添付資料　（人間 JR26061 看護人材育成 02）

添付資料１：　PDM、活動計画表（PO）

添付資料２：　日本人専門家派遣実績

添付資料３：　貸与物品リスト

添付資料４：　合同調整委員会（JCC）議事録

添付資料５：　本邦研修日程表、研修員リスト

添付資料６：　運営指導調査団来バ時実施セミナー　アジェンダ、発表資料

Project Design Matrix

Version 0
Dated December 22, 2021

Project Title: Project for Capacity Building of Nursing Services Phase 2
Implementing Agency: Directorate General of Nursing and Midwifery Services (DGNM), Bangladesh Nursing and Midwifery Council (BNMC)
Period of Project: From March 2022 to March 2026 (4 years from the date when the first JICA expert is dispatched to Bangladesh)
Project Site: 8 public nursing colleges and collaborative hospitals (to be selected by mutual agreement at the Detailed Planning Survey)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal			
The quality of nursing education is improved in Bangladesh.	The number of nursing colleges certified by government accreditation is increased.		
Project Purpose			
Implementation system of nursing education is strengthened at the target public nursing colleges and hospitals.	1) The evaluation score on education by college students is improved. 2) The percentage of nursing units that CNTs provide support to students' clinical practice.	Project reports Baseline and end line surveys	1. Policies and implementation system of nursing services and education do not change significantly. 2. The security situation in Bangladesh does not impede the Project. 3. Local activities of counterpart and Japanese experts are not significantly restricted due to Covid-19 situation in Bangladesh. 4. Frequent transfer of senior level positions does not happen within very short period. 5. The Bangladesh side properly allocates necessary budget and distribute personnel for maintaining and enhancing benefits derived from the Project.
Outputs			
1. Management capacity for nursing administration is strengthened.	Policies and strategies for BSc Nursing education are updated.	Project reports	
2. Implementation system of nursing education for BSc is strengthened at the target public nursing colleges.	Nursing education fulfilling the standards is carried out.	Project reports	
3. Implementation system of clinical nursing practices is strengthened at the collaborative hospitals.	1) The percentage of trained Clinical Nurse Teachers (CNTs) among all clinical nurses. 2) The percentage of trained CNTs for students. 3) The percentage of trained clinical nurses among all clinical nurses.	Project reports Baseline and end line surveys	
4. Networking of nursing colleges and the related organizations is strengthened.	Seminars and forums regarding nursing are held XX times a year.	Project reports	
Activities	**Inputs**		**Pre-Conditions**
1. Management capacity for nursing administration is strengthened.	**The Japanese Side**	**The Bangladesh Side**	
	Dispatch of Experts	**Counterparts**	
1-1: Investigate the current situation of nursing administration in Bangladesh and specify issues for sharing experiences of Japan. 1-2: Formulate a career path for nurses. 1-3: Promote nursing college accreditation. 1-4: Train organizational and administrative nurse managers/administrators in selected issue.	1. Chief Advisor / Nursing Administration 2. Nursing Education 3. Clinical Practice 4. Training Management 5. Others	1. Project Director 2. Project Manager	

2. Implementation system of nursing education for BSc is strengthened at the target public nursing colleges. 2-1: Assess the situation of public nursing colleges and determine the target colleges. 2-2: Establish the system for improving the quality of teachers skill (mentoring, teaching quality evaluation) in the target public nursing colleges. 2-3: Establish the system of strengthening clinical nursing practices. (Coordination with CNTs (clinical nurse teachers) in the collaborative hospitals in the target public nursing colleges.) 2-4: Strengthen the system of promoting nursing research activities. 2-5: Provide subject-based nursing for nurse educators (ex. fundamental nursing, community nursing etc.) **3. Implementation system of clinical nursing practices is** 3-1: Assess the situation of implementation of clinical nursing practices and in-service training on clinical nursing practices at the collaborative hospitals which accept students from target nursing colleges. 3-2: Conduct CNTs training. 3-3: Provide in-service training for nurses to improve clinical practices. 3-4: Establish the system for promoting CNTs training and deployment as well as in-service training on nursing clinical practices. 3-5: Make policy recommendation regarding clinical nursing practice system. **4. Networking of nursing colleges and the related organizations is strengthened.** 4-1: Share the knowledge (such as training tools) of Phase1 and Phase2-output2 for strengthening the implementation system of nursing education. 4-2: Share the knowledge (such as training tools) of Phase1 and Phase2-output3 for capacity development of CNTs. 4-3: Support organizing forums and seminars for capacity development of post graduate nurses (Possible theme will be instruction method for newly graduated nurses, fundamental nursing skills and others.)	**Trainings / Seminars / Workshops** 1. Training in Japan 2. In-country / third-country training **Equipment and Material** Educational / Clinical practice equipment, vehicle and other necessary equipment **Local Costs** 1. Necessary costs for the project activities 2. The budget of honorarium for attending local level training/seminar/workshop for the first year of the project, based on MOHFW Circular (No. 59.177.014.00.00.003.2017-66) The eligible trainings, seminars, workshops should be agreed in advance. The eligible types of honorarium are as follows: 1.1 Daily honorarium, 1.2 Travel allowance, 1.3 Field visit as part of the training (if applicable), 1.4 Stationary, 1.5 Rent of venue, 1.6 Staff support (Daily),1.9 Public address system (if applicable), 1.10 Certificate, Banner and accomplish other emergency activities, 1.11 Prepare materials/ photocopy/ other relevant activities for Training/ seminar/ workshop. 3. The budget for honorarium of the Project after the second year which will be decided within the first year of the Project.	**Facilities, equipment and materials** 1.Office spaces in the Ministry of Health and Family Welfare 2.Land, building and other facilities necessary for project activities **Local Costs** 1. A part of operational expenses necessary for implementation of the project activities such as personnel costs of counterparts, running costs including, equipment, consumables, electricity and water, at the implementation site of the Project. 2. Maintenance and operation cost (including consumables) for equipment provided by JICA. 3. The budget of honorarium for attending internal meeting including JCC, PIC, and committees and working groups at the activity level (at colleges and hospitals) for the first year of the Project. 4. The budget for honorarium of the Project after the second year which will be decided within the first year of the Project. **Available data and information related to the Project**	

Project Design Matrix

Version 1
Dated March 27, 2023

Project Title: Project for Capacity Building of Nursing Services Phase 2
Implementing Agency: Directorate General of Nursing and Midwifery (DGNM), Bangladesh Nursing and Midwifery Council (BNMC)
Period of Project: From March 2022 to March 2026 (4 years from the date when the first JICA expert is dispatched to Bangladesh)
Project Site: 8 public nursing colleges and collaborative hospitals

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal The quality of nursing education is improved in Bangladesh.	The number of nursing colleges certified by government accreditation is increased.		
Project Purpose Implementation, monitoring, and evaluation system of nursing education is strengthened.	1) At least 80% of students are satisfied with the educational environment of the target nursing colleges. 2) Routine monitoring activity to be added in NMES OP and the target colleges receive the routine monitoring by DGNM according to the plan of OP.	1) Baseline and end line surveys 2) Project reports	1. Policies and implementation system of nursing services and education do not change significantly. 2. The security situation in Bangladesh does not impede the Project. 3. Local activities of counterpart and Japanese experts are not significantly restricted due to Covid-19 situation in Bangladesh. 4. Frequent transfer of senior level positions does not happen within very short period. 5. The Bangladesh side properly allocates necessary budget and distribute personnel for maintaining and enhancing benefits derived from the Project.
Outputs 1. Management capacity for nursing administration is strengthened.	1) Accreditation application is submitted from the two first target colleges and site visit is conducted by the review team. 2) Post-test scores in management training for nursing administration exceed pre-test scores.	Project reports	
2. The implementation system of nursing education for BSc is strengthened at the target public nursing colleges.	1) More than 6 out of 8 target nursing colleges obtain 70% or more marks for the result of simplified evaluation par each 5 Standards based on the accreditation criteria. 2) At least 80% of the planned meetings of the committees is held in the target nursing colleges.	1) Baseline and end line surveys 2) Project reports	
3. The implementation system of clinical nursing practices is strengthened at the collaborative hospitals.	1) At least 50% of students get support from CNTs on clinical practices. 2) At least 80% of the planned meetings of the committees is held in the collaborative hospitals.	Project reports	
4. Networking of nursing colleges and related organizations is strengthened.	Number of non-target public nursing schools participating in project-organised events.	Project reports	
Activities	**Inputs**		
1. Management capacity for nursing administration is strengthened. 1-1: Investigate the current situation of nursing administration in Bangladesh and specify issues for sharing experiences of Japan. 1-2: Formulate a career path for nurses. 1-3: Promote nursing college accreditation. 1-4: Train organizational and administrative nurse managers/administrators in selected issue. 1-5: Establish a framework for continuous professional development (CPD) for nurses.	**The Japanese Side** **Dispatch of Experts** 1. Chief Advisor / Nursing Administration 2. Nursing Education 3. Clinical Practice 4. Training Management 5. Others	**The Bangladesh Side** **Counterparts** 1. Project Director 2. Project Manager	
2. The implementation system of nursing education for BSc is strengthened at the target public nursing colleges. 2-1: Assess the situation of public nursing colleges and determine the target colleges. 2-2: Establish the system for improving the quality of teacher's skills in the target public nursing colleges. 2-3: Establish the system of strengthening clinical nursing practices. (Coordination with CNTs (clinical nurse teachers) in the collaborative hospitals in the target public nursing colleges.) 2-4: Strengthen the system of promoting nursing research activities.	**Trainings / Seminars / Workshops** 1. Training in Japan 2. In-country / third-country training **Equipment and Material** Educational / Clinical practice equipment, vehicle and other necessary equipment	**Facilities, equipment and materials** 1.Office spaces in the Ministry of Health and Family Welfare 2.Land, building and other facilities necessary for project activities	**Pre-Conditions**

2-5: Promote subject-based nursing for nurse educators.	**Local Costs** 1. Necessary costs for the project activities 2.Cost sharing of allowance after second year (March 27, 2023) of the Project. ・Trainings by June 2024 ・Seminars/workshops ・Internal meeting (PMC, WG1-4) The details are shown in Annex 4 of Minutes of Meetings signed on XX.	**Local Costs** 1. A part of operational expenses necessary for implementation of the project activities such as personnel costs of counterparts, running costs including, equipment, consumables, electricity and water, at the implementation site of the Project. 2. Maintenance and operation cost (including consumables) for equipment provided by JICA. 3. Cost sharing of allowance after second year of the Project. ・Trainings after July 2024 ・Internal meeting (JCC, PIC) The details are shown in Annex 4 of Minutes of Meetings signed on XX. 4. Available data and information related to the Project	
3. The implementation system of clinical nursing practices is strengthened at the collaborative hospitals.			
3-1: Assess the situation of implementation of clinical nursing practices and in-service training on clinical nursing practices at the collaborative hospitals which accept students from target nursing colleges. 3-2: Conduct CNTs training. 3-3: Provide in-service training for nurses to improve clinical nursing practices. 3-4: Establish the system for promoting CNTs training and deployment as well as in-service training on clinical nursing practices.			
4. Networking of nursing colleges and the related organizations is strengthened.			
4-1: Share the knowledge (such as training tools) and best practice of Phase1 and Phase2-output2 for strengthening the implementation system of nursing education. 4-2: Share the knowledge (such as training tools) and best practice of Phase1 and Phase2-output3 for capacity development of CNTs. 4-3: Support organizing forums and seminars for capacity development of postgraduate nurses (Possible theme will be instruction method for newly graduated nurses, fundamental nursing skills and others.) 4-4: Compile materials for policy recommendations to further strengthen nursing education.			

Project Design Matrix

Version 2
Dated August 13, 2025

Project Title: Project for Capacity Building of Nursing Services Phase 2
Implementing Agency: Directorate General of Nursing and Midwifery (DGNM), Bangladesh Nursing and Midwifery Council (BNMC)
Period of Project: From March 2022 to March 2026 (4 years from the date when the first JICA expert is dispatched to Bangladesh)
Project Site: 8 public nursing colleges and collaborative hospitals

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal			
The quality of nursing education is improved in Bangladesh.	The number of nursing colleges certified by government accreditation is increased.		
Project Purpose			
Implementation, monitoring, and evaluation system of nursing education is strengthened.	1) At least 80% of students are satisfied with the educational environment of the target nursing colleges. 2) The target colleges receive routine monitoring by DGNM.	1) Baseline and end line surveys 2) Project reports	1. Policies and implementation system of nursing services and education do not change significantly. 2. The security situation in Bangladesh does not impede the Project. 3. Local activities of counterpart and Japanese experts are not significantly restricted due to Covid-19 situation in Bangladesh. 4. Frequent transfer of senior level positions does not happen within very short period. 5. The Bangladesh side properly allocates necessary budget and distribute personnel for maintaining and enhancing benefits derived from the Project.
Outputs			
1. Management capacity for nursing administration is strengthened.	1) Accreditation application is submitted from the two first target colleges and site visit is conducted by the review team. 2) Post-test scores in management training for nursing administration exceed pre-test scores.	Project reports	
2. The implementation system of nursing education for BSc is strengthened at the target public nursing colleges.	1) More than 6 out of 8 target nursing colleges obtain 70% or more marks for the result of simplified evaluation par each 5 Standards based on the accreditation criteria. 2) At least 80% of the planned meetings of the committees is held in the target nursing colleges.	1) Baseline and end line surveys 2) Project reports	
3. The implementation system of clinical nursing practices is strengthened at the collaborative hospitals.	1) At least 50% of students get support from CNTs on clinical practices. 2) At least 80% of the planned meetings of the committees is held in the collaborative hospitals.	Project reports	
4. Networking of nursing colleges and related organizations is strengthened.	Number of non-target public nursing schools participating in project-organised events.	Project reports	
Activities	**Inputs**		**Pre-Conditions**
1. Management capacity for nursing administration is strengthened.	**The Japanese Side**	**The Bangladesh Side**	
	Dispatch of Experts	**Counterparts**	
1-1: Investigate the current situation of nursing administration in Bangladesh and specify issues for sharing experiences of Japan. 1-2: Formulate a career path for nurses. 1-3: Promote nursing college accreditation. 1-4: Train organizational and administrative nurse managers/administrators in selected issue. 1-5: Support the establishment of the continuous professional development (CPD) framework for nurses.	1. Chief Advisor / Nursing Administration 2. Nursing Education 3. Clinical Practice 4. Training Management 5. Others	1. Project Director 2. Project Manager	

2. The implementation system of nursing education for BSc is strengthened at the target public nursing colleges. 2-1: Assess the situation of public nursing colleges and determine the target colleges. 2-2: Establish the system for improving the quality of teacher's skills in the target public nursing colleges. 2-3: Establish the system of strengthening clinical nursing practices. (Coordination with CNTs (clinical nurse teachers) in the collaborative hospitals in the target public nursing colleges.) 2-4: Strengthen the system of promoting nursing research activities. 2-5: Promote subject-based nursing for nurse educators. **3. The implementation system of clinical nursing practices is strengthened at the collaborative hospitals.** 3-1: Assess the situation of implementation of clinical nursing practices and in-service training on clinical nursing practices at the collaborative hospitals which accept students from target nursing colleges. 3-2: Conduct CNTs training. 3-3: Support in-service training for nurses to improve clinical nursing practices. 3-4: Establish the system for promoting CNTs training and deployment as well as in-service training on clinical nursing practices. **4. Networking of nursing colleges and the related organizations is strengthened.** 4-1: Share the knowledge (such as training tools) and best practice of Phase1 and Phase2-output2 for strengthening the implementation system of nursing education. 4-2: Share the knowledge (such as training tools) and best practice of Phase1 and Phase2-output3 for capacity development of CNTs. 4-3: Support organizing forums and seminars for capacity development of postgraduate nurses (Possible theme will be instruction method for newly graduated nurses, fundamental nursing skills and others.) 4-4: Compile materials for policy recommendations to further strengthen nursing education.	**Trainings / Seminars / Workshops** 1. Training in Japan 2. In-country / third-country training **Equipment and Material** Educational / Clinical practice equipment, vehicle and other necessary equipment **Local Costs** 1. Necessary costs for the project activities 2. The budget of honorarium for attending local level training/seminar/workshop for the first year of the project, based on MOHFW Circular (No. 59.177.014.00.00.003.2017-66) The eligible trainings, seminars, workshops should be agreed in advance. The eligible types of honorarium are as follows: 1.1 Daily honorarium, 1.2 Travel allowance, 1.3 Field visit as part of the training (if applicable), 1.4 Stationary, 1.5 Rent of venue, 1.6 Staff support (Daily), 1.9 Public address system (if applicable), 1.10 Certificate, Banner and accomplish other emergency activities, 1.11 Prepare materials/ photocopy/ other relevant activities for Training/ seminar/ workshop. 3. The budget for honorarium of the Project after the second year which will be decided within the first year of the Project.	**Facilities, equipment and materials** 1.Office spaces in the Ministry of Health and Family Welfare 2.Land, building and other facilities necessary for project activities **Local Costs** 1. A part of operational expenses necessary for implementation of the project activities such as personnel costs of counterparts, running costs including, equipment, consumables, electricity and water, at the implementation site of the Project. 2. Maintenance and operation cost (including consumables) for equipment provided by JICA. 3. The budget of honorarium for attending internal meeting including JCC, PIC, and committees and working groups at the activity level (at colleges and hospitals) for the first year of the Project. 4. The budget for honorarium of the Project after the second year which will be decided within the first year of the Project. **Available data and information related to the Project**	

Project Design Matrix

Version 3
Dated January 28, 2026

Project Title: Project for Capacity Building of Nursing Services Phase 2
Implementing Agency: Directorate General of Nursing and Midwifery (DGNM), Bangladesh Nursing and Midwifery Council (BNMC)
Period of Project: From 26 March 2022 to 25 June 2026 (Four years and 3 months from the date when the first JICA expert is dispatched to Bangladesh)
Project Site: 8 public nursing colleges and collaborative hospitals

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal			
The quality of nursing education is improved in Bangladesh.	The number of nursing colleges certified by government accreditation is increased.		
Project Purpose			
Implementation, monitoring, and evaluation system of nursing education is strengthened.	1) At least 80% of students are satisfied with the educational environment of the target nursing colleges. 2) The target colleges receive routine monitoring by DGNM.	1) Baseline and end line surveys 2) Project reports	1. Policies and implementation system of nursing services and education do not change significantly. 2. The security situation in Bangladesh does not impede the Project. 3. Local activities of counterpart and Japanese experts are not significantly restricted due to Covid-19 situation in Bangladesh. 4. Frequent transfer of senior level positions does not happen within very short period. 5. The Bangladesh side properly allocates necessary budget and distribute personnel for maintaining and enhancing benefits derived from the Project.
Outputs			
1. Management capacity for nursing administration is strengthened.	1) Accreditation application is submitted from the two first target colleges and site visit is conducted by the review team. 2) Post-test scores in management training for nursing administration exceed pre-test scores.	Project reports	
2. The implementation system of nursing education for BSc is strengthened at the target public nursing colleges.	1) More than 6 out of 8 target nursing colleges obtain 70% or more marks for the result of simplified evaluation par each 5 Standards based on the accreditation criteria. 2) At least 80% of the planned meetings of the committees is held in the target nursing colleges.	1) Baseline and end line surveys 2) Project reports	
3. The implementation system of clinical nursing practices is strengthened at the collaborative hospitals.	1) At least 50% of students get support from CNTs on clinical practices. 2) At least 80% of the planned meetings of the committees is held in the collaborative hospitals.	Project reports	
4. Networking of nursing colleges and related organizations is strengthened.	Number of non-target public nursing schools participating in project-organised events.	Project reports	
Activities	**Inputs**		**Pre-Conditions**
1. Management capacity for nursing administration is strengthened.	**The Japanese Side**	**The Bangladesh Side**	
	Dispatch of Experts	**Counterparts**	
1-1: Investigate the current situation of nursing administration in Bangladesh and specify issues for sharing experiences of Japan. 1-2: Formulate a career path for nurses. 1-3: Promote nursing college accreditation. 1-4: Train organizational and administrative nurse managers/administrators in selected issue. 1-5: Support the establishment of the continuous professional development (CPD) framework for nurses.	1. Chief Advisor / Nursing Administration 2. Nursing Education 3. Clinical Practice 4. Training Management 5. Others	1. Project Director 2. Project Manager	

2. The implementation system of nursing education for BSc is strengthened at the target public nursing colleges. 2-1: Assess the situation of public nursing colleges and determine the target colleges. 2-2: Establish the system for improving the quality of teacher's skills in the target public nursing colleges. 2-3: Establish the system of strengthening clinical nursing practices. (Coordination with CNTs (clinical nurse teachers) in the collaborative hospitals in the target public nursing colleges.) 2-4: Strengthen the system of promoting nursing research activities. 2-5: Promote subject-based nursing for nurse educators. **3. The implementation system of clinical nursing practices is strengthened at the collaborative hospitals.** 3-1: Assess the situation of implementation of clinical nursing practices and in-service training on clinical nursing practices at the collaborative hospitals which accept students from target nursing colleges. 3-2: Conduct CNTs training. 3-3: Support in-service training for nurses to improve clinical nursing practices. 3-4: Establish the system for promoting CNTs training and deployment as well as in-service training on clinical nursing practices. **4. Networking of nursing colleges and the related organizations is strengthened.** 4-1: Share the knowledge (such as training tools) and best practice of Phase1 and Phase2-output2 for strengthening the implementation system of nursing education. 4-2: Share the knowledge (such as training tools) and best practice of Phase1 and Phase2-output3 for capacity development of CNTs. 4-3: Support organizing forums and seminars for capacity development of postgraduate nurses (Possible theme will be instruction method for newly graduated nurses, fundamental nursing skills and others.) 4-4: Compile materials for policy recommendations to further strengthen nursing education.	**Trainings / Seminars / Workshops** 1. Training in Japan 2. In-country / third-country training **Equipment and Material** Educational / Clinical practice equipment, vehicle and other necessary equipment **Local Costs** 1. Necessary costs for the project activities 2. The budget of honorarium for attending local level training/seminar/workshop for the first year of the project, based on MOHFW Circular (No. 59.177.014.00.00.003.2017-66) The eligible trainings, seminars, workshops should be agreed in advance. The eligible types of honorarium are as follows: 1.1 Daily honorarium, 1.2 Travel allowance, 1.3 Field visit as part of the training (if applicable), 1.4 Stationary, 1.5 Rent of venue, 1.6 Staff support (Daily), 1.9 Public address system (if applicable), 1.10 Certificate, Banner and accomplish other emergency activities, 1.11 Prepare materials/ photocopy/ other relevant activities for Training/ seminar/ workshop. 3. The budget for honorarium of the Project after the second year which will be decided within the first year of the Project.	**Facilities, equipment and materials** 1.Office spaces in the Ministry of Health and Family Welfare 2.Land, building and other facilities necessary for project activities **Local Costs** 1. A part of operational expenses necessary for implementation of the project activities such as personnel costs of counterparts, running costs including, equipment, consumables, electricity and water, at the implementation site of the Project. 2. Maintenance and operation cost (including consumables) for equipment provided by JICA. 3. The budget of honorarium for attending internal meeting including JCC, PIC, and committees and working groups at the activity level (at colleges and hospitals) for the first year of the Project. 4. The budget for honorarium of the Project after the second year which will be decided within the first year of the Project. **Available data and information related to the Project**	

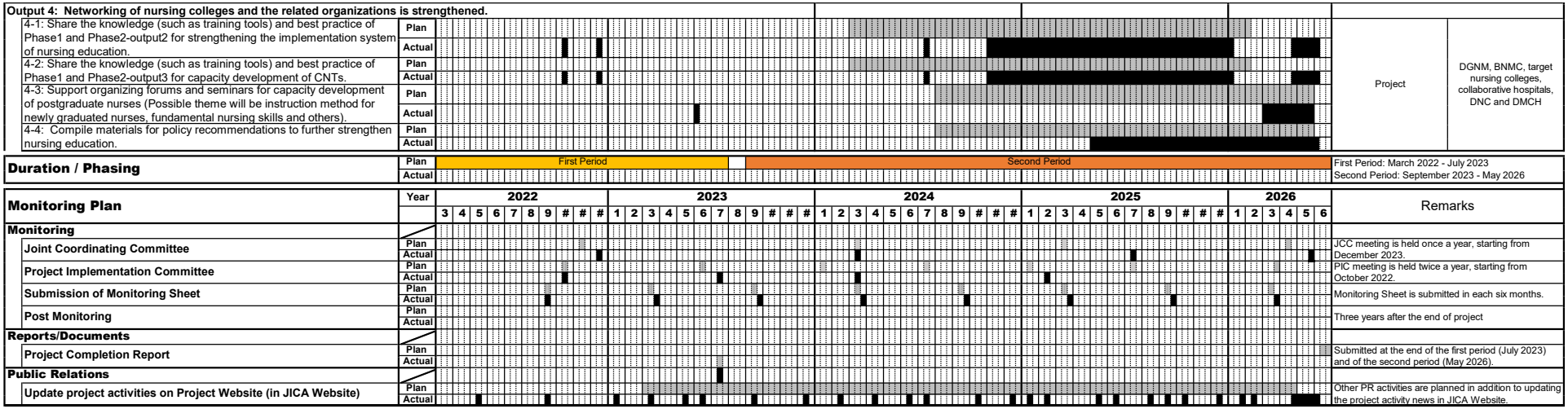
Plan of operation

Project Title: Project for Capacity Building of Nursing Services Phase 2

As of June 15, 2026

Inputs	Year	2022									2023									2024									2025									2026						Remarks
		3	4	5	6	7	8	9	#	#	#	1	2	3	4	5	6	7	8	9	#	#	#	1	2	3	4	5	6	7	8	9	#	#	#	1	2	3	4	5	6	7	8	9	#	#	#	1	2	3	4	5	6	
Expert																																												
Chief Advisor / Nursing Administration	Plan																																											- The Chief Advisor / Nursing Administration 1 and the Deputy Chief Advisor / Nursing Education 3 / Clinical Practice 3 are in charge of project management. - The Chief Advisor / Nursing Administration 1 and the expert of Nursing Administration 2 share the duties of "Nursing Administration". - The expert of Nursing Education 1, the expert of Nursing Education 2 / Clinical Practice 1, and the Deputy Chief Advisor / Nursing Education 3 / Clinical Practice 3 share the duties of "Nursing Education". - The expert of Nursing Education 2 / Clinical Practice 1, the expert of Clinical Practice 2 and the Deputy Chief Advisor / Nursing Education 3 / Clinical Practice 3 share the duties of "Clinical Practice". - All experts conducted activities on a shuttle basis.
	Actual																																										
Deputy Chief Advisor / Nursing Education	Plan																																									
	Actual																																									
Clinical Practice	Plan																																								
	Actual																																								
Training Management	Plan																																								
	Actual																																								
Equipment																																										
Training/Teaching equipment	Plan																																									The Project has started the procurement of the training equipment in February 2024.
	Actual																																									
Training in Japan																																									
Nursing Administration	Plan																																								
	Actual																																								
Nursing Education	Plan																																								
	Actual																																								
In-country/Third country Training																																									
Dissemination seminar for nursing colleges	Plan																																								These activities will be implemented as parts of Output 4 activities.
	Actual																																								
Forums and seminars for post graduate nurses	Plan																																								
	Actual																																								

Activities	Year	2022									2023									2024									2025									2026						Responsible Organization(s)	
Sub-Activities	Month	3	4	5	6	7	8	9	#	#	#	1	2	3	4	5	6	7	8	9	#	#	#	1	2	3	4	5	6	7	8	9	#	#	#	1	2	3	4	5	6	7	8	9	#	#	#	1	2	3	4	5	6	Japan	GOB
Output 1: Management capacity for nursing administration is strengthened.																																												
1-1: Investigate the current situation of nursing administration in Bangladesh and specify issues for sharing experiences of Japan.	Plan																																										Project	DGNM, BNMC (WG members)
	Actual																																										
1-2: Formulate a career path for nurses.	Plan																																										
	Actual																																										
1-3: Promote nursing college accreditation.	Plan																																										
	Actual																																										
1-4: Train organizational and administrative nurse managers/administrators in selected issue.	Plan																																										
	Actual																																										
1-5: Support the establishment for continuous professional development (CPD) for nurses.	Plan																																										
	Actual																																										
Output 2: The implementation system of nursing education for BSc is strengthened at the target public nursing colleges.																																												
2-1: Assess the situation of public nursing colleges and determine the target colleges.	Plan																																										Project	DGNM, target nursing colleges (WG members)
	Actual																																										
2-2: Establish the system for improving the quality of teacher's skill in the target public nursing colleges.	Plan																																										
	Actual																																										
2-3: Establish the system of strengthening clinical nursing practices. (Coordination with CNTs (clinical nurse teachers) in the collaborative hospitals in the target public nursing colleges.)	Plan																																										
	Actual																																										
2-4: Strengthen the system of promoting nursing research activities.	Plan																																										
	Actual																																										
2-5: Promote subject-based nursing for nurse educators.	Plan																																										
	Actual																																										
Output 3: The implementation system of clinical nursing practices is strengthened at the collaborative hospitals.																																												
3-1: Assess the situation of implementation of clinical nursing practices and in-service training on clinical nursing practices at the collaborative hospitals which accept students from target nursing colleges.	Plan																																										Project	DGNM, collaborative hospitals (WG members)
	Actual																																										
3-2: Conduct CNTs training.	Plan																																										
	Actual																																										
3-3: Support in-service training for nurses to improve clinical nursing practices.	Plan																																										
	Actual																																										
3-4: Establish the system for promoting CNTs training and deployment as well as in-service training on clinical nursing practices.	Plan																																										
	Actual																																										


Output 4: Networking of nursing colleges and the related organizations is strengthened.
4-1: Share the knowledge (such as training tools) and best practice of Phase1 and Phase2-output2 for strengthening the implementation system of nursing education.
4-2: Share the knowledge (such as training tools) and best practice of Phase1 and Phase2-output3 for capacity development of CNTs.
4-3: Support organizing forums and seminars for capacity development of postgraduate nurses (Possible theme will be instruction method for newly graduated nurses, fundamental nursing skills and others).
4-4: Compile materials for policy recommendations to further strengthen nursing education.
Plan
Actual
Project
DGNM, BNMC, target nursing colleges, collaborative hospitals, DNC and DMCH
Duration / Phasing
First Period
Second Period
First Period: March 2022 - July 2023
Second Period: September 2023 - May 2026
Monitoring Plan
Year
2022
2023
2024
2025
2026
3 4 5 6 7 8 9 # # # 1 2 3 4 5 6 7 8 9 # # # 1 2 3 4 5 6 7 8 9 # # # 1 2 3 4 5 6 7 8 9 # # # 1 2 3 4 5 6
Remarks
Monitoring
Joint Coordinating Committee
JCC meeting is held once a year, starting from December 2023.
Project Implementation Committee
PIC meeting is held twice a year, starting from October 2022.
Submission of Monitoring Sheet
Monitoring Sheet is submitted in each six months.
Post Monitoring
Three years after the end of project
Reports/Documents
Project Completion Report
Submitted at the end of the first period (July 2023) and of the second period (May 2026).
Public Relations
Update project activities on Project Website (in JICA Website)
Other PR activities are planned in addition to updating the project activity news in JICA Website.

添付資料2：日本人専門家派遣実績（第1期、第2期）

業務従事者の従事計画／実績表（実費精算契約）

契約件名：バングラデシュ国看護サービス人材育成プロジェクトフェーズ2(第1期)

担当業務	格付	計画/実績	人月合計	渡航回数実績		
			全期間	全期間	2022年度	2023年度
溝上　芳恵（業務責任者／看護行政1）	2	当初計画	3.87	3	2	1
		最新計画	3.87	3	2	1
		実績	3.87	3	2	1
佐々木　雅子（前任）（副業務主任者／看護行政2）	3	当初計画	2.55	3	3	0
		最新計画	2.55	3	3	0
		実績	2.55	3	3	0
吉武　桃子（看護行政２）	3	当初計画	2.00	3	1	2
		最新計画	2.00	3	1	2
		実績	2.00	3	1	2
中野　久美子（看護教育１）	3	当初計画	2.78	3	2	1
		最新計画	2.78	3	2	1
		実績	2.78	3	2	1
山中　郁（副業務主任／看護教育2／臨地実習1）	3	当初計画	5.52	5	4	1
		最新計画	5.52	5	4	1
		実績	5.52	5	4	1
宇田川　珠美（臨地実習２）	4	当初計画	6.02	5	4	1
		最新計画	6.02	5	4	1
		実績	6.02	5	4	1
増山　千花（前任）（ダイバーシティ枠研修管理）	6	当初計画	2.97	2	2	0
		最新計画	2.97	2	2	0
		実績	2.97	2	2	0
長澤　真衣子（ダイバーシティ枠研修管理）	6	当初計画	2.68	2	1	1
		最新計画	2.68	2	1	1
		実績	2.68	2	1	1
当初計画（合計）			28.39	26	19	7
最新計画（合計）			28.39	26	19	7
実績（合計）			28.39	26	19	7

業務従事者の従事計画／実績表（実費精算契約）

契約件名：バングラデシュ国看護サービス人材育成プロジェクトフェーズ2(第2期)

担当業務	格付	計画/実績	人月合計	渡航回数実績			
			全期間	全期間	2023年度	2024年度	2025年度
溝上　芳恵 （業務責任者／ 看護行政1）	2	当初計画	9.40	8	2	3	3
		最新計画	9.72	9	2	3	4
		実績	9.72	9	2	3	4
長澤　真衣子 （副業務主任者／看護教育3／臨地実習3）	4	当初計画	7.06	5	2	2	1
		最新計画	7.21	6	1	2	3
		実績	7.21	6	1	2	3
吉武　桃子 （看護行政２）	3	当初計画	6.10	6	1	2	3
		最新計画	6.15	7	1	2	4
		実績	6.15	7	1	2	4
中野　久美子 （看護教育１）	3	当初計画	4.30	6	1	2	3
		最新計画	4.30	8	1	3	4
		実績	4.30	8	1	3	4
山中　郁 （看護教育2／臨地実習1）	3	当初計画	6.16	6	2	2	2
		最新計画	6.30	7	2	3	2
		実績	6.30	7	2	3	2
宇田川　珠美 （臨地実習２）	4	当初計画	4.75	4	1	2	1
		最新計画	4.75	4	1	2	1
		実績	4.75	4	1	2	1
坂根　優奈 （研修管理）	6	当初計画	9.36	5	2	2	1
		最新計画	9.75	8	2	2	4
		実績	9.75	8	2	2	4
堀井　聡子 （領域別看護教育指導１）	5	当初計画	1.30	2	0	2	0
		最新計画	1.30	2	0	0	2
		実績	1.30	2	0	0	2
当初計画（合計）			48.43	42	11	17	14
最新計画（合計）			49.48	51	10	17	24
実績（合計）			49.48	51	10	17	24

添付資料3: 貸与物品リスト

貸与物品リスト（継続契約あり）
List of Property Lending

	物品名称 (Name of Property)	規格・品番 (Standard, Part Number)	個数 (Quantity)	取得価格 (Purchase Price)			検査合格日 (Date of Inspection Passed)	事業終了後の取扱い (After Completion of Project: Handover/Return)
				取得価格 (Purchase Price)	通貨 (Currency)	日本円換算取得価格 (In Japanese Yen)		
1	Laptop	5CD1465JNK	1	68,500	BDT	98,850	2022/4/13	Handover to MMCH
2	Multifunction Photocopier	Versalik C7020	1	395,000	BDT	594,885	2022/5/24	Handover to CONSBN
3	Laptop	5CD1465JNK	1	70,000	BDT	105,422	2022/5/30	Handover to ShSMCH
4	Laptop	Pavilion 15-eh1890AU	2	169,000	BDT	217,423	2023/1/12	Handover to CONSBN and MNC
5	Printer	HP Color LaserJet Pro M283fdw	1	186,000	BDT	231,865	2023/2/14	Handover to MMCH
【以下、JICAから貸与されている物品 (Property Lent by JICA)】								
1	Desktop	Fujitsu / ESPRIMO WD2/E2	2			299,251	Handover to the project on 2023/2/9. Inspection passed on 2023/3/21	Handover to CONSBN
2	LAN card	10Gtek / 82576-2T-X1	2			9,091	Same as above	Handover to CONSBN
3	Keyboard	Logitech / MK120	2			8,307	Same as above	Handover to CONSBN
4	3K Monitor	LG / 32QN600-B	1			33,000	Same as above	Handover to CONSBN
5	Full HD Monitor	LG / 32ML600M	1			24,891	Same as above	Handover to MNC
6	NAS server 6bay	Synology / DS1621+	2			201,122	Same as above	Handover to CONSBN
7	HDD 4TB	Seagate / ST4000VN008	12			147,436	Same as above	Handover to CONSBN
8	Microphone speaker	YAMAHA / YVC-330	7			357,000	Same as above	Handover to CONSBN
9	Audio cable	Order Made	5			76,500	Same as above	Handover to CONSBN
10	Adapter for Microphone speaker	MUSB-5V1A	5			2,995	Same as above	Handover to CONSBN
11	IP Camera	Amcrest / IP4M-1051	6			127,525	Same as above	Handover to CONSBN
12	PoE Splitter	ANVISON	6			6,818	Same as above	Handover to CONSBN
13	IP Camera	Axis / M5525-E	5			609,141	Same as above	Handover to CONSBN
14	Web Camera	Logicool / C922n	1			7,984	Same as above	Handover to CONSBN
15	Main router	Netgear / RBK852(RBR850)	2			129,471	Same as above	Handover to CONSBN
16	Satellite router	Netgear / RBS850	2			62,727	Same as above	Handover to CONSBN
17	Transformer(for UPS)	Swallow electronic / SU-2000GX	2			100,000	Same as above	Handover to CONSBN
18	24 port PoE hub	Netgear / GS724TP	1			46,319	Same as above	Handover to CONSBN
19	8 port PoE hub	Netgear / GS108PP	6			84,851	Same as above	Handover to CONSBN
20	Document scanner	ELMO / MX-P2	1			39,000	Same as above	Handover to CONSBN
21	HDMI capture board	Uraytech / UHE265-1L	2			69,324	Same as above	Handover to CONSBN
22	Mobile Camera Stand	As One / 7-1225-01	5			67,123	Same as above	Handover to CONSBN
23	Clip	Smallrig / 2164	5			5,905	Same as above	Handover to CONSBN
24	Camera Stand(bracket)	Order Made	5			296,000	Same as above	Handover to CONSBN
25	USB cable for UPS-NAS	APC / AP98117J	2			2,315	Same as above	Handover to CONSBN
26	UPS	APC / SMC2000I	2			211,675	Same as above	Handover to CONSBN

Government of the People's Republic of Bangladesh
Medical Education and Family Welfare Division
Ministry of Health and Family Welfare
Planning-2 Section
Bangladesh Secretariat, Bangladesh.

Record of Discussion

Subject: First Joint Coordinating Committee (JCC) Meeting on "Capacity Building of Nursing Services (CBNS-II), JICA, Bangladesh.
Date and Time: December 14, 2022, 12.00 pm
Venue: Conference Room, Ministry of Health and Family Welfare (MOHFW)
Chaired by: Md. Saiful Hassan Badal, Secretary, MEFWD, MOHFW
Co-Chaired by: Mr. Takashi Komori, Senior Representative, JICA

1. Summary of the meeting

Opening speech

1.1 The Chair of the meeting, Md. Saiful Hassan Badal, Secretary of Medical Education and Family Welfare Division (MEFWD), MOHFW welcomed all the participants on the meeting and thanked Japan for a friendly and proven relationship with Bangladesh. After the welcome remark of the Chair, Mr. Takashi Komori, Senior Representative, JICA Bangladesh Office and the Co-Chair of the meeting, expressed his gratitude to the Secretary and mentioned that the CBNS project had been recognized as a vital project to enhance the nursing education system in Bangladesh and shared the Honorable Premier Minister Sheikh Hasina has also interested in this area.

Overview of CBNS II and the revision of PDM and PO

1.2 Ms. Kaoru Yamanaka, Deputy Chief Advisor, CBNS-II gave a brief overview of the CBNS Phase I. She then explained the objectives of the CBNS-II, including the Project Design Matrix (PDM) and Plan of Operation (PO) of the Project. Regarding the PDM, she mentioned that indicators could modify based on baseline survey and information collection activities results, which required approval by the JCC.

Comments and suggestions from the participants

1.3 In the discussion, various comments and suggestions provided. The Secretary asked to add behavioral issues in training topics so that service providers could deliver adequate service to the patient. The Director General, Directorate General of Nursing and Midwifery (DGMN), and the Registrar of Bangladesh Nursing and Midwifery Council agreed on enhancing Behavior Change Communication. The Principal, College of Nursing, Sher-E Bangla Nagar (CONSBN), Dhaka mentioned the need for clinical preceptors, subject-based teacher training, and laboratory support for college accreditation. She also suggested developing a clinical preceptorship or mentorship program for hospital nurses and building strong collaboration between hospitals and colleges. Similar comments made by the directors of the target hospitals regarding the training of quality nurses and the improvement of nursing services.

1.4 Regarding the project management, the Director of Shaheed Suhrawardy Medical College Hospital (ShSMCH) raised a question on committee members that there is no member from the hospital administration side and suggested involving them in the committees.

1.5 Some other comments made by participants are as follows. Joint Secretary Ms. Maksuda (online) mentioned considering the challenges and the success of Phase 1. She also expressed the activities regarding the training of capacity building of nurses as there are other training, so the contents and mechanisms should check. Joint secretary ERD, A. K. M Sohel suggested outlining the tentative budget needs in the CBNS-II to reach a consensus on cost sharing. Md. Abdus Salam Khan, Joint Secretary (Planning) emphasized the development of cooperation and coordination between hospitals and nursing colleges and the committee's role and functions.

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CBNS-II activity progress and plan

1.6 The Deputy Chief Advisor, CBNS-II gave a presentation on the activity progress since the beginning of the Project, such as baseline survey, project management committees, working group activities, and the findings of visits to target eight nursing colleges and hospitals. She then explained the implementation process of outputs of the Project by sharing a PO and sub-activities of each output. She mentioned the details of training for master trainers (MT) as one example of planned activities for 2023. Training of master trainers for all target colleges and hospitals will in Dhaka. The first two target colleges and their collaborative hospitals (CONSBN and ShSMCH, Mymensingh Nursing College, and Mymensingh Medical College Hospital) will have close support of the Project to implement subsequent activities. In the other six colleges and hospitals, trained MTs will train their own college teachers and hospital nurses, and the Project will visit them for monitoring.

Cost sharing issues

1.7 The Director (Finance and Budget and Program Manager) of the DGNM explained DGNM's stance on the cost-sharing issue. She mentioned that duration of the 4th sector plan (HPNSP) extended without cost; therefore, it would not be possible to share the cost of training until June 2024. According to her comment, CBNS training plan can included into the 5th sector plan after July 2024. On the other hand, she refused to add the CBNS's workshop, meeting, and seminar to the operational-plan (OP) of DGNM. She proposed to spend project money for upcoming CBNS training, workshop, and others until July 2024 by their own. Other representatives from MOHFW and counterparts also took part in the discussions and provided suggestions. The agenda of the JCC and the list of the participants are attached as Annex 1 and 2, respectively.

2. Discussion and Decision

Agenda & Issues	Discussions	Decisions
The lesson learned from CBNS Phase I.	The Deputy Chief Advisor explained activities implemented in CBNS Phase I and discussed the issues and challenges. In particular, interruption of activities during the COVID-19 pandemic and subsequent measures taken by the Government to maintain quality and continuity of work after the project completion.	2.1 Management Committee meeting should be conducted regularly as planned for discussing and monitoring the progress of the project activities.
Sharing report of the baseline survey.	The CBNS-II team informed that baseline survey completed, and findings of survey presented in the report. It mentioned that none of the eight target colleges reached the same status in nursing education as Dhaka Nursing College (target of Phase I and accredited), which set as an indicator in PDM. The planned activities for the target colleges include supporting accreditation procedures or training to improve the clinical practice environment as essential to improve the quality of nursing education. The project team explained that a revision of the Baseline Survey Report is required.	2.2. Project needs to coordinate with other donor agencies to discuss activities to support the accreditation procedure for target nursing colleges. 2.3 Project will consider the training components, particularly improving a clinical practice environment for student nurses to gain more credit in accreditation. 2.4 Revised Baseline Survey Report to be shared with the JCC member when it is ready.
Communicating the progress of CBNS-II activities.	The Director of Shaheed Suhrawardy Medical College Hospital suggested involving members from the hospital administration side in the project management committee and project implementation committee.	2.5 The CBNS-II team will discuss the request for additional committee members.
Taking approval of the revised Project Design Matrix	The Deputy Chief Advisor explained that the PDM indicators would be modified based on the baseline survey and information collection	2.6 Revised version of PDM to be agreed with DGNM and approved by MEFWD.

Agenda & Issues	Discussions	Decisions
(PDM)	activity results, and PDM needed to be approved by the JCC. The Chair agreed that DGNM and JICA would discuss and agree on the modified version of PDM after JCC.	
Specification and approval of the revised Plan of Operation (PO) of CBNS II.	The Deputy Chief Advisor explained the implementation process of outputs of the Project by sharing a PO and sub-activities of each output. The project plans for a Master Trainer Training in 2023 with candidates from all 16 nursing colleges and hospitals. For the six colleges, MTs will transfer the knowledge to their own college/hospital. The Deputy Chief Advisor proposed the meeting for the approval of the said draft. Mr. Salam, Joint Secretary (Planning) advised the project team to finalize the revision based on the discussion of the JCC meeting.	2.7 Revised version of PO to be agreed with DGNM and approved by MEFWD. 2.8 Activities planned for the two first target colleges and the rest of the 6 colleges are to be clarified and agreed upon in a written document. 2.9 Activities for 2023 including a Master Trainer Training Plan to be agreed upon by the management committee and conducted according to the plan.
Cost sharing issue	The Director (Finance & Budget) of DGNM informed that OP had been extended till July 2024 without any budget sanction; therefore, DGNM cannot provide any financial support for the activities planned until June 2024. The CBNS project's planned capacity-building training which will be conducted after July 2024, can be integrated into the 5th sector plan. However, it will not be possible to include the management committees' budget, nor any workshops and seminars' budget, in the OP. The Chair suggested that DGNM and JICA would discuss and agree on cost sharing after JCC.	2.10 DGNM and JICA to discuss and agree on the cost-sharing issue from the second year. 2.11 Cost sharing agreement needs to be approved by MEFWD.
Way forward	The Chair of the meeting thanked the participants for attending the meeting and for valuable suggestions and time. He then expressed the hope of seeing excellent results from the Project.	2.12 Minutes of JCC to be shared and approved by MEFWD.

Md. Saiful Hassan Badal 21/11/22
Secretary
Medical Education and Family Welfare Division
Ministry of Health and Family Welfare

Government of the People's Republic of Bangladesh
Medical Education and Family Welfare Division
Ministry of Health and Family Welfare
Planning-2 Section
Bangladesh Secretariat, Bangladesh

Record of Discussion

Subject: Second Joint Coordinating Committee (JCC) Meeting on Capacity Building of Nursing Services (CBNS-II), JICA, Bangladesh
Date and Time: **March 24, 2024, 12:30 pm**
Venue: Conference Room, Ministry of Health and Family Welfare (MOHFW)
Chaired by: Md. Azizur Rahman, Secretary, MEFWD, MOHFW
Co-Chaired by: Mr. Takashi Komori, Senior Representative, JICA Bangladesh Office

Summary of the Meeting

Opening Speech

Mr. Md. Azizur Rahman, Secretary of MEFWD, MOHFW, chaired the meeting, welcoming attendees and expressing gratitude to Japan for its development cooperation. Mr. Takashi Komori, Senior Representative, JICA Bangladesh Office, acknowledged the crucial role of nurses in healthcare and GoB's recognition of their importance in patient recovery. He also highlighted JICA's focus on nursing education and expressed gratitude to the Prime Minister for supporting CBNS II.

Reminder of CBNS-II Outlines and Basic Policies

Ms. Yoshie Mizogami, Chief Advisor of CBNS-II at JICA, provided a brief overview of the project, noting it began in March 2022 and is scheduled to continue until March 2026. The project involves collaboration between DGNM, BNMC, MEFWD, and HSD, focusing on eight target public nursing colleges and their collaborative hospitals, with comprehensive intervention in two specific colleges and hospitals. Implementation is aligned with the revised Project Design Matrix (PDM) from May 2023.

Project Implementation Structure & Progress Activities

Mr. Md. Azizur Rahman, Secretary of MEFWD, MOHFW, inquired about the project's purpose to strengthen the implementation, monitoring, and evaluation system of nursing education and the strategies to achieve this. Ms. Mizogami explained the four outputs designed to achieve this purpose. In response to the Secretary's question about Output 2, she detailed activities to strengthen the capacity of nursing teachers, including faculty development training, committees between nursing college and hospital, and research capacity building. Similar programs exist for hospitals under Output 3, including master trainer and clinical nurse teacher (CNT) training, internal committees, and a coordination committee. CBNS II provides in-service and master trainer (MT) training for continuous professional development (CPD). Ms. Mizogami also discussed Output 1 and the need for DGNM collaboration for monitoring and supervision to sustain activities. Mr. Salam, Joint Secretary, noted CBNS II's provision of clinical practice and hands-on skill training for nurses' CPD.

The Secretary questioned whether nursing students are being trained to global standards. Ms. Mizogami clarified that the project follows national guidelines with standard guidelines, emphasizing the importance of monitoring and supervision for accurate implementation. Mr. Salam noted CBNS II's positive impact on nursing education quality, building on CBNS I. The Secretary inquired about measured indicators to identify gaps in training outcomes. Ms. Mizogami reported that a baseline survey was conducted, and objective indicators were set, with PDM revisions based on the first JCC meeting. Ms. Maqsura Noor, DG of DGNM, asked about pre- and post-test training evaluations, which Ms. Mizogami and Dr. Latif confirmed were conducted.

The Secretary expressed his vision for nurse teachers to train students to global standards within five years, enabling nurses to access the global market. Dr. Latif stated that the curriculum is standard but faces implementation challenges due to a lack of a proper delivery system, quality faculty, and supervised clinical practice. CBNS II aims to address these issues with master trainer and CNT training. Dr. Latif also raised concerns about the sustainability of CNTs, noting a significant decrease since CBNS I. The project provides direct support to Sher-E-Bangla Nursing College (CONSBN) and Mymensingh Nursing College for accreditation. The Secretary emphasized the need for standards and measurement indicators to assess progress.

Global Idea of the Project

Ms. Mizogami discussed the PDM and PO, noting their modification and approval based on the last JCC meeting's baseline survey results. The project aims to achieve its purpose through four outputs, each with activities and indicators for progress monitoring with DGNM. She highlighted the project's focus on strengthening the implementation system of nursing education and clinical practice. The Secretary requested timely provision of meeting documents for effective participation. Ms. Mizogami highlighted the expansion from one nursing college and collaborated hospital in CBNS I to eight of each in CBNS II, with outcomes to be shared with other institutions. She also outlined the JCC, PIC, and PMC meeting schedules for project oversight.

The Secretary announced and requested the postponement of a project steering committee meeting due to insufficient information, with a rescheduled date within 15 days. He requested all necessary documents from Mr. Salam and the DG of DGNM. Ms. Mizogami mentioned the presence of Japanese experts and her impending departure, leading to a decision to limit the meeting's depth.

Major Activities in 2023

Ms. Mizogami outlined project management and other activities, including coordination with other DPs, Japan training, JCC & PIC meetings, PMC meetings, regular monitoring, detailed planning surveys, harmonization with the next Ops, and the first batch of Japan Training. Output 1 activities include career path development, accreditation training, and CPD, with coordination efforts with other partners. Output 2 focuses on nursing teachers, clinical practice, and research, including needs assessments, tool preparation, MT training, and the establishment and monitoring of committees to enhance coordination between nursing colleges and hospitals. Output 3 involves MT and CNT training at the hospital side and the preparation of tools for in-service training. Output 4 relates to sharing CBNS phase 1 outcomes with stakeholders. She also shared the project activity plan and progress.

Some Issues and Countermeasures

Ms. Mizogami reported the postponement of the second PIC meeting due to the absence of major members over daily allowance concerns. DG of DGNM clarified the meeting was under government regulations and did not require project coverage of the allowance. The meeting was held one month later. The Secretary stressed the importance of regular PIC meetings for monitoring project progress. Mr. Nasir, Director of DGNM, cited the project's non-provision of travel costs and honoraria. The Secretary advised those from outside Dhaka to submit bills to their offices. Dr. Latif clarified that all PIC participants were from within Dhaka. Ms. Mizogami reiterated the project's cost-sharing agreements and requested advocacy for adherence to the agreement. Mr. Secretary emphasized proper meeting conduct and requested the DG of DGNM to oversee meetings and keep the ministry informed. Ms. Mizogami noted scheduling conflicts with other DP meetings and the project's efforts to coordinate, particularly with ProNurse, and the importance of sustainability through harmonization with the next operational plan.

Regarding the first round of Japan training, the Secretary inquired about issue number 13, which Dr. Latif and the DG of DGNM attributed to a problem with the ministry. The Secretary announced that the Ministry had sent the Accreditation Council proposal to the Prime Minister for approval, with the Council's potential functionality this month or early next month. On the faculty development issue, the Secretary stated his decision to direct the recruitment of BSc and MSc nurse teachers as lecturers. Mr. Latif and Ms. Afroza raised concerns about senior nurses already teaching. The Secretary assured those existing teachers would retain their positions.

The Secretary handed over the meeting to the DG of DGNM to continue and approve decisions. Participants discussed the direct recruitment of nurse teachers as lecturers, agreeing to consider it a career opportunity for qualified senior nurses. Ms. Mizogami provided updates on activity progress for outputs 1, 3, and 4, including the formation of a career path advisory board and working group. The DG of DGNM stated that the advisory committee would be formed within a week. Regarding output 2, Ms. Mizogami noted irregularities in college and hospital meeting frequency, causing implementation differences, and stressed the need for joint monitoring by DGNM. She also pointed out the inactivity of Research Committees and the importance of linking teacher experience with career paths to promote research. Output 3 progress was similar. Ms. Mizogami highlighted activities such as the first batch of training in Japan, the accreditation promotion meeting, and the completion of the first batch of MT training. Mr. Quader, Joint Secretary, discussed the action plan presentation from the Japan training, but Mr. Salam suggested postponing it until the Secretary was present.

Key points that highlighted as decision points:

- **Project Implementation and Monitoring:**
    - Regular PIC meetings are crucial for monitoring project progress and ensuring sustainability.
    - The need for timely provision of meeting documents to the Secretary for effective participation.
    - Addressing irregularities in college and hospital meeting frequency and the need for joint monitoring by DGNM.
- **Training and Capacity Building:**
    - Ensuring nursing students are trained to meet global standards.

    - Addressing implementation challenges in the curriculum, including the lack of a proper delivery system, quality faculty, and supervised clinical practice.
    - Concerns about the sustainability of CNTs and the need to address the decrease in numbers since CBNS I.
    - The importance of faculty development and the decision to recruit MSc nurse teachers as lecturers.
- **Coordination and Collaboration:**
    - The need for coordination with other DPs and harmonization of activities with the next operational plan to ensure sustainability.
    - Formation of a career path advisory committee and working group.
- **Accreditation:**
    - Update on the Accreditation Council proposal and its potential functionality.

In conclusion:

The DG of DGNM concluded the meeting, stating that the next meeting would be held soon to share all information. The meeting was adjourned with thanks to all participants.

Government of the People's Republic of Bangladesh
Ministry of Health and Family Welfare (MOHFW)
Medical Education and Family Welfare Division
Planning-2 Section
Bangladesh Secretariat, Bangladesh

Record of Discussion

Subject: Third Joint Coordinating Committee (JCC) Meeting on Capacity Building of Nursing Services (CBNS-II), JICA, Bangladesh.
Date and Time: July 29, 2025, 2:00 pm
Venue: 332, Conference Room, Ministry of Health and Family Welfare (MOHFW)
Chaired by: Dr. Md. Sarwar Bari, Secretary, MEFWD, MOHFW
Co-Chaired by: Dr. Eiji Yamada, Senior Representative, JICA Bangladesh Office.
Agenda & Issues
The meeting agenda focused on the progress and future of the CBNS-II project. Key items and issues discussed included:

- Reviewing the progress of the CBNS-II project with eight months remaining until its conclusion.
- Presenting the project's activities, achievements, and challenges.
- Addressing issues related to the sustainability of project outcomes.
- Discussing the formal recognition of Master Trainers (MTs) and Clinical Nurse Teachers (CNTs).
- Examining the functionality and sustainability of institutional committees.
- Reviewing planned management activities for the remainder of the project.

Meeting Summary
1. Opening Remarks
Dr. Md. Sarwar Bari, the Secretary of MEFWD, began the meeting by welcoming all attendees and expressing gratitude for Japan's continued development cooperation. He hoped the meeting would provide an excellent opportunity to review the progress of nursing-related activities under the CBNS-II project.
Dr. Eiji Yamada, the Senior Representative of the JICA Bangladesh, co-chaired and thanked the participants, highlighting the important role of nurses. He provided an update on the CBNS-II project's activities, including accreditation support, improvements in nursing education, career path development, and the preparation of 64 Master Trainers (MTs) and Clinical Nurse Teachers (CNTs). He also mentioned that the project will conclude in eight months, with plans to showcase and disseminate the results after its completion.
2. Project Outline, Progress, Achievements, and Challenges
Presentation:
Ms. Yoshie Mizogami, the Chief Advisor of the CBNS-II, presented a comprehensive overview of the project's activities, progress, achievements, and challenges. She noted that the project is built on four pillars with the ultimate goal of improving the quality of nursing education and services, as well as establishing a system for implementing, monitoring, and evaluating the BSc education curriculum. She expressed her hope for the continuity and sustainability of the project's activities even after its duration ends.
2.1 Project Progress and Achievements: Ms. Yoshie Mizogami presented on the project's status, emphasizing its four pillars and focus on building sustainable systems.

- **Output 1 (Nursing Administration):** She said that CBNS-II has supported the DGNM and BNMC in different activities, such as developing a career path, promoting accreditation support, and advancing Continuing Professional Development (CPD) initiatives. Already, College of Nursing Sher-e-Bangla and Mymensingh Nursing College have submitted their accreditation self-assessment reports, and dates have been set for the accreditation review meetings.
- **Output 2 (Nursing Education):** The CBNS-II project has worked closely with the target nursing colleges and hospitals to strengthen the capacity of clinical nurses and nursing faculty through Master Trainer (MT) training. A total of 64 certified MTs have been developed—five from each hospital and three from each nursing college. These MTs from the nursing colleges are also providing the faculty development (FD) training to enhance the capabilities of existing nurse teachers.
- **Output 3 (Clinical Practice):** Master Trainers (MTs) from hospitals train Clinical Nurse Teachers (CNTs) to ensure direct supervision of students in clinical settings. Additionally, MTs and CNTs provide in-service training for clinical nurses. A total of **258 CNTs** have been developed, with a target of 400.
- **Output 4 (Dissemination & Sustainability):** The project is focused on knowledge-sharing, with two mutual visits completed and more planned. Best practices from both Phase I and Phase II will be compiled and shared at a seminar following an end-line survey in November 2025. Ms. Mizogami also mentioned that a draft MT training module and navigation guide are being finalized, with a stakeholder meeting planned to seek approval from the ministry via DGNM. She highlighted that this process also includes establishing career path options for MTs and CNTs, validating the training module, and securing budget approval to ensure ongoing training and sustainability.

2.2 Project Status & PDM:

Ms. Mizogami noted the project has seven months remaining and presented the status of the Project Design Matrix (PDM) indicators. She mentioned that an end-line survey is underway to measure student satisfaction in nursing colleges as well as other outcomes. She also noted the minor modifications to the PDM to clarify terminology and improve operational guidance.

2.3 Key Challenges:

Ms. Mizogami raised several key challenges for the JCC to address.

- **Frequent Transfers:** The frequent transfer of institute heads creates a need for proper handovers to ensure project continuity.
- **Stagnant Committee Activities:** The project's institutional committees at some nursing colleges and hospitals have stagnated, requiring regular monitoring by DGNM. Mizogami expressed concern that during the CBNS phase 1, the project provided significant intervention, but after its completion, activities ceased.
- **Sustainability:** She emphasized that ensuring the continuation of good practices and activities after the project's conclusion remains a significant concern.

2.4 Major Planned Activities:

Ms. Mizogami outlined upcoming activities, including the next JCC meeting, the end-line survey, ongoing training and support, mutual visits to share best practices, and the development of a CPD framework and policy recommendations.

3. Discussion & Decisions:

- The Registrar of BNMC explained the accreditation process to reply to the secretary's question: colleges submit self-assessments, a review team conducts site visits, and BNMC assigns star ratings based on the re-evaluation of the accreditation Decision-Making committee.
- Regarding the number of Master Trainers (MTs) and Clinical Nurse Teachers (CNTs), Ms. Mizogami confirmed 64 MTs and 258 CNTs have been developed, with a target of 400 CNTs. She stressed the need for a system to sustain this training.
- The DG of DGNM noted that the 1.4 crore taka budget for revenue training is insufficient to train all 43,000 nurses in clinical practice. He added that a 55-crore taka budget proposal for foundation training has been submitted.
- The Secretary highlighted the importance of formally recognizing MTs and CNTs within the system. The DG of DGNM responded that while not all are equally qualified, efforts are being made to accommodate them as trainers or teachers based on their competency.
- Mr. Salam, Additional Secretary, stressed the importance of formal monitoring and including project activities in the revenue budget to ensure sustainability.
- The DG of DGNM noted that among the eight target colleges, MNC and Sh. SMCH have been performing well in holding committee meetings.
- Mr. Salam emphasized that leadership should not rely solely on JICA personnel and that non-functional committees need reform. He added that a small refreshment budget of 500 taka could help to motivate committee members attending the meeting on time.
- The Director of MMCH praised CBNS-II and expressed a desire to elevate nursing standards in Bangladesh. He offered space for continued training and requested training materials at Mymensingh Medical College Hospital.
- The Director of Sh. SMCH appreciated JICA's contributions and emphasized the need to sustain improvements.
- Regarding the **PDM** Mr. Salam suggested discussing the PDM with the DG of DGNM and assured ministry approval. It is noted that following the meeting, Project Chief Adviser & Senior consultant already discussed the PDM modification part with DG of DGNM and he agreed on the change on August 13th.

4. Final Remarks:

- The chair finally concluded the meeting by thanking CBNS-II and JICA and extending his best wishes for the success of all planned activities. The meeting was formally concluded with mutual expressions of appreciation.

Signed/-
Date 31.07.2025
(Dr. Md. Sarwar Bari)
Secretary
Medical Education & Family Welfare Division
Ministry of Health and Family Welfare.

No 59.00.0000.153.14.001.15-139(1) Date 31.07.2025

Distribution (not according to seniority):

1. Secretary, Economic Relations Division (ERD), Shere-Bangla Nagar, Dhaka;
2. Member, Planning Commission, Dhaka;
3. Secretary, Implementation of Monitoring Evaluation Division (IMED), Dhaka;
4. Director General, Directorate General of Health Service, Mohakhali, Dhaka;
5. Additional Secretary (Development Wing), Medical Education and Family Welfare Division;
6. Additional Secretary, (Nursing & Midwifery) Health Service Division, Dhaka;
7. Additional Secretary (Admin), Medical Education and Family Welfare Division, Dhaka;
8. Additional Secretary, (Planning) Health Service Division, Dhaka;
9. Director General, Directorate General of Nursing and Midwifery, Mohakhali, Dhaka;
10. Joint Secretary (Planning), Medical Education and Family Welfare Division, Dhaka;
11. Director, Shaheed Suhrawardy Medical College Hospital, Dhaka;
12. Director, Mymensingh Medical College Hospital;
13. Deputy Secretary (Planning 1/3), Medical Education and Family Welfare Division, Dhaka.
14. PS to the Secretary, Medical Education and Family Welfare Division
15. Registrar, Bangladesh Nursing and Midwifery Council (BNMC);
16. Principal, College of Nursing, Sher-E-Bangla Nagar, Dhaka;
17. Principal, Mymensingh Nursing College, Mymensingh;

JCC Members:

18. Mr. Yamada Eiji, Senior Representative, JICA Bangladesh Office;
19. Ms. Yumi Okazaki Representative JICA BD Office;
20. Ms. Salma Akter, Deputy Program Manager, JICA BD Office;
21. Mizogami Yoshie, Chief Advisor, JICA CBNS Phase-II;
22. Maiko Nagasawa, Deputy Chief/Clinical Practice, CBNS Phase-II;
23. Tamami Udagawa, Expert Clinical Practice, CBNS Phase-II;
24. Dr. Abdul Latif, Senior Consultant, JICA CBNS Phase-II;
25. Satu Mondal, Mid-Career Consultant, CBNS-II;
26. Afroza Banu, Mid-career Consultant, JICA CBNS Phase-II;
27. Nasima Sultana, Mid-career Consultant, JICA CBNS Phase-II;
28. Sarder Mehedi Hyder, Manager (Admin), JICA CBNS Phase-II;
29. Mothiour Rahman, Manager (Admin), JICA CBNS Phase-II;

31.07.2025

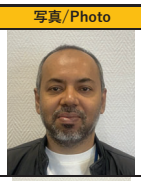
(Nasrin Parvin)
Deputy Secretary
Medical Education and Family Welfare Division

添付資料5：本邦研修日程表、研修員リスト

研修日程表

日付	時刻	形態	研修内容	都道府県	研修場所
11/25(土)	23:55 ～		ダッカ出発		
11/26(日)	6:05 ～ 9:25		（シンガポール経由）		
	～ 17:30		成田着		
11/27(月)	10:00 ～ 12:00		研修ブリーフィング	東京都	JICA東京
	12:00 ～ 13:00		研修オリエンテーション	東京都	JICA東京
	15:00 ～ 16:30	講義	日本看護協会（講義・ディスカッション） ・日本看護協会の果たす役割、看護師のキャリア構築支援、質の高い看護職人材養成のための官民協働促進、他	東京都	日本看護協会
11/28(火)	10:00 ～ 12:00	講義	日本訪問看護財団（講義・ディスカッション） ・日本の訪問看護の実情、医療の地域移行について	東京都	日本訪問看護財団
	13:00 ～ 15:00	講義	日本訪問看護財団（講義・ディスカッション） ・地域型医療のチャレンジ	東京都	日本訪問看護財団
	15:00 ～ 15:30	視察	日本訪問看護財団 地域型医療のチャレンジ ・訪問看護ステーション見学、体験実習、	東京都	日本訪問看護財団
11/29(水)	9:30 ～ 11:00	講義	厚生労働省医政局看護課/地域医療計画課/健康局健康課（講義・ディスカッション） ・日本の看護行政について、看護系技官のキャリアパス、看護の質の向上に係る厚生労働省の取り組み、他	東京都	厚生労働省医政局
	11:30 ～ 12:30	講義	文部科学省高等教育局医学教育課（講義・ディスカッション） ・日本における高等看護教育（大学看護教育）の歩み、大学における看護系人材養成のあり方（看護学教育モデル・コア・カリキュラム）、他	東京都	文部科学省高等教育局医学教育課
	14:00 ～ 15:00	講義	日本看護系大学協議会（講義、ディスカッション） ・日本における大学看護学教育の充実・発展及び学術研究の水準の向上の取り組みについて、他	東京都	日本看護系大学協議会 （会議室）
	15:00 ～ 16:00	講義	日本看護学教育評価機構（講義、ディスカッション、施設見学） ・看護学教育分野別評価の重要性と必要性について、他	東京都	日本看護系大学協議会 （会議室）を引き続き利用
	16:30 20:00		移動（東京→神戸）		
11/30(木)	9:30 ～ 12:00	講義	神戸市看護大学（講義、ディスカッション） ・大学職員の配置、career/faculty development、大学看護教育の実際、他	兵庫県	神戸市看護大学
	12:00 ～ 12:30	視察	神戸市看護大学（施設見学） ・大学看護教育の実際、施設見学	兵庫県	神戸市看護大学
	14:00 ～ 15:00	講義	附属病院視察（講義、ディスカッション） ・病院組織図・院内委員会等、他職種とのチーム医療、看護職のcareer path,in-service trainingの実際、地域連携室（退院支援）他	兵庫県	神戸市医療センター中央市民病院
	15:00 ～ 16:30	視察	附属病院視察（施設見学）・病院組織図・院内委員会等、他職種とのチーム医療、看護職のcareer path,in-service trainingの実際、地域連携室（退院支援）他	兵庫県	神戸市医療センター中央市民病院
12/1(金)	9:30 ～ 11:30	講義	兵庫県看護協会（講義、ディスカッション） ・看護協会に所属するメリット、2025年に向けた地域・地方看護の挑戦、看護の将来ビジョン他	兵庫県	兵庫県看護協会
	11:30 ～ 12:00	視察	兵庫県看護協会（研修センターと図書館見学） ・研修センター・図書館見学、他	兵庫県	兵庫県看護協会
	14:00 ～ 15:00	講義	地域看護関連施設（講義） ・地域看護のメカニズムや利点、地域で働く看護職（保健師）の活動場所と活動内容、公衆衛生学・予防医学に関わるサービス、	兵庫県	神戸市保健所・保健センター
	15:00 ～ 16:30	視察	地域看護関連施設視察 ・神戸市保健所、保健センター見学、ディスカッション	兵庫県	神戸市保健所・保健センター
12/2(土)	9:00 ～ 10:30	講義	日本文化体験(歴史街道)プログラム（講義）	京都府	JICA関西
12/2(土)	10:30 ～ 17:00	視察	日本文化体験(歴史街道)プログラム（視察・文化体験）	京都府	
12/3(日)	～		アクションプラン作成（自主研修）	兵庫県	各自
12/4(月)	9:30 ～ 12:30	発表	アクションプラン発表会	兵庫県	JICA関西
	～		閉講式　(30分程度を予定)		
12/5(火)	11:00 ～		関空出発		
	～		（シンガポール経由）		
	～ 22:40		ダッカ着		

Members List

No.	写真/Photo	Name of the Participants	研修員名（日）	Designation	所属機関（日）	Position	職位（日）
1		Mohammad Abdul Quader	ムハンマド・アブドゥル・カデル	Ministry of Health and Family Welfare	保健家族福祉省	Joint Secretary (Nursing Education branch)	次官補佐
2		（Brig. Gen.） Md. Golam Ferdous	ムハンマド・ゴラム・フェル	Mymensingh Medical College Hospital	マイメンシン医科大学病院	Director	病院長
3		Nilufar Easmin	ニルファ・ヤスミン	Bangladesh Nursing and Midwifery Council (BNMC)	バングラデシュ看護助産審議会	Deputy Registrar	副会長
4		Mosammat Shahinoor Begum	モサマット・シャヒヌル・ベグム	College of Nursing, Sher-E Bangla Nagar, Dhaka	シェレバングラナガル看護大学	Principal	学長
5		Mamotaz Begum	モモタジ・ベグム	Mymensingh Nursing College, Mymensingh	マイメンシン看護大学	Principal	学長
6		Mossamat Salina Akther	モサマット・セリナ・アクタ	Chottogram Nursing College, Chottogram	チョットグラム看護大学	Principal	学長
7		Shahina Begum	シャヒナ・ベグム	Sylhet Nursing College, Sylhet	シレット看護大学	Principal	学長
8		（Dr. ） Md. Foyejur Rahman	ムハンマド・フォイズル・ラフマン	Rajshahi Nursing College, Rajshahi	ラジシャヒ看護大学	Principal	学長
9		Most. Sufia Begum	ムサンマド・シュフィア・ベグム	Rangpur Nursing College, Rangpur	ロンプール看護大学	Nursing Instructor	講師
10		Tahmina Akter	タホミナ・アクタル	Barisal Nursing College, Barisal	バリサル看護大学	Principal	学長
11		Shamsun Nahar	シャムスン・ナハル	Shaheed Tajuddin Nursing College	シャヒード・タジュディン看護大学	Principal	学長
12		Shahnawaz Parveen	シャハニワズ・パルビン	Shaheed Sahrawardy Medical College Hospital	シャヒード・スフラワルディー医科大学病院	Nursing Superintendent	看護部長
13		Niva Rani Chanda	ニバ・ラニ・チョンド	Mymensingh Medical College Hospital	マイメンシン医科大学病院	Nursing Superintendent	看護部長

Seminar on the advancement of the status of nurses in Bangladesh
Agenda (Tentative)

Venue: **Conference Room, DGNM, Mohakhali, Dhaka**
Date: **May 8, 2025**
Time: **11:00 am - 1:00 pm**
Chairperson: **Director General (DG), DGNM**

Purpose of the Seminar:

- To provide an opportunity for sharing Japanese experiences and perspectives on promoting the professional status of nurses, and to facilitate discussion among stakeholders on actions needed to strengthen the recognition, roles, and working environment of nurses in Bangladesh.

Seminar Agenda:

- Current efforts to promote nursing career paths in Bangladesh
- Efforts to enhance nurses' status at the International Council of Nurses and the Japanese Nursing Association
- Nursing policy and administrative systems in Japan and building nursing career development
- Strengthening nursing education and skills development at nursing colleges
- Discussion

Timetable

No.	Time	Activity	Person Responsible
1	10:45	Registration	DGNM, CBNS-II Project team
2	11:00	Introduction of participants	DGNM, CBNS-II Project team
3	11:05	Welcome address, efforts to promote nursing career paths in Bangladesh	Director General, DGNM
4	11:10-11:35	Lecture 1: Enhancement of nurses' status based on experience with the International Council of Nurses and the Japanese Nursing Association	Dr. Hiroko Minami, Emeritus Professor of Kobe City College of Nursing, External Advisor of CBNS-II
5	11:35-12:05	Lecture 2: Nursing policy and administrative systems in Japan and building career development on that basis	Dr. Yayohi Tamura, President of Japan Visiting Nursing Foundation, External Advisor of CBNS-II
6	12:05-12:35	Lecture 3: Strengthening nursing education and skills development, drawing on experience as president of a nursing college	Dr. Noriko Katada, Chair of the Board of Trustees and President of Mie Prefectural College of Nursing, Expernal Advisor of CBNS-II
7	12:35-12:55	Q &A and Discussion	DGNM, CBNS-II Project team
8	12:55	Closing Speech	DG, DGNM

Tea/BS

Lunch.

Participants List (Tentative)

1. Director General, Directorate of Nursing & Midwifery (DGNM)
2. Director (Admin), DGNM
3. Director (Education & Discipline), DGNM
4. Deputy Director (Admin), DGNM
5. Deputy Director (Education), DGNM
6. Deputy Director (PMIS), DGNM
7. Deputy Program Managers, DGNM (2)
8. Additional/ Joint Secretary, MEFWD, MOHFW.
9. Additional/ Joint Secretary, HSD, MOHFW
10. Joint Secretary (HRD), HSD, MOHFW.
11. Registrar, BNMC
12. Director, NIANER, Mugda, Dhaka
13. Principal, Dhaka Nursing College, Dhaka
14. Principal, College of Nursing, Sher E Bangla Nagar, (CONSBN), Dhaka
15. Nursing Superintendent, Dhaka Medical College Hospital
16. Nursing Superintendent, Sheed Suhrawardy Medical College Hospital (ShSMCH), Dhaka
17. Principal, Grameen Caledonian College of Nursing
18. ProNurse, GAC
19. UNFPA
20. WHO
21. JICA Headquarters (2)
22. JICA Bangladesh Office (2)
23. CBNS-II (6)

20250508 Seminar; Position Promotion of Nurses in Bangladesh

Leadership and Communications of Nursing Administrators



—Through personal experiences

南　裕子　Minami, Hiroko:　RN, MPH, DNSc

Former President of Kobe City College of Nursing

Professor Emeritus of the following academic organization;

St. Luke's International University,

University of Hyogo, University of Kochi & KCCN

Former President of Japanese Nursing Association

Former President of International Council of Nurses(ICN)

Former Chair of the Board of World Academy of Nursing Science

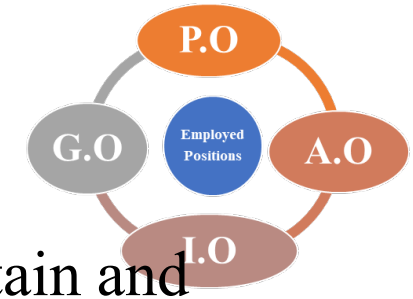
Where are you working?
How far are you relating to?



Leaders's Roles



Leader's Roles

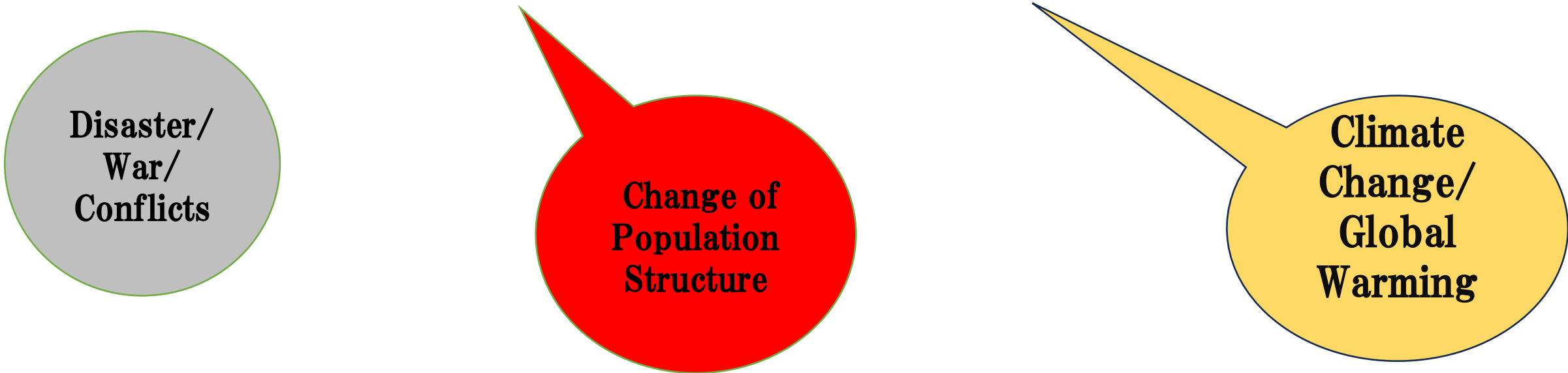


Nurses with leader's position have responsibility and accountability to maintain and improvehealth of people in their country and around the world.

Primal responsibility and accountability were for their work place(employed).

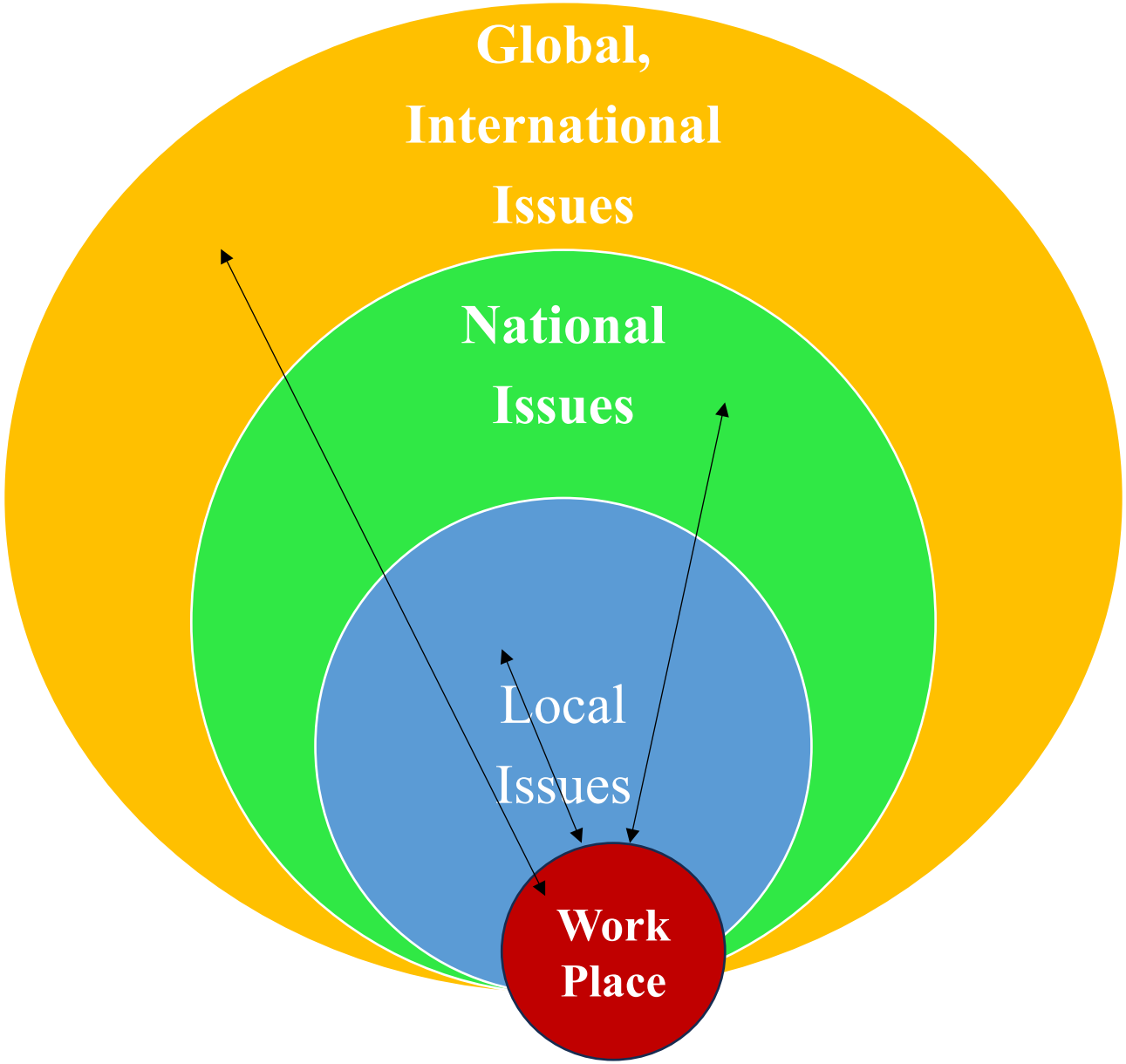
However, that is not enough .

Nurse Leaders can expand their leadership roles through professional and academic organizations to improve nursing status and then leading to health of people in the world.



My Personal Experiences




Global,
International
Issues
National
Issues
Local
Issues
Work
Place

My 9-years experience in St. Luke's College of Nursing



Within Work

1. Start the program of MH/Psy. Nursing
2. Devel. of WHO Collaborative Center
3. Devel. the Doctoral program

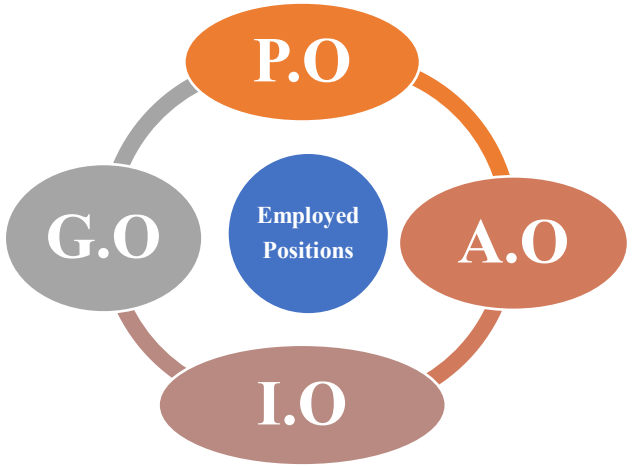
Extended Work

1. Plan the CNS programs with other universities
2. Conduct the Collaborative Research projects
3. Member of governmental committees

Outside of the work

1. Vice President of JNA, incld. establish CNS system
2. Private project with other leaders
3. Member of WHO Global Nursing projects

My 17-years experiences of University of Hyogo



Within work

1. BSN, MN, DNS programs established
2. Cope with the Great Earthquake of Hanshin Awaji
3. Established practice oriented research center
4. Inaugurated WHO CC
5. Remodeled from College to University

Outside of work

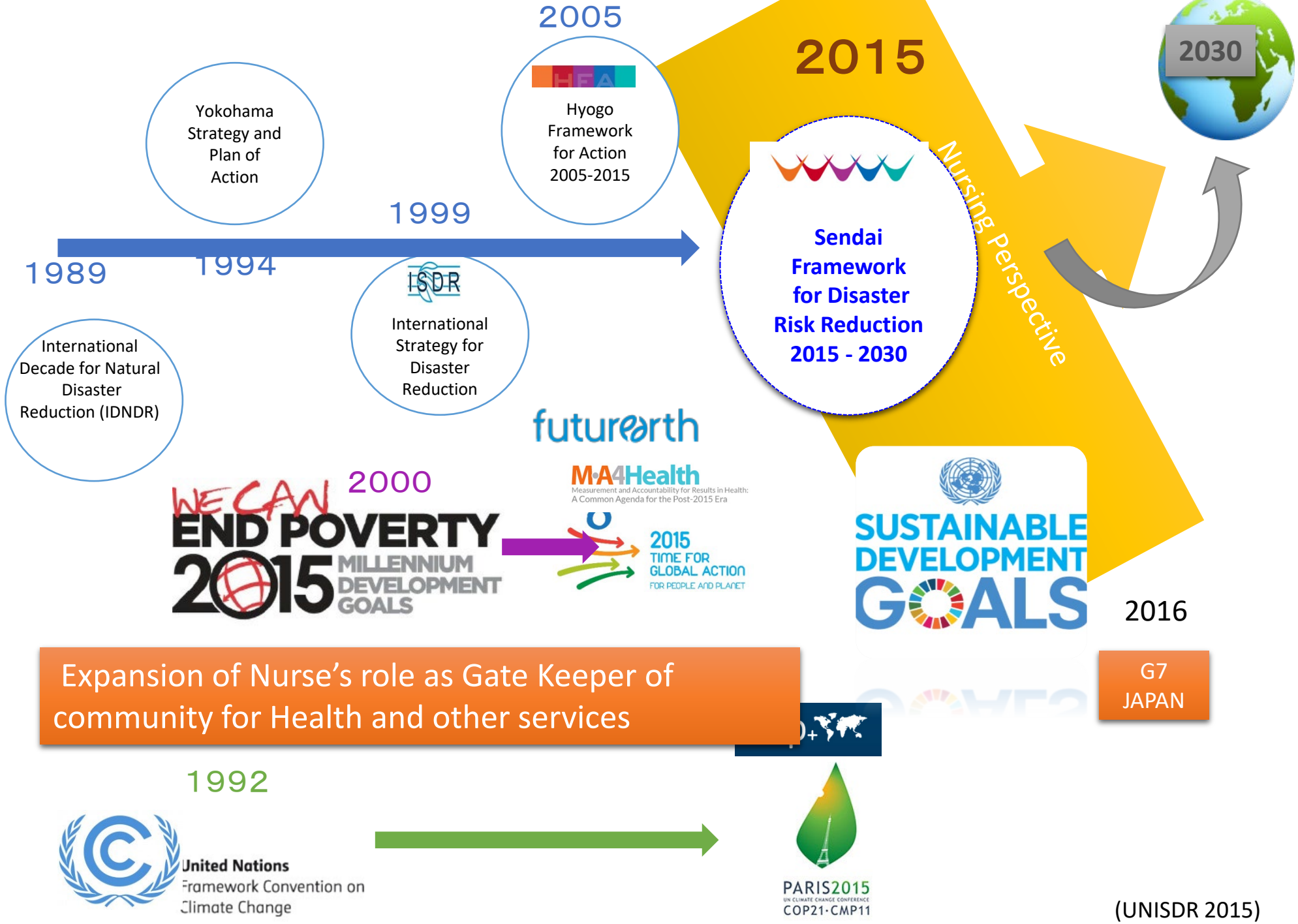
1. President of JNA
2. President of ICN
3. Establishment of JSDN
4. Establishment of WANS
5. Member of NGO/GO org.
6. Member of Science Council of Japan

Extended Work

1. Member of global network of WHO CC
2. Member of Governmental committees
3. Leading the national network of nursing education
4. Develop. of prefectural network of nursing education

My Personal Experiences




2005
Yokohama Strategy and Plan of Action
Hyogo Framework for Action 2005-2015
2015
2030
1999
1989
1994
International Decade for Natural Disaster Reduction (IDNDR)
International Strategy for Disaster Reduction
Sendai Framework for Disaster Risk Reduction 2015 - 2030
Nursing Perspective
futureearth
2000
WE CAN END POVERTY 2015 MILLENNIUM DEVELOPMENT GOALS
M·A4Health
Measurement and Accountability for Results in Health: A Common Agenda for the Post-2015 Era
2015 TIME FOR GLOBAL ACTION FOR PEOPLE AND PLANET
SUSTAINABLE DEVELOPMENT GOALS
2016
G7 JAPAN
Expansion of Nurse's role as Gate Keeper of community for Health and other services
1992
United Nations Framework Convention on Climate Change
PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

(UNISDR 2015)

SUSTAINABLE DEVELOPMENT GOALS



Human Security

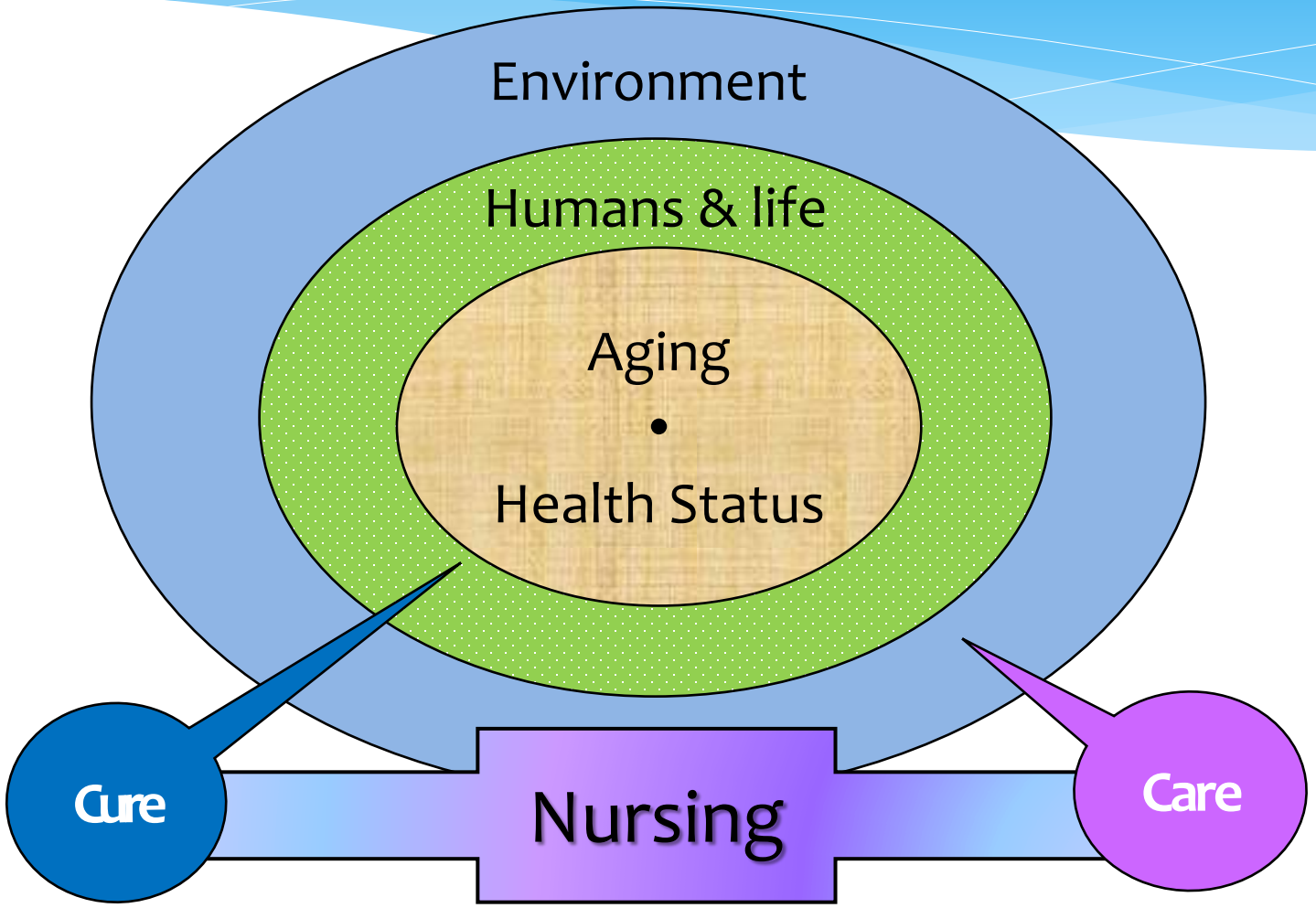
Human security means protecting fundamental freedoms—freedoms that are the essence of life.



* It means "protecting people from critical (severe) and pervasive (widespread) threats and situations.
* It means using processes that build on people's strengths and aspirations. It means creating political, social, environmental, economic, military and cultural systems that together give people the building blocks of survival, livelihood and dignity.

UNOCHA: Human Security Now 2003

Componets of Nursing Knowledge



Developing Care Innovations to Address Local Needs Will Transform Nursing

From "Think Globally, Work Locally"
Communicate globally from local initiatives!

The Role of Nursing Administration in Building Nursing Careers in Japan

JICA Short-Term Expert

President, Japan Visiting Nursing Foundation

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2025 May, DGNM Seminar

Enactment of the “Act on Public Health Nurses, Midwives, and Nurses” and Establishment of "Nursing Division" in the Ministry of Health and Welfare (1948)

- **Purpose of Act on Public Health Nurses, Midwives and Nurses**

  "To improve the quality of public health nurses, midwives, and nurses, and thereby to promote and improve medical care and public health."

- **Legal measures to improve qualifications**

  1. Education: 3 years or more of education after high school graduation,

  criteria for designation as a school / training center (Ministerial designation)

  2. National examinations

  3. License

- **Nurse appointed as Chief Nursing Officer**

Establishment of the “The National Center for Nursing Education and Research” (1976)
—To improve the quality of nursing education—

- **Executive Nursing Teacher Training Course**

  Training period: 1 year

  Educational content: school management, curriculum development, research, etc.

- **Full-time teacher training course (**pubic health nurse, midwife, nurse training institute)

  Training period: 1 year

  Educational content: educational theory, educational methodology, educational practice, etc.

- **Nursing teacher was recognized as a career for the nursing profession.**

Report of the Study Group on the Nursing System, Ministry of Health and Welfare (1987)

To broad examination of the state of the nursing system with an eye toward the 21st century

- **Social changes**: Aging of society, changes in the structure of disease, more sophisticated and specialized medical care, growing public interest in health, etc.
- **Nursing changes**: increas nursing care and guidance for homebound patients, liaison and coordination in team approach medical care, increased health education, terminal care, etc.
- **Key Recommendations**
  1. Expansion of universities and graduate schools
  2. Development of clinical nurse specialist
  3. Development of visiting nurses
  4. Training of nursing managers
  5. Systematization of lifelong education, etc.

Report of the Study Group on Lifelong Education for Nursing Personnel, Ministry of Health and Welfare (1992)

- Toward the Implementation of the Recommendations of the Nursing System Study Group (1987) * 5th Key recommendation

"For All Nurses Can Grow as Professionals" was discussed.

1. Refresher Education: All Nurses

2. Professional development training

(1) Nursing practical training: Nurses who have graduated within the last 3 years

(2) Training in specialty areas in nursing

(3) Training in leadership and management positions

Nursing Teachers Seminar

Nursing Managers Seminar

Enacted Law Concerning the Promotion of Human Resource Securing for Nurses (1992)

- **Background**: With the drastic reform of the healthcare delivery system, the shortage of nurses has become a major social issue. This law was enacted to address this issue.
- **"Basic Guidelines on Measures to Promote Human Resource Securing for Nurses" formulated in accordance with the law (public notice by the three Ministers of Health, Education, and Labor)**

  1. Training: Improvement and enhancement of nursing colleges and graduate schools
  2. Improvement of compensation: reduction of night shift workload, salary level, work reform, welfare, etc.
  3. Quality improvement: training for those in leadership and management positions, systematization of lifelong training
  4. Employment promotion: promote retention, identify underemployed persons, and promote reemployment
  5. Promoting public understanding on nursing: Establishment of "Nursing Day"

Ministry of Health, Labour and Welfare, "Study Group on the Training of New Nursing Staff" Report (2004)

- **Background**

  1: Decline in technical skills of new graduates due to curriculum revision

  2: Strong social demand for medical safety

- Recommendations for training instructional structure and training objectives for new nursing staff (2004)

  → 2005 Started training of training supervisors

  → 2006 Training of new midwives and new nurses begins.

- Development of "Training Guidelines for New Nursing Staff" (2007)

- “Public Health Nurse, Midwife, and Nurse Act“ revised (2009):

  Add "Obligation to make efforts for training" for all nursing personnel, etc.

- “Law Concerning the Promotion of Human Resource Securing for Nurses" revised (2009)

  Add: "To provide a training environment" to the employer's responsibilities.

  Add: “To receive training" to the responsibilities of nurses, etc.

Ministry of Health, Labour and Welfare, "Council for the Promotion of Team Medicine" Report (2013) -1

- **Background**

1. Shortage of physicians in charge of medical practice due to mandatory post-graduate training for physicians

2. The increasing need to promote team approach to medical care as it becomes more sophisticated

3. The need for medical care for home care patients is increasing

4. Progress in nursing education at universities and graduate schools

Ministry of Health, Labour and Welfare, "Council for the Promotion of Team Medicine" Report (2013) -2

- Based on the recommendations of this council report

  The Act on Public Health Nurses, Midwives, and Nurses was amended (2014) to introduce the Specific Practice Training System

  Nurses have received training at designated training institute can perform 38 specific medical procedures based on comprehensive direction of a physician.

- **Examples of specific actions**:

  Tracheal cannula replacement, Temporary pacemaker operation and management, Removal of central venous catheter Blood sampling by direct arterial puncture, Adjustment of insulin dosage, Administration of analgesics via epidural catheter and dosage adjustment,Temporary administration of anticonvulsants, anxiolytics, etc.

Amendments to the “ National Personnel Authority Regulations ”: Revision of the Salary Schedule for National Public Servant Nurses (2022) -1

- **Background**

1. The increase of the number of public opinion that nurses should be paid more for their work during the COVID-19 epidemic.

2. The traditional salary schedule does not reflect the diverse careers of nurses.

Amendments to the “ National Personnel Authority Regulations ”: Revision of the Salary Schedule for National Public Servant Nurses (2022) -2

- As a result of the amendment, nurses can now be promoted to higher job grades as they advance in their careers, along with salary increases.

  1. At Grade 3: Stipulating "Assistant Head Nurse" and " Nurse who is engaged in difficult work based on a particularly high level of knowledge and experience”.

  2. At Grade 4: Stipulating “ Head Nurse"

- For many young nurses, it is also expected to increase their motivation for career advancement.

Summary -1

1. Based on the aging of the population, disease structure change, and trends in health care and welfare, MHLW conducted a study by experts, and the concept and direction of the nursing system and career development for nurses were clearly presented as recommendations.

2. In the implementation of the recommendations, efforts are being developed at various levels, including the national and prefectural governments, nursing associations, universities, and hospitals depending on the content of the recommendations. In promoting these initiatives, cooperation between the Nursing Division of the MHLW and the Japan Nurses Association is very important.

Summary -2

3. Various career development such as training for new nurses, nurse specialists , visiting nurses, nursing managers has been realized. These are supported by the mandatory training effort provision based on the Public Health Nurses, Midwives, and Nurses Act and the Law concerning the Promotion of Human Resource Securing for Nurses to promote these programs. The salary structure is also able to reflect careers.

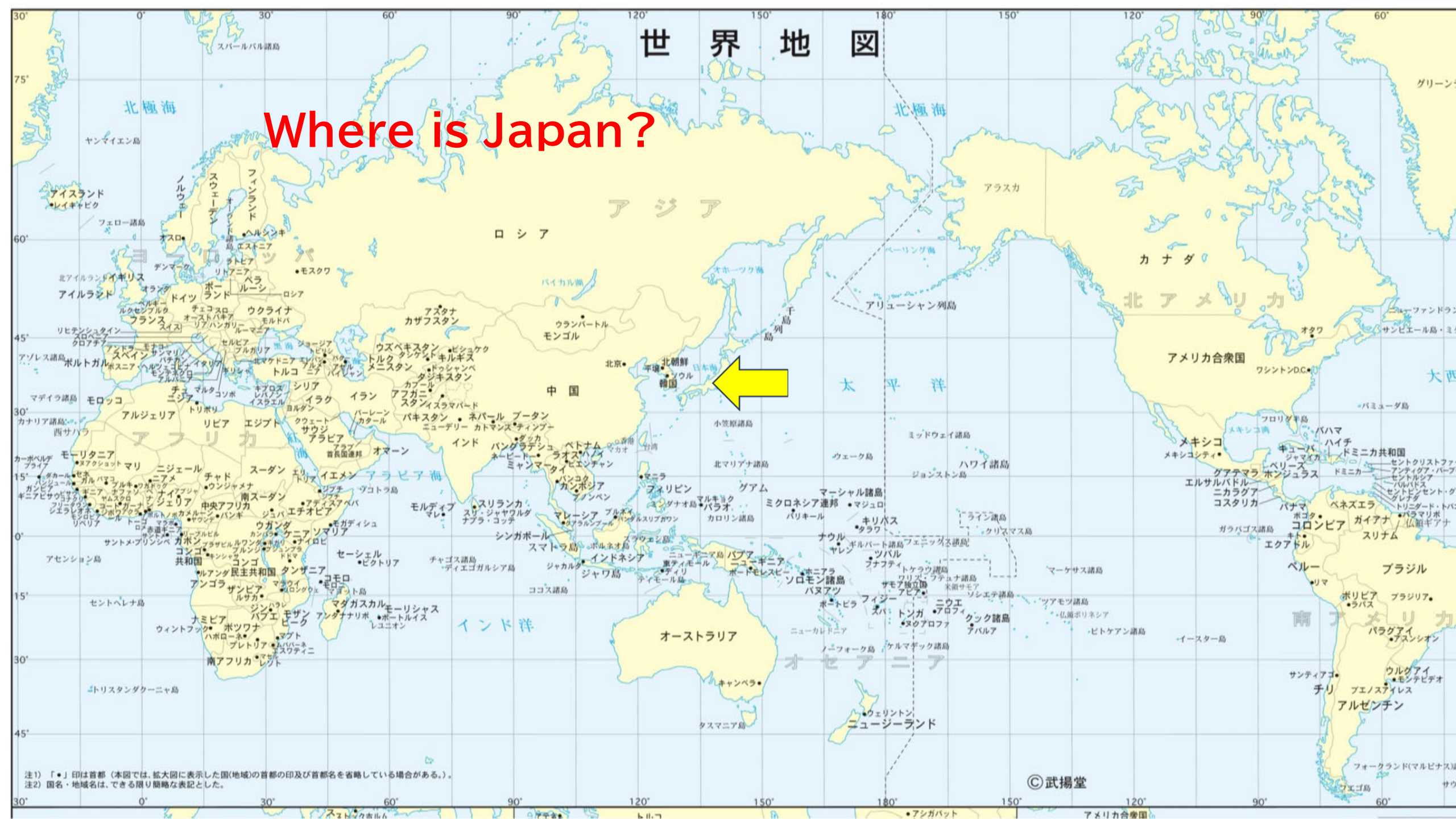
4. Nursing teacher were trained through trainings for a long time, but nowadays, the standard path is to obtain a degree at a graduate school, which have been developed under the Law concerning the Promotion of Human Resources Securing for Nurses.

Thank you very much!

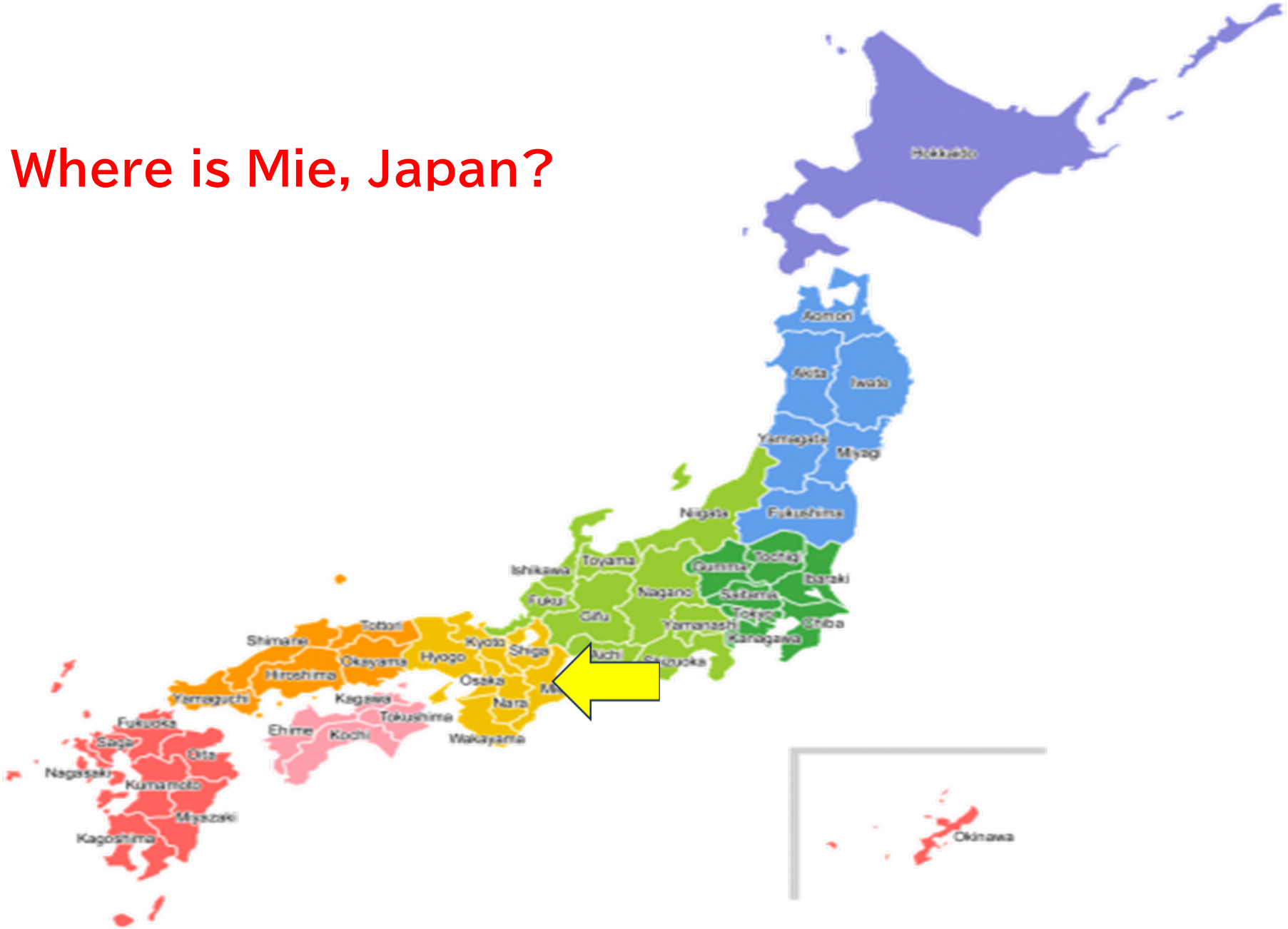
অসংখ্য ধন্যবাদ।

Nursing Education to Empower Students

Noriko Katada, RN, DNSc
President Mie Prefectural College of Nursing
Professor Emeritus University of Hyogo
Member of the Science Council of Japan


世界地図
Where is Japan?
北極海
アジア
ロシア
ヨーロッパ
アフリカ
北アメリカ
カナダ
アメリカ合衆国
中国
太平洋
インド洋
オーストラリア
オセアニア
南アメリカ
ブラジル
アルゼンチン
ニュージーランド
©武揚堂

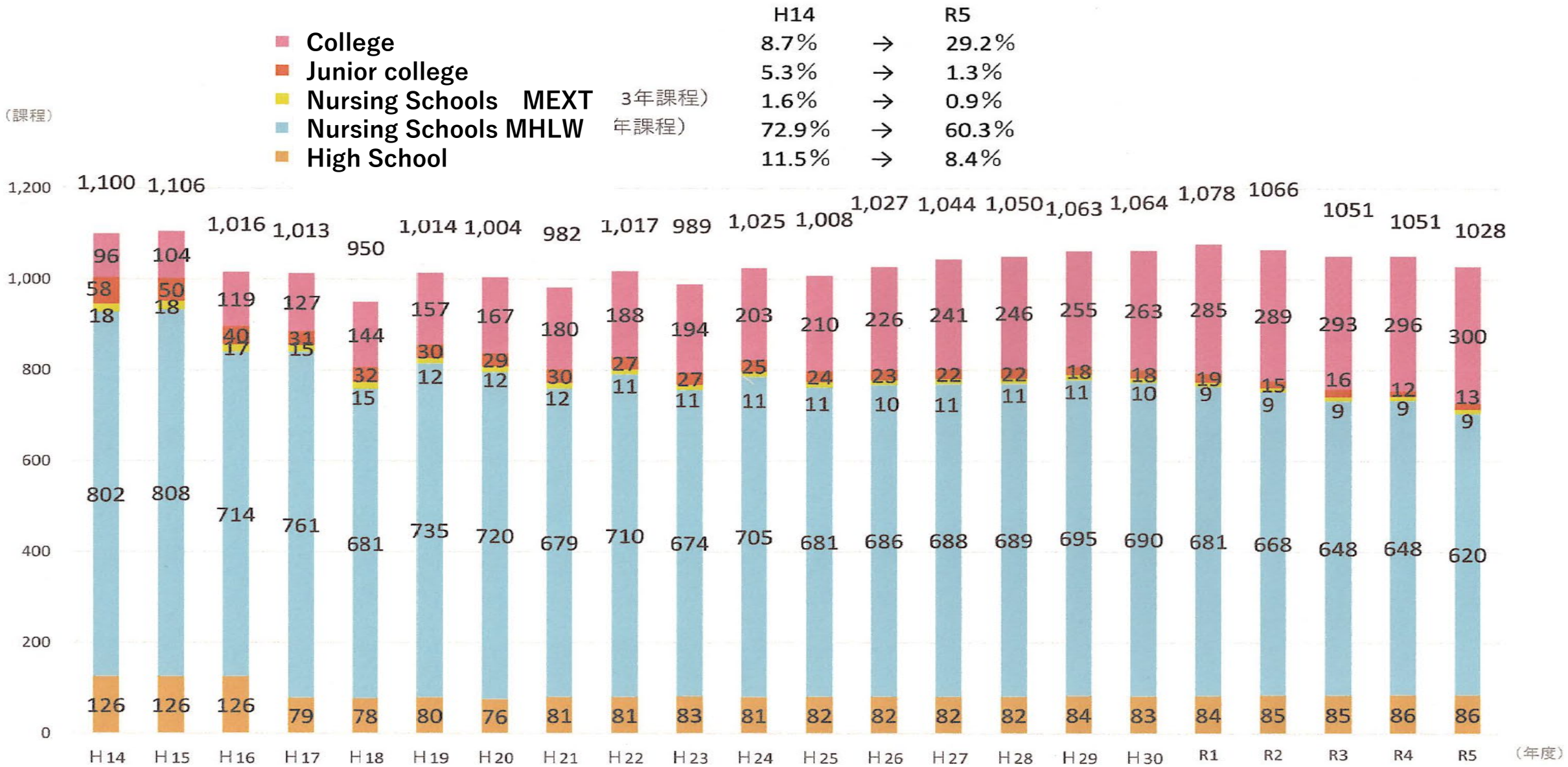
Where is Mie, Japan?



Where is Tsu, Mie, Japan



Yearly Changes in the Number of Training Courses In Japan



Mie Prefectural College of Nursing

Started on 1997

1. **Rationale for Establishing the College/ University**

2. **Educational Philosophy**

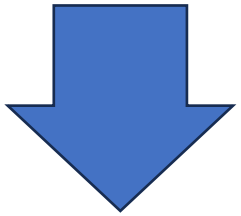
3. **Educational Goals**

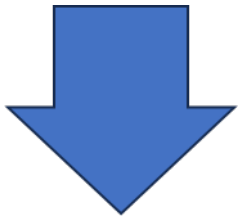


from Handbook for Students (2025）

1. Rationale for Establishing the Nursing College

- rapid ageing of the Japanese population
- transformation and change of healthcare environment
- role of nursing has undergone qualitative changes and a significant expansion in scope
- demonstrate sound judgment and the ability to adapt flexibly to the dynamic social landscape





Mie Prefectural College of Nursing was Started:

To actively promote nursing education and research rooted in regional characteristics.

To cultivate highly competent nurses capable of addressing a broad range of social healthcare needs.

To contribute the enhancement of health, medical care, and welfare in the region and beyond.

2. Educational Philosophy

Advanced knowledge and practical skills founded upon a deep sense of humanity and a broad worldview.

Aims to develop comprehensive competencies as professionals who can contribute to improving the health, medical care, and welfare of individuals and communities across diverse societal domains.

Aims to cultivating future educators and researchers who will advance the discipline of nursing science and contribute to its academic foundation.

3. Educational Goals

The College upholds the following educational objectives:

1. To cultivate an ethical foundation grounded in respect for life, flexible critical thinking, and a holistic understanding of human beings.

2. To impart the knowledge and skills essential to the nursing profession and nurture the ability to respond appropriately to patients ’nursing needs throughout all stages of life.

3. To encourage students’ abilities to collaborate across professional disciplines in healthcare, thereby ensuring effective nursing interventions tailored to the needs of local communities.

3. Educational Goals （continue）

4. To promote understanding of regional lifestyles, cultures, and histories, and foster nursing. practices that are sensitive to local characteristics.

5. To instill habits of self-directed learning and a research-oriented mindset, equipping students to contribute to the development of nursing science.

6. To stimulate students' intercultural communication abilities and foster a global perspective in professional conduct.

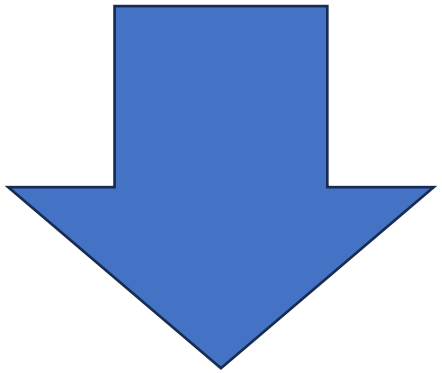
4. Three Core Academic Policies in each College

[Admissions Policy] (What Is Expected of Applicants)

[Diploma Policy] (Certification & Degree Awards for Graduates)

[Curriculum Policy] (Organization and Implementation of the Curriculum)

For the health and empowerment of the people



1. Commitment to Service and Professional Growth
2. Academic Skills
3. Logical Thinking Skills
4. Interpersonal Skills
5. Ethical Standards
6. Leadership Skills and Social Commitment

添付資料　（人間 JR26061 看護人材育成 03）

添付資料７：　ベースライン調査報告書

Report

Baseline survey of the Capacity Building of Nursing Services Phase 2 Project

October 25, 2022

Submitted to

Capacity Building of Nursing Services Phase 2 (CBNS-II)

Submitted by

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Abbreviations

BaNC	Bandarban Nursing College
BNC	Barisal Nursing College
BNMC	Bangladesh Nursing & Midwifery Council
BSH	Bandarban Sadar Hospital
CBNS	Capacity Building of Nursing Services
CMCH	Chattogram Medical College Hospital
CNC	Chattogram Nursing College, Chattogram
CNT	Clinical Nurse Teacher
CONSBN	College of Nursing, Sher-e-Bangla Nagar, Dhaka
CPD	Continuous Professional Development
DGHM	District General Hospital, Manikganj
DGNM	Directorate General of Nursing & Midwifery
DMCH	Dhaka Medical College Hospital
DNC	Dhaka Nursing College
GAC	Global Affairs Canada
HPNSP	Health, Population and Nutrition Sector Program
JICA	Japan International Cooperation Agency
KII	Key Informant Interview
MaNC	Manikganj Nursing College
MMCH	Mymensingh Medical College Hospital
MNC	Mymensingh Nursing College
MOHFW	Ministry of Health & Family Welfare
NIANER	National Institute of Advanced Nursing Education and Research
NS	Nursing Supervisor
NSI	Nursing Superintendent
RMCH	Rajshahi Medical College Hospital

RNC	Rajshahi Nursing College
RpMCH	Rangpur Medical College Hospital
RpNC	Rangpur Nursing College
SBMCH	Sher-e-Bangla Medical College Hospital
SHB	Sadar Hospital, Bandarban
ShSMCH	Shaheed Suhrawardy Medical College Hospital
ShTAMCH	Shaheed Tajuddin Ahmad Medical College Hospital
ShTANC	Shaheed Tajuddin Ahmad Nursing College, Gazipur
SNC	Sylhet Nursing College
SOMCH	Sylhet MAG Osmani Medical College Hospital
SSH	Society of Stimulation in Healthcare
UHC	Universal Health Coverage
UNFPA	United Nations Population Fund
WHO	World Health Organization

Chapter 1: Overview of the Survey

1.1 Background

The People's Republic of Bangladesh (hereafter referred to as Bangladesh) has a long-standing health human resources shortage, particularly an overwhelming shortage of nurses. According to the World Health Organization (WHO), the number of nurses is 3.6 per 10,000 population (in 2020), a significant deviation from the WHO requirement of 44.5 per 10,000 population. There is an urgent need to increase the nursing workforce.

In the health sector in Bangladesh, the Eighth Five Year Plan (8FYP, FY2020/21-2024/25), which is the national development plan, and the 4th Health, Population and Nutrition Sector Program (4th HPNSP) (January 2017 - June 2023) set out efforts towards achieving Universal Health Coverage (UHC) by 2030 through strengthening the health system and the quality of health care services. However, the mid-term review report of the 4th HPNSP (May 2020) pointed out the delay in measures regarding the number of healthcare personnel and the quality of healthcare services as a major challenge. The Government of Bangladesh has stepped up its efforts to increase the number of nurses, with Prime Minister Sheikh Hasina pledging in 2009 to increase the number of nurses and work as a government to address the nursing shortage. In December 2016, 10000 new nurses were placed in hospitals in Bangladesh. Also, a four-year Bachelor of Science (BSc) in Nursing was introduced in 2008, and the Health Workforce Strategy was developed in 2015.

The Japan International Cooperation Agency (hereafter referred to as JICA) has assisted the efforts of GoB. The "Project for Capacity Building of Nursing Services" (2016-2020) (hereafter referred to as the CBNS-I Project) aimed to improve the quality of education for BSc in Nursing in Bangladesh. The activities have been implemented in three areas: implementing policy and strategy to improve BSc Nursing education, improving quality of management and faculty member of BSc Nursing education and enhancing management of clinical practice system, in collaboration with the Ministry of Health and Family Welfare (MOHFW), the Bangladesh Nursing and Midwifery Council (BNMC), Dhaka Nursing College (DNC) and Dhaka Medical College Hospital (DMCH).

The "Project for Capacity Building of Nursing Services Phase II (hereafter referred to as the CBNS-II Project) was then formulated to continue to support strengthening the management capacity of nursing administration and to develop the results of the CBNS-I Project on strengthening the implementation system of nursing education and clinical nursing practice to other universities.

1.2 Purpose of the Survey

The purpose of the baseline survey is to get preliminary information on the current situation related to the nursing administration, nursing education and clinical practices in the targeted nursing colleges and its partner hospitals with the goal of strengthening the system of nursing education and clinical nursing practices.

1.3 Methodology

1.3.1 Study design: It was a cross-sectional institution-based study following a mixed approach, both qualitative and quantitative, with a duration from June to October 2022.

1.3.2 Study area: Eight public nursing colleges with their partner hospitals were selected for this study; where are the target institutes of Capacity Building of Nursing Service Project Phase II (CBNS-II), one of the JICA project along with other relevant institutions and stakeholders e.g. Dhaka Nursing College (DNC), Dhaka Medical College Hospital (DMCH), Government Organizations and Donors (UNFPA, GAC, NIANER). Two non-targeted institutions (Manikganj Nursing College and Bandarban Nursing College, along with their collaborated hospitals) were also selected as a control sample for an impact study between a baseline and an endline survey.

The list of selected CBNS-II target nursing colleges collaborated hospitals and other organizations as bellow.

Table 1: Target institutes for the Baseline Survey

SI	Nursing Colleges	SI	Partner Hospitals
1-1	College of Nursing, Sher-e-Bangla Nagar, Dhaka (CONSBN)	1-2	Shaheed Suhrawardy Medical College Hospital, Dhaka (ShMCH)
2-1	Mymensingh Nursing College, Mymensingh (MNC)	2-2	Mymensingh Medical College Hospital (MMCH)
3-1	Chattogram Nursing College, Chattogram (CNC)	3-2	Chattogram Medical College Hospital (CMCH)
4-1	Sylhet Nursing College, Sylhet (SNC)	4-2	Sylhet MAG Osmani Medical College Hospital (SOMCH)
5-1	Rajshahi Nursing College, Rajshahi (RNC)	5-2	Rajshahi Medical College Hospital (RMCH)
6-1	Rangpur Nursing College, Rangpur (RpNC)	6-2	Rangpur Medical College Hospital (RpMCH)
7-1	Barisal Nursing College, Barisal (BNC)	7-2	Sher-E-Bangla Medical College Hospital, Barisal (SBMCH)
8-1	Shaheed Tajuddin Ahmad Nursing College, Gazipur (ShTANC)	8-2	Shaheed Tajuddin Ahmad Medical College Hospital, Gazipur (ShTAMCH)
	List of non-targeted / Controlled sample institutions		
9	Manikganj Nursing College (MaNC) and affiliated Hospital (DGHM)		
10	Bandarban Nursing College (BaNC) and affiliated Hospital (SHB)		
	Other Organizations for KII		
11	Dhaka Nursing College (DNC)		
12	Dhaka Medical College Hospital (DMCH)		
13	Directorate General of Nursing & Midwifery (DGNM)		
14	Bangladesh Nursing & Midwifery Council (BNMC)		
15	National Institute of Advanced Nursing Education & Research (NIANER)		
16	Global Affairs Canada (GAC)/ProNurse		
17	United Nations Population Fund (UNFPA)		

1.3.3 Data collection instrument

Data collection methodology

- A semi-structured questionnaire
- Observation checklist
- KII guideline

Development of the Questionnaires

During development of the questionnaire few documents were reviewed and the questionnaire was organized into five parts -

Part A: Provider-based questionnaire to the Nursing Colleges
Part B: Nursing college student-based questionnaire
Part C: Partner hospitals nursing staff-based questionnaire
Part D: Questionnaire for Clinical Supervisors / Instructors of Partner hospital nursing staffs who look after the student nurses
Part E: Provider-based questionnaire to the Partner Hospitals

Part A comprises Program director /Institute head data, administrative data, Program data, Faculty data, Student data, Teaching & Learning Resources (Infrastructure) and Others.

Part B includes the nursing college student-based questionnaire to assess student's satisfaction with the quality of their education. We will utilize the extensively established *Course Experience Questionnaire* (CEQ) scale. CEQ comprises 6 sections as follows: 'Student Support Scale (SSS),' 'Learning Resources Scale (LRS),' 'Course Organization Scale (COS)', 'Learning Community Scale (LCS),' 'Graduate Qualities Scale (GQS),' and 'Intellectual Motivation Scale (IMS)'. This scale comprises a total of 30 questions under 6 sub scales and the responses were measured in a 4-point Likert scale (strongly disagree= -2, disagree= -1, agree=1, strongly agree=2) with higher scores indicating more satisfaction. In our study, we also collected information on students' career aspirations by asking them to indicate their career goals on the end-of-semester survey as a freeform.

Part C includes the *'Practice Environment Scale of the Nursing Work Index'* which was used to measure nurses' satisfaction with the practice environment. This scale comprises of 37 items/questions under 7 different subsections named as 'Training opportunity for nurses', 'Career development', 'Nursing team', 'System to assure quality nursing care', 'Nursing care and its quality', 'Relationship with co-worker' and 'Treatment for nurses in the hospital'. The respondent's responses were assessed to the extent to which they were satisfied with each item on a 5-point Likert scale (very dissatisfied= -2, dissatisfied= -1, neutral=0, satisfied=1, and very satisfied=2), with higher scores indicating more favorable nursing practice environments.

Part D questionnaire is for the clinical supervisors / instructors who look after the students in hospital settings. The aim of this part is to assess the current situation of clinical practices for student nurses. The questionnaire includes the duration of experience of the clinical supervisor / instructor, number of students supervised per instructor, any training they received either in-service or pre-service etc.

Part E is for the provider-based questionnaire for the partner hospitals to collect the information about the total number of wards, beds, departments and nurses in different positions, the number of master trainers and training held for the mentoring nurses, department-wise placement of the nursing students. This part also helped to assess the current situation of clinical practices for student nurses.

KII Guideline

Separate guidelines were prepared for DGNM, BNMC, NIANER, GAC/ProNurse, UNFPA, External Review Team Members, the Principal of the Dhaka Nursing College & Director of Dhaka Medical College Hospital.

Pre-testing

The questionnaires were finalized through a consultation meeting with the JICA project team members. Feedback was received from other stakeholders such as Directorate General of Nursing and Midwifery (DGNM, MOHFW) and Bangladesh Nursing and Midwifery Council (BNMC). Then the provider, institutional and affiliated hospitals' administrators, nursing staff and students' interview questionnaires were translated into the local language and finalized. Then pre-testing was done to assess the validity of the questionnaire. The survey was performed after resolving any ambiguities in the questionnaires.

1.3.4 Sampling technique and sample size

Table 2: Sampling technique, sample size, target interviewee and method of interview

Questionnaire	Target Interviewee	Sample size	Sampling technique	Method of interview
Part A	Principal of the Nursing College	8	Purposive	Face-to-face interview
Part B	Nursing students	As actual	Census as all students of 2nd & 4th year will be taken	Self-administered Questionnaire
Part C	Nursing Staff	400	Proportionate stratified systematic random sampling	Self-administered Questionnaire
Part D	Clinical Supervisor / Instructor	As actual	Census as all available Clinical Supervisor / instructor will be taken	Self-administered Questionnaire

Questionnaire	Target Interviewee	Sample size	Sampling technique	Method of interview
Part E	Director/Nursing Superintendent of Hospital	16	Purposive	Face-to-face interview

Table 3: Number of the student nurses (SN) interviewed in each nursing college for Part B

Sl	Nursing Colleges	2nd Year	4th Year	Total number of NS
1	College of Nursing, Sher-E-Bangla Nagar, Dhaka	86	89	175
2	Mymensingh Nursing College	92	88	180
3	Chattogram Nursing College	90	89	179
4	Sylhet Nursing College, Sylhet	79	66	145
5	Rajshahi Nursing College, Rajshahi	86	84	170
6	Rangpur Nursing College, Rangpur	92	83	175
7	Barisal Nursing College, Barisal	88	93	181
8	Shaheed Tajuddin Ahmad Nursing College, Gazipur	95	97	192
	Total in 8 target colleges	**708**	**689**	**1,397**
9	Manikganj Nursing College	83	58	141
10	Bandarban Nursing College*	42	-	42
	Grand Total	**833**	**747**	**1,580**

*In Bandarban, there are no students in 4th year.

Sample size determination for Part C

Using a confidence level of 95% and assuming a proportion of nurses as 50%, the number of nurses estimated at 384 (using the formula $n = Z^2 pq/d^2$, where n= sample size; Z = standard normal variate = 1.96; p=prevalence; q =1-p and d = allowable error of known prevalence). Considering 5% non-response rate the final sample size was 400 and the number of nursing staff in each partner hospital was selected by proportionate sampling technique after collecting the staff list from the hospital (see below table 4).

Table 4: The proportionate distribution of nursing staff in each targeted partner hospital for Part C

Sl	Partner Hospitals	Total number of staff nurses	Ratio of nurses with total sample size	Sample size from each hospital
1	Shaheed Suhrawardy Medical College Hospital, Dhaka	660	8.7	35
2	Mymensingh Medical College Hospital	1,052	13.9	56
3	Chattogram Medical College Hospital	1,197	15.8	63
4	Sylhet MAG Osmani Medical College Hospital	1,211	16.0	64
5	Rajshahi Medical College Hospital	1,168	15.4	62

Sl	Partner Hospitals	Total number of staff nurses	Ratio of nurses with total sample size	Sample size from each hospital
6	Rangpur Medical College Hospital	936	12.4	49
7	Sher-E-Bangla Medical College Hospital, Barisal	950	12.6	50
8	Shaheed Tajuddin Ahmad Medical College Hospital, Gazipur	388	5.1	21
	Total	**7,562**	**100%**	**400**

Finally, 392 nursing staff were interviewed as a total from the 8 targeted hospitals and the others were non-response (please see table 3 for specific number). From the counted number of each hospital, it was planned to take half from the nursing staff with equal or less than 10 years' experience and another half with more than 10 years of experience. But due to the absence of data on nurse's experience in the hospital record it was not possible to select the nurses equally from each group initially during recruitment. We selected the required number from each hospital and then divided them into two groups (<10 and >10 years' experience) during analysis.

Table 5: Number of nursing staff interviewed in each targeted partner hospital for Part C

Sl	Partner Hospitals	Number of nurses	<10-year experience	≥10-year experience
1	Shaheed Suhrawardy Medical College Hospital, Dhaka	35	13	22
2	Mymensingh Medical College Hospital	56	38	18
3	Chattogram Medical College Hospital	49	31	18
4	Sylhet MAG Osmani Medical College Hospital	64	12	52
5	Rajshahi Medical College Hospital	62	32	30
6	Rangpur Medical College Hospital	55	11	44
7	Sher-E-Bangla Medical College Hospital, Barisal	50	16	34
8	Shaheed Tajuddin Ahmad Medical College Hospital, Gazipur	21	17	4
	Total	**392**	**170**	**222**

From the non-targeted two hospitals (Manikganj District General Hospital and Bandarban Sadar Hospital) total 52 staff nurses were interviewed as per their availability.

Table 6: Non-targeted Hospitals

Sl.	Partner Hospitals	Number of nurses	<10-year experience	≥10-year experience
1	District General Hospital, Manikganj	30	24	6
2	Sadar Hospital, Bandarban	22	7	15
	Total	**52**	**31**	**21**

For Part D – the number of clinical supervisors / instructors were not known as there is no such designated sanctioned post in the hospitals who supervise the nursing students in clinical placement. So, to get this number we collected the roaster of student's clinical placement and then asked the nursing superintendent of each hospital during the field survey - "Who supervises the students in their clinical placement in different wards?", "Do you have any roaster for the nursing staff who supervises the students?". Based on the answer of the nursing superintendent the interviewee for Part D questionnaire was selected.

Table 7: Number of Clinical Supervisors / Instructors interviewed in each partner hospital for Part D

SI	Partner Hospitals	Number of Clinical Supervisors/Instructors
1	Shaheed Suhrawardy Medical College Hospital, Dhaka	10
2	Mymensingh Medical College Hospital	5
3	Chattogram Medical College Hospital	39
4	Sylhet MAG Osmani Medical College Hospital	5
5	Rajshahi Medical College Hospital	16
6	Rangpur Medical College Hospital	15
7	Sher-E-Bangla Medical College Hospital, Barisal	1
8	Shaheed Tajuddin Ahmad Medical College Hospital, Gazipur	6
	Subtotal	**97**
9	District General Hospital, Manikganj	10
10	Sadar Hospital, Bandarban	5
	Grand total	**112**

1.3.5 Data collection and analysis

A. Documents review

- To assess the standard of nursing education we collected and reviewed the curriculum of BSc nursing education, accreditation guideline for self-assessment tool and review team report from BNMC and policy documents from the BNMC and DGNM.
- To fulfil the provider-based information we collected and reviewed all the relevant documents required for evaluating the accreditation status of form the administrative authority of 10 selected nursing colleges, like fulfillment of infrastructure with BNMC criteria, organogram, master plan/prospective/resource plan/budget of the institution where available, administrative documents supporting student intake per year according to Government policy, records of student's admission/student's results, curriculum vitae or personal data sheet assessing the qualification of the directors/ teachers or nursing instructors, number of training received by the teachers/instructors, number of part-time or full-time teachers, records of the orientation of the new students and faculties, lesson plan of the instructors etc.
- To collect the same, we reviewed the documents from the partner hospitals like number of beds, wards, nursing staff, departments, department-wise clinical rotation plan of

students, number of Clinical Supervisor / Instructor, if any, and list of clinical placement sites in other organizations, etc.

B. Observation

To assess the education standard, we also filled up a checklist (yes/no) through observation, like the presence of well-equipped classrooms and labs, favorable learning environment, infrastructure and condition of the nursing hostel, availability of safe drinking water source, presence of separate washroom for faculties and students, presence of common room, prayer room, guard room etc. We also observed a theoretical and a clinical class (student-teacher interaction).

C. Face-to-face interview

Quantitative

After taking the authorization letter from the project office of JICA, we approached for a support letter from the Govt. (DGNM, BNMC). The Consultants self-accompanied the team during all the interviews of the heads of the nursing colleges and partner hospitals and facilitated the team in order to collect proper information along with documents through a provider-based questionnaire (Part A & E).

For Part B, C & D the selected participants were invited for an interview using a self-administered questionnaire on a pre-fixed schedule. The data collectors assisted the interviewee to fill up the questionnaire under the supervision of the Field Supervisor.

Qualitative

For the qualitative component, a key informant interview (KII) was conducted. Guidelines for KII were developed in consultation with JICA Project team members and the consultant was involved here directly. A total of seven KIIs, were conducted from health care administrators (DG of DGNM, Registrar of BNMC, Principal of DNC, Director of DMCH), and other stakeholders (GAC/ProNurse, UNFPA, NIANER) as suggested by the project team members of JICA. All the KIIs were recorded using a voice recorder after taking permission from the participants. Transcription of the recorded session was transcribed in the local language first as it is and then was translated into English for further analysis. Thematic analysis was done to present the findings.

Measures of Variables

The following variables were chosen as outcomes based on the grantee's set-up guidelines:

Program director credentials*:* Program director credentials were tracked as a multi-level categorical variable, which included BA, BS, MSN, DNP, PhD, and various other fields (Master of Education [MEd], Doctor of Education [EdD], "non-nursing master's", etc.).

Faculty qualifications*:* Faculty qualifications were tracked as a multi-level categorical variable. For each of the following categories, the proportion of faculty members holding these education credentials were reported: (a) associate degree, (b) baccalaureate nursing, (c) baccalaureate non-

nursing, (d) master nursing, (e) master non-nursing, (f) DNP, (g) PhD nursing, and (h) PhD non-nursing.

Clinical Supervisor / Instructor:

The nursing staff of the hospitals who supervise the student nurse in their clinical placement are designated as Clinical Supervisor / Instructor.

Total enrollment/maximum capacity: Separate variables were created to present for total student enrollment and maximum program capacity.

Estimated graduation rate*:* Raw scores were recorded.

CEQ score: Raw score was measured in different subscales.

Career aspirations: categorical variables created for student's students' career goals at the end of the semester.

Seminars and forums*:* The number of seminars and forums in the past 12 months held was counted.

Practice Environment Scale of the Nursing Work Index: Raw scores were counted, the higher scores indicating a more favorable nursing practice environment.

Trained nursing staff: number of trained nursing staff in the partner hospital who received training in the past twelve months.

Ethical clearance

Ethical Approval was obtained from the Ethical Review Committee (ERC) of Bangladesh University of Health Sciences, Dhaka, Bangladesh (Memo No: BUHS/ERC/EA/22/43 Date: 31.07.2022).

1.4 Targets

a. Head of the nursing colleges
b. Faculties (nursing instructors) of the nursing colleges
c. Students of the nursing colleges
d. Head of the partner hospitals
e. Nursing Superintendent of partner hospitals
f. Nursing staff of partner hospitals
g. Clinical supervisors / instructors in partner hospitals
h. Other stakeholders (DGNM, BNMC, UNFPA, ProNurse, NIANER etc.)

1.5 Points of Analysis

For the quantitative part, descriptive analysis was done, and the findings of the survey were presented in tables and graphs using frequency and percentage. We presented the findings in separate tables and graphs for each part of the questionnaire showing each institution in a separate column. For part A and E, percentage calculation was done in excel, counting the yes/no and putting them in the result in a descriptive manner. From part A we calculated the accreditation standard score for each college through the assessment criteria of each standard separately.

We used the windows software SPSS for the analysis of part B, C and D. In part B, student's opinion for each of the 6 scales was categorized as poor = score below 18, average = score 18 to 27, and good = score more than 27 using the Median and Interquartile Range (IQR).

For the qualitative part, at first raw transcription was done directly in English from the recorded speech, then the comments were arranged in sequence following the KII guideline and presented as a summary for each organization.

Chapter 2: Results

2.1 Situation of the Nursing Colleges

The situation of the nursing colleges is described here based on fulfillment of the accreditation standards. Accreditation is an evaluation process initiated by BNMC and conducted by the self-initiatives of the colleges. There are 5 domains and 5 standards of accreditation as shown below.

Table 8: Accreditation Domains and Standards according to Bangladesh Nursing and Midwifery Council (BNMC)

Domains	Standards	
Administration and Leadership	I	The governance of the Nursing and Midwifery Educational Institutions supports good quality nursing & midwifery education.
Student Type and Intake	II	The Nursing and Midwifery Educational Institutions admit students who have the academic background and ability to meet the requirements of the program.
Teaching Staff and Learning	III	The students of Nursing and Midwifery Educational Institutions are taught by well- qualified instructors in the classroom and in clinical placements
Curriculum Delivery	IV	The delivery of the national curriculum for nurse and midwife fosters good student outcomes.
Resources	V	The Nursing and Midwifery Education Institutions have the resources to provide a good learning environment for teaching and learning.

Accreditation procedure

First, the colleges have to do self-assessment using the self-assessment tools. After that they will apply to the Bangladesh Nursing and Midwifery Council (BNMC) for accreditation. After BNMC receives a formal application from the college, accreditation will be processed through 3 phases as below.

Phase 1: Formation of review team - a 3 member's review team (external) will be formed by BNMC for different courses (BSc, Post-basic, Diploma etc.) of the colleges. BNMC give a training to all the external members including the colleges how they will inspect the college and how the college will cooperate with the members, as it is a very new process in Bangladesh.

Phase 2: Site visit and submission of report - Self-assessment tool is validated by the review members according to each criterion of the 5 Standards. Then the review team will visit the site and observe each criterion for example, access to the class, clinical placement, practical, or other facilities of the college through the evidence-based inspection by the review team. Following that, the committee will submit a review team report to the Registrar of BNMC with their recommendations and observations.

Phase 3: Decision making – BNMC will submit the review team report to the Accreditation Decision Making Committee. The committee will sit with the experts, sometimes they can ask for some changes,

or they can ask for some additional documents. After that, the committee will propose for the accreditation of the college and the decisions will be made by the vote of the committee members.

The accreditation is given for year wise provided that all the colleges must apply again before completion of the validity of the accreditation.

The scoring system

if the applicant college gets:

1. score equal or more than 80% in each standard - the college will get accreditation for five years without any condition.
2. score between 70% to <80% in each standard - the college will get accreditation for four years with some recommendation and
3. score between 60% to <70% in 1 to 3 standards or 70% + for four to five standards - the college will get accreditation for three years with conditions.
4. score between 50% and 60% in 4 to 5 standards - the college will get accreditation for 2 years with some conditions
5. score less than 50% in one or more standards - Denial of accreditation - then they must apply again with fulfillment of all criteria for accreditation

Full and each score

Table 9: Full and each score of Accreditation

Scoring system		**1**	**2**	**3**	**4**	**5**
Score	**100 %**	**≧80%**	**70%-<80％**	**60%-<70%**	**50%-<60%**	**＜50%**
Standard I	20	≧16	14<16	12<14	10<12	<9
Standard II	6	≧4.8	4.2<4.8	3.6<4.2	3<3.6	<2
Standard III	22	≧17.6	15.4<17.6	13.2<15.4	11<13.2	<10
Standard IV	14	≧11.2	9.8<11.2	8.4<9.8	7<8.4	<6
Standard V	18	≧14.4	12.6<14.4	10.8<12.6	9<10.8	<8
Total Score	80	≧64	56<64	48<56	40<48	<39
Results		**5 years**	**4 years**	**3 years*[1]**	**2 years*[2]**	**denial**

need to achieve *[1] 1 to 3 Standards or 70% + of 4 to 5 Standards, *[2] 4 to 5 Standards

Full and each score to be able to obtain accreditation per year has shown as above. A score is calculated for each standard based on the following process: Each of the criteria of a standard receives a score of 2 if all components are met; 1 if all components are partially met; and 0 if all components are unmet. The total for each standard is then converted into a percentage by calculating the actual score and dividing it by the maximum score possible.

However, in this report, two criteria (in Standard III, 3.4 and Standard IV 4.1) has been fallen from the original questionnaire therefore, we have used different full scores – 20 instead of 22 for Standard III, and 12 instead of 14 for Standard IV to make the finding results in percentage as close to the realistic number.

2.1.1 Situation of the nursing colleges based on accreditation standard

Summary

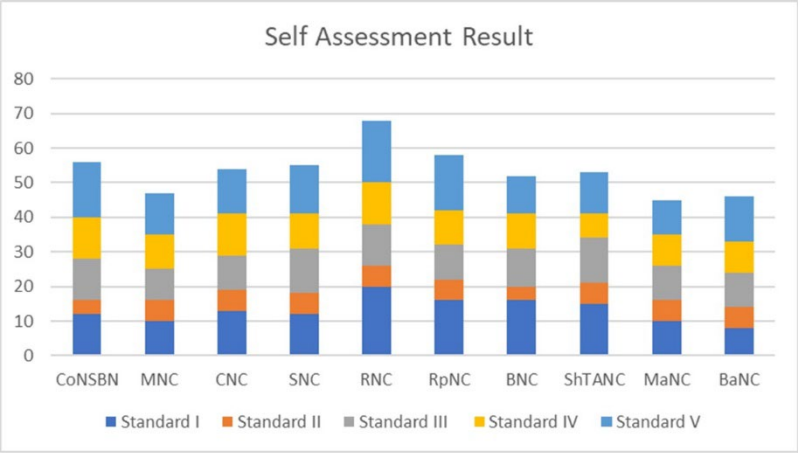


Figure 1: Self-assessment result of all nursing colleges

Figure 1 shows the overall result of the self-assessment score that this survey collected, and an individual score and percentage been shown in Tables 10 and 11.

It is found that 7 out of 8 nursing colleges which are the target colleges for the CBNS-II project, may be eligible for accreditation. However, none of the nursing colleges obtained a score between 70%-<80% (equivalent to 4 years accreditation) in each standard which Dhaka Nursing College - the targeted college of CBNS-I, the predecessor project of CBNS-II, has received the score and accredited recently. Unfortunately, Mymensingh Nursing College has scored <50% for Standard III; therefore, their accreditation will be highly likely to be denied even if they applied at this point.

Table 10: Individual college accreditation score per Standard

Standards	CoN SBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTA NC	Overall	MaN C	BaN C
Standard I	12	10	13	12	20	16	16	15	**14.3**	10	8
Standard II	4	6	6	6	6	6	4	6	**5.5**	6	6
Standard III	12	9	10	13	12	10	11	13	**11.3**	10	10
Standard IV	12	10	12	10	12	10	10	7	**10.4**	9	9
Standard V	16	12	13	14	18	16	11	12	**14.0**	10	13

Table 11: Percent score per standard of individual college for accreditation

Standards	CoN SBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	Overall	MaNC	BaNC
Standard I	60%	50%	65%	60%	100%	80%	80%	75%	**71%**	50%	40%
Standard II	67%	100%	100%	100%	100%	100%	67%	100%	**92%**	100%	100%
Standard III	60%	45%	50%	65%	60%	50%	55%	65%	**56%**	50%	50%
Standard IV	100%	83%	100%	83%	100%	83%	83%	58%	**86%**	75%	75%
Standard V	89%	67%	72%	78%	100%	89%	61%	67%	**78%**	56%	72%

*Standard III and IV percentage has been calculated with full score as 20 and 12

The remaining 7 nursing colleges obtained a score over 50% for all 5 standards. Among them, Rajshahi Nursing College, Sylhet Nursing College, and the College of Nursing, Sher-E-Bangla Nagar fulfilled the criteria 60%-<70% in all standards, which is equivalent to 3 years of accreditation with conditions. The rest of 4 nursing colleges - Chattogram Nursing College, Rangpur Nursing College, Barisal Nursing College, and Shaheed Tajuddin Ahmad Nursing College are eligible for 2 years of accreditation with some conditions.

The common bottleneck was found in Standard III which the overall score is 56%. Standard III is the standard focusing on teaching staff and learning and it specifies the presence of well-qualified instructors in the classroom and clinical placements. (Table 11)

Standard I: Administration and Leadership

Standard I is about Administration and Leadership and it shows if the governance of the nursing and midwifery institutions supports a good quality education for the students or not. It includes, for example, the information about the educational qualification of the Head of the Nursing College, his/her decision-making autonomy, organized administrative and information systems and maintenance of well-organized and up-to-date records of student files, other administrative files and support for the nursing instructors in updating their knowledge. Figure 2 displays the accumulation of the score of Standard I and the red line shows the level to obtain the same accreditation as DNC for your reference.

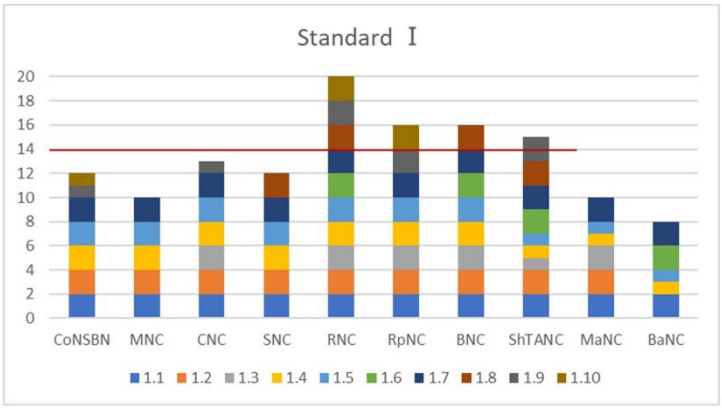


Figure 2: Assessment score bar for Standard I

Table 12: Assessment Score of Standard I

Standard I	CoN SBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	%	MaNC	BaNC
1.1	2	2	2	2	2	2	2	2	**100%**	2	2
1.2	2	2	2	2	2	2	2	2	**100%**	2	0
1.3	0	0	2	0	2	2	2	1	**56%**	2	0
1.4	2	2	2	2	2	2	2	1	**94%**	1	1
1.5	2	2	2	2	2	2	2	1	**94%**	1	1
1.6	0	0	0	0	2	0	2	2	**38%**	0	2
1.7	2	2	2	2	2	2	2	2	**100%**	2	2
1.8	0	0	0	2	2	0	2	2	**50%**	0	0
1.9	1	0	1	0	2	2	0	2	**50%**	0	0
1.10	1	0	0	0	2	2	0	0	**31%**	0	0
Total	**12**	**10**	**13**	**12**	**20**	**16**	**16**	**15**		**10**	**8**
%	**60%**	**50%**	**65%**	**60%**	**100%**	**80%**	**80%**	**75%**	**71%**	**50%**	**40%**

The percentage highlighted in blue is the average for 8 nursing colleges per each criterion, and the percentage gained per each college is shown in the bottom column. Also, less than 50% are marked in red.

After analysis of the assessment criteria for Standard I, we found the following points. On the positive side, 100% of the heads (Principals) of the nursing colleges met full accreditation requirements (criteria number 1.1) and also stated that the Head of the NC has autonomy in decision-making within his/her jurisdiction (1.2). 100% of nursing colleges marked either fully or partially for their administrative and information systems to be organized and effective with updated student records (1.4, 1.5). On top of that, 100% of the nursing college mentioned that the guest teachers they hired are all experts in their specific field (1.7).

At the same time, there were some weaknesses found - half of the nursing colleges mentioned that they have no supporting staff for the Head of the Institute (1.3) and 5 out of 8 nursing colleges have no support for the nursing instructor in updating their knowledge, competency and professional development activities (1.6). Also, the half - 4 colleges expressed that there is no opportunity for developing a partnership with a practice-related organization to ensure that the environment of clinical placements supports student learning (1.8). Among the target nursing colleges, only two have displayed a current publicized organogram (1.10), and only 3 colleges hold a prospectus, a masterplan, and their resource plan (1.9). (Table 12).

Standard II: Student Type and Intake

Standard II is about the student type and intake, which shows the fulfillment of the student criteria for admission to the colleges.

The score of this standard was high on average as all the nursing colleges followed the government admission policy (2.1) and checked the medical and physical fitness of the students during admission (2.2) as recommended.

All the students except two colleges initially demonstrate that they are independent learners and are willing to serve in health care (2.3). Students at the College of Nursing, Sher-E-Bangla Nagar, and Barisal Nursing College are the ones who failed in these aspects. Therefore, these two colleges did not reach the same target line for accreditation as the DNC (70%-<80%) for Standard II. (Figure 3)

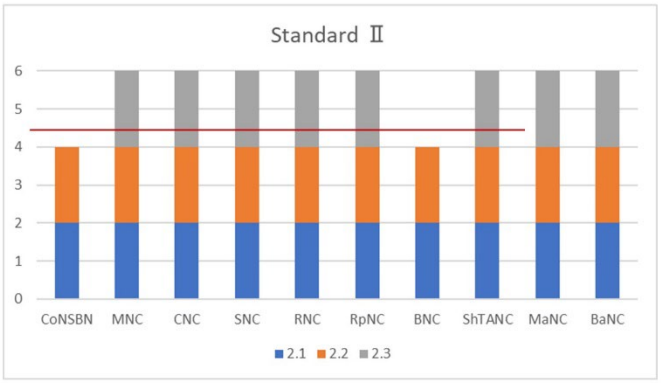


Figure 3: Assessment score bar for Standard II

Table 13: Assessment Score of Standard II

Standard II	CoNSBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	%	MaNC	BaNC
2.1	2	2	2	2	2	2	2	2	**100%**	2	2
2.2	2	2	2	2	2	2	2	2	**100%**	2	2
2.3	0	2	2	2	2	2	0	2	**75%**	2	2
Total	**4**	**6**	**6**	**6**	**6**	**6**	**4**	**6**		**6**	**6**
%	**67%**	**100%**	**100%**	**100%**	**100%**	**100%**	**67%**	**100%**	**92%**	**100%**	**100%**

Standard III: Teaching Staff and Learning

The main bottleneck of obtaining accreditation is Standard III, as we can see from Figure 4 and Table 14. Standard III is about teaching staff and learning, which shows that the students of the nursing and midwifery institutes are taught by well-qualified instructors in the classroom and in clinical placements.

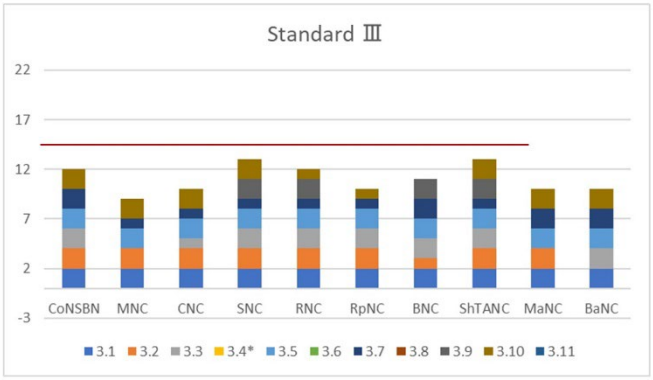


Figure 4: Teaching staff and learning

For this standard, none of the colleges marked above 70%-<80%, which are required to obtain accreditation in the same category as the DNC. (The red line in Figure 4 is the reference line for this category.) Moreover, as mentioned earlier, Mymensingh Nursing College has scored <50% in this standard, which means that their accreditation will be denied even if they apply at this point.

Table 14: Assessment Score of Standard III

Standard III	CoN SBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	%	MaNC	BaNC
3.1	2	2	2	2	2	2	2	2	**100%**	2	2
3.2	2	2	2	2	2	2	1	2	**94%**	2	0
3.3	2	0	1	2	2	2	2	2	**81%**	0	2
3.4*											
3.5	2	2	2	2	2	2	2	2	**100%**	2	2
3.6	0	0	0	0	0	0	0	0	**0%**	0	0
3.7	2	1	1	1	1	1	2	1	**63%**	2	2
3.8	0	0	0	0	0	0	0	0	**0%**	0	0
3.9	0	0	0	2	2	0	2	2	**50%**	0	0
3.10	2	2	2	2	1	1	0	2	**75%**	2	2
3.11	0	0	0	0	0	0	0	0	**0%**	0	0
Total	**12**	**9**	**10**	**13**	**12**	**10**	**11**	**13**		**10**	**10**
%	**60%**	**45%**	**50%**	**65%**	**60%**	**50%**	**55%**	**65%**	**56%**	**50%**	**50%**

*Criteria 3.4 was missing from the questionnaire

The failure of this standard is related to the lack of infrastructure, the required number of nursing instructors, and the presence of clinical supervisors/instructors in the clinical setting. None of the nursing colleges fulfill the criteria of the required ratio between the instructors and nursing students both in the classroom courses (1:20) and clinical placement (1:8) (3.6). The actual situation is a 1: 90-100 ratio for educators and students in theoretical classes. Also, there is no clinical supervisor / instructor for the students in the hospitals, so no ratio is maintained for the clinical placements. Criteria 3.8 (clinical instructors holding a minimum of bachelor's degree in nursing/public health) and 3.11 (presence of clinical instructors) are also not fulfilled because of the absence of clinical supervisor / instructors in the hospitals. Other weak points seen in criteria 3.9 which is also related to the same issue as only four colleges responded that they collaborate with qualified registered nurses, midwives, and nurse-midwives, as well as other medical providers, in clinical practice to supervise and teach students appropriately. None of the colleges marked 0 for the required percentage of part-time instructors; however, there were only 2 colleges marked full for this criterion (3.7).

Nonetheless, there are some strengths in this standard as well. The result shows that the educators and all the guest lecturers hold a required educational background in all 8 colleges (3.1, 3.5). Also, most of the colleges responded positively that the educators do use well-recognized teaching methods to foster student learning (It was only Barisal Nursing College partially met this criterion) and they give educational support to the students on a regular basis in the clinical site (2 colleges, Rajshahi and Rangpur Nursing College marked 1 and Barisal, 0) (3.2 and 3.10). Except for Mymensingh and Chattogram Nursing College, 6 colleges are marked full for if the educators provide classroom and clinical learning experiences based on the most current reliable evidence (3.3).

Standard IV: Curriculum Delivery

Standard IV is about the delivery of the national curriculum for nurses and midwives to foster a good student outcome.

Except for one criterion (4.4), in this standard, all the criteria show over 70% on average (Figure 5 & Table 15). All the colleges expressed that they are using reliable evaluation methodologies and tools to assess student's learning as per the curriculum and communicate the results to the students (4.3). They all also have access to a clinical learning site required to deliver the curriculum (4.5).

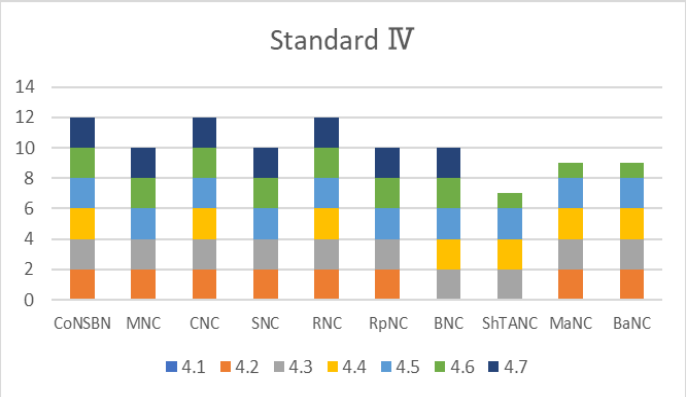


Figure 5: Curriculum delivery

Table 15: Assessment Score of Standard IV

Standard IV	CoN SBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	%	MaNC	BaNC
4.1*											
4.2	2	2	2	2	2	2	0	0	**75%**	2	2
4.3	2	2	2	2	2	2	2	2	**100%**	2	2
4.4	2	0	2	0	2	0	2	2	**63%**	2	2
4.5	2	2	2	2	2	2	2	2	**100%**	2	2
4.6	2	2	2	2	2	2	2	1	**94%**	1	1
4.7	2	2	2	2	2	2	2	0	**88%**	0	0
Total	**12**	**10**	**12**	**10**	**12**	**10**	**10**	**7**		**9**	**9**
%	**100%**	**83%**	**100%**	**83%**	**100%**	**83%**	**83%**	**58%**	**86%**	**75%**	**75%**

*Criteria 4.1 was missing in the questionnaire

Six out of 8 nursing colleges offer students opportunities for multidisciplinary learning and inter-professional teamwork collaboration (4.2) and it was Barisal and Shaheed Tajuddin Ahmad Nursing College failed to provide this. Similar to whether the nursing colleges provide a good balance of classroom and practice learning experiences (4.4), three colleges, Mymensingh, Sylhet and Rangpur Nursing Colleges, failed to do so. Shaheed Tajuddin Ahmad Nursing College failed to provide supervised clinical learning experiences for supporting the nursing theory (4.7) and also only partially met criteria 4.6, which shows that the college ensures a subject-based clinical experience by placing the students in other healthcare facilities.

Standard V: Resources

Standard V deals with the availability of resources in nursing colleges to provide a good learning environment for teaching.

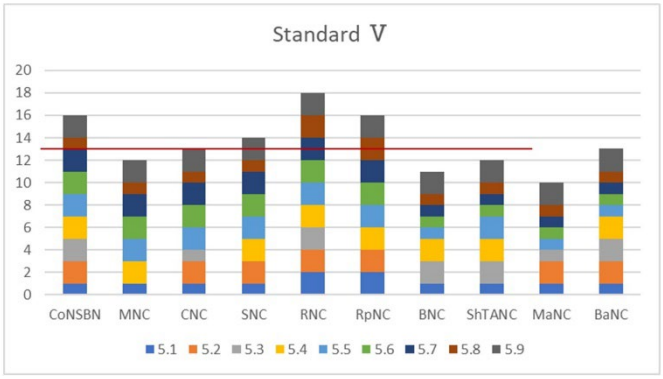


Figure 6: Resources

Overall, except criteria 5.3, each criterion marked over 60% in this Standard (Table 16); however, there are a number of colleges that only got partial marks per each criterion. For example, 6 out of 8 nursing colleges failed to provide adequate accommodation support to the students except for Rajshahi and Rangpur Nursing College who ensured well-furnished secured hostels for the students with visiting room, guard room, washroom facilities etc. (5.1).

Table 16: Assessment Score of Standard V

Standard V	CoN SBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	%	MaNC	BaNC
5.1	1	1	1	1	2	2	1	1	**63%**	1	1
5.2	2	0	2	2	2	2	0	0	**63%**	2	2
5.3	2	0	1	0	2	0	2	2	**56%**	1	2
5.4	2	2	0	2	2	2	2	2	**88%**	0	2
5.5	2	2	2	2	2	2	1	2	**94%**	1	1
5.6	2	2	2	2	2	2	1	1	**88%**	1	1
5.7	2	2	2	2	2	2	1	1	**88%**	1	1
5.8	1	1	1	1	2	2	1	1	**63%**	1	1
5.9	2	2	2	2	2	2	2	2	**100%**	2	2
Total	**16**	**12**	**13**	**14**	**18**	**16**	**11**	**12**	**78%**	**10**	**13**
%	**89%**	**67%**	**72%**	**78%**	**100%**	**89%**	**61%**	**67%**	**78%**	**56%**	**72%**

Mymensingh, Barisal and Tajuddin Ahmed nursing colleges could not fulfill criteria 5.2 due to a lack of facilities for safe drinking water. Three nursing colleges (Mymensingh, Sylhet and Rangpur) failed to ensure adequate classroom space to support students learning as well (5.3) and Chattogram Nursing College only partially met this criterion. Mymensingh Nursing College could not meet criteria 5.4 for not ensuring at least 1 bathroom for 20 students. Barisal Nursing College could not ensure equipped lab space for 7 labs, so it only met the criteria 5.5 partially. Barisal and Shaheed Tajuddin Ahmad Nursing College partially met the criteria 5.6, 5.7 and 5.8 because of poorly equipped computer lab and poor internet connections (5.6), not having a furnished library facility with up-to-date books, journals and magazines (5.7), and also not having at least 30,000 square feet of college campus including office room for Head of the nursing college, separate common room, prayer room, attached washroom for teachers, meeting room, changing room and room for office support (5.8).

The only fulfillment area in this standard is that human resources have been recruited as per Government policy/ rules in all nursing colleges (5.9).

2.2 Student's satisfaction regarding nursing education

The survey conducted with 1,580 nursing students in total includes 1,397 from our 8 target colleges. All second and fourth years have given instruction and questionnaire each to fill in. Below are the overall characteristics of the students.

Overall characteristics of the students

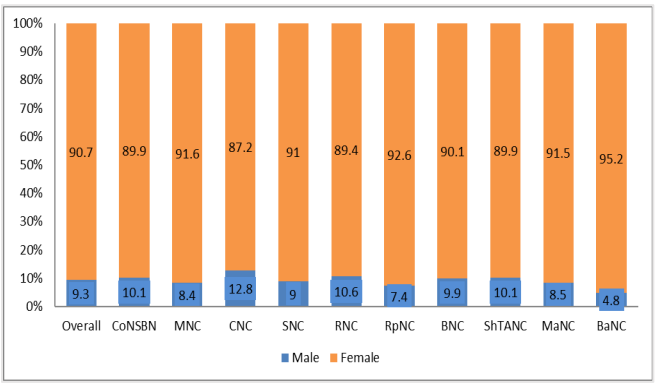


Figure 7: Gender distribution of the students

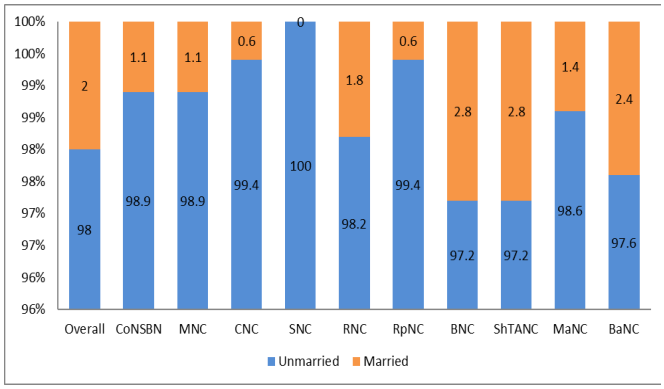


Figure 8: Marital status of the students

Table 17 shows that 1,580 out of the total 1,382 students from our 8 target colleges, the majority of the nursing students are female (90.4%; Figure 7) and also unmarried (98%; Figure 8).

Table 17 Overall characteristics of the students

Variables	*Category*	CoN SBN	MN C	CNC	SNC	RN C	RpNC	BN C	ShTAN C	Overall	%	MaN C	BaNC
Sex	***Male***	14	15	23	13	18	13	18	18	132	**9.6%**	2	12
	Female	161	163	156	132	152	162	163	161	1,250	**90.4%**	40	129
	Total	175	178	179	145	170	175	181	179	1,382	**100.0%**	42	141
Academic Year	***2nd***	86	92	90	79	86	92	88	89	702	**50.8%**	42	83
	4th	89	86	89	66	84	83	93	90	680	**49.2%**	-	58
	Total	175	178	179	145	170	175	181	179	1,382	**100.0%**	42	141
Marital status	***Unmarried***	173	167	178	145	167	174	176	174	1,354	**98.0%**	41	139
	Married	2	11	1	0	3	1	5	5	28	**2.0%**	1	2
	Total	175	178	179	145	170	175	181	179	1,382	**100.0%**	42	141

Although the capacity of nursing students for each academic year is 100, interestingly, we can see from Table 17 that none of the colleges hold 100 students neither in the second nor fourth year. This did not clarify the clue during our survey, although there is an assumption that there may be a high dropout rate each year. If we presume that there were 100 students admitted for all the colleges, by the fourth year, the colleges are losing an average of 15 students by the end of the course, with the highest being 34 students at Sylhet Nursing College.

Reflection of student's satisfaction by various scales

Student satisfaction has been measured by the Course Experience Questionnaire (CEQ) scale which was described in the Questionnaire Development part earlier. CEQ comprises 6 sections as follows: 'Student Support Scale (SSS),' 'Learning Resources Scale (LRS),' 'Course Organization Scale (COS)', 'Learning Community Scale (LCS),' 'Graduate Qualities Scale (GQS),' and 'Intellectual Motivation Scale (IMS)'.

Table 18 : Course Experience Questionnaire (CEQ) scale

Abv	Subjects
SSS	Students Support Scale
LRS	Learning Resource Scale
COS	Information related to the Course Organization Scale
LCS	Learning Community Scale
GQS	Graduate Qualities Scale
IMS	Information related to the Intellectual Motivation Scale

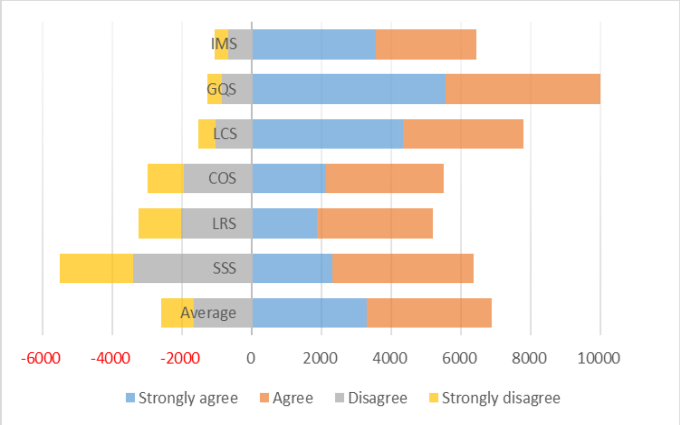


Figure 9: Reflection of student satisfaction of each scale

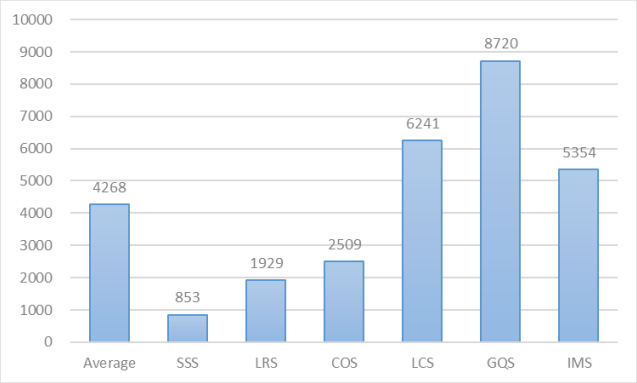


Figure 10: Total score of each scale

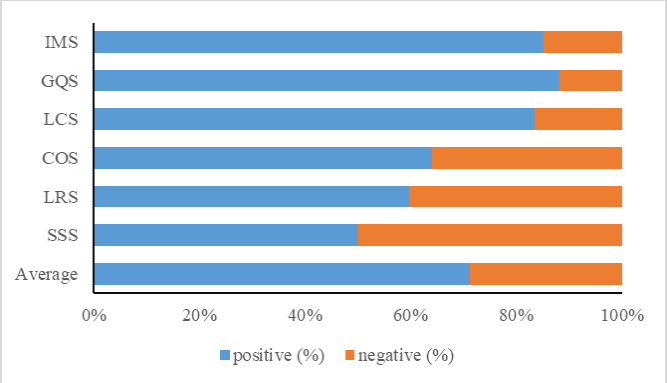


Figure 11: Positives and Negatives of each scale

Overall, from Figures 9, 10 & 11, it was found that the students showed their highest satisfaction in Graduate Qualities Scale (GCS) with the highest positive score (88.7%, Table 19), which denotes if the nursing course has increased their knowledge and confidence about the specific field they are studying and they are able to learn how to utilize their experience in developing new ideas for future. Also, this scale measures if the course motivated them for further learning as well.

Table 19: Student satisfaction through Positive and Negative scoring

Category	Average	SSS	LRS	COS	LCS	GQS	IMS
Positive	6,877	6,367	5,195	5,501	7,785	9,990	6,424
Negative	2,609	5,514	3,266	2,992	1,544	1,270	1,070
Total	**9,486**	**11,881**	**8,461**	**8,493**	**9,329**	**11,260**	**7,494**
Positive (%)	72.5%	53.6%	61.4%	64.8%	83.4%	88.7%	85.7%
Negative (%)	27.5%	46.4%	38.6%	35.2%	16.6%	11.3%	14.3%

The second place for the student's overall satisfaction was related to the Intellectual Motivation Scale (IMS), which marked 85.7% positive response, and this reflects that the course is intellectually stimulating and motivating for the students.

The students expressed their third highest positive response towards the Learning Community Scale (LCS), with 83.4%. This scale expresses that the course helped the students feel like a part of the college community and allowed them to explore their ideas and academic interests with other students and staff.

Both the Course Organization Scale (COS) and Learning Resources Scale (LRS) indicated just above 60% of positive responses. COS is to measure how well the course is organized, obtaining helpful advice while planning the academic program and flexibility of the courses to suit the student's needs. On the other hand, LRS is about the appropriateness of library and information technology resources in teaching and learning with clear, concise, relevant and up-to-date study materials.

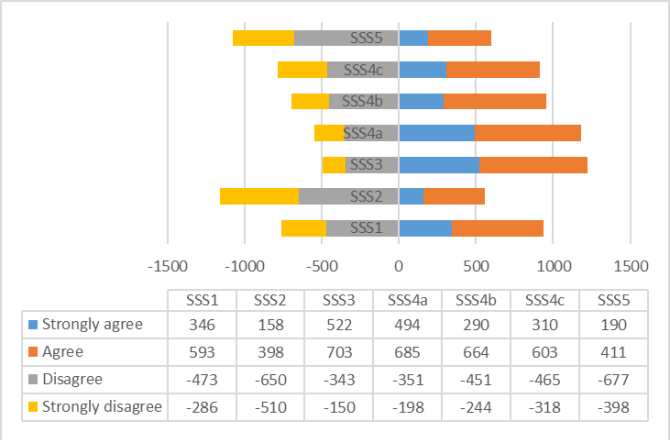
Finally, the students showed their least satisfaction regarding the Student Support Scale (SSS), comprising the highest 48% of negative responses. SSS is about the accessibility to library services, information technology and relevant learning resources, and the need for student welfare, health care, and counseling services.

Student's Satisfaction on a different scale of 8 targeted nursing colleges

Student Support Scale status of Nursing colleges

Table 20: Subjects of SSS

SSS 1	The library services were readily accessible
SSS 2	I was able to access information technology resources when I needed them
SSS 3	I was satisfied with the course and careers advice student learning outcomes
SSS 4a	Health services met my requirements
SSS 4b	Welfare services met my requirements
SSS 4c	Counseling services met my requirements
SSS 5	Relevant learning resources were accessible when I needed them



	SSS1	SSS2	SSS3	SSS4a	SSS4b	SSS4c	SSS5
Strongly agree	346	158	522	494	290	310	190
Agree	593	398	703	685	664	603	411
Disagree	-473	-650	-343	-351	-451	-465	-677
Strongly disagree	-286	-510	-150	-198	-244	-318	-398

Figure 12: Overall score of SSS

As mentioned earlier, among all the 6 scales, the highest dissatisfaction by the students was seen in SSS. 67% of the students at our target colleges expressed that they feel they cannot access information technology resources as needed (SSS 2). Also, 64.1% shared that the relevant learning resources were not accessible when they needed them neither (SSS 5, Table 21), which seems to make this scale a bottleneck among all the scales. The positive aspects are that 71.3% said they are satisfied with the course and career advice towards student learning outcomes (SSS 3), and 68.2% expressed that health services meet their requirements (SSS 4a).

Table 21: Positive and Negative percentages of SSS

	Total	SSS 1	SSS 2	SSS 3	SSS 4a	SSS 4b	SSS 4c	SSS 5
Positive	12,738	939	556	1,225	1,179	954	913	601
Negative	11,026	759	1,160	493	549	695	783	1,075
Total	23,764	1,698	1,716	1,718	1,728	1,649	1,696	1,676
Positive (%)	53.6%	55.3%	32.4%	71.3%	68.2%	57.9%	53.8%	35.9%
Negative (%)	46.4%	44.7%	67.6%	28.7%	31.8%	42.1%	46.2%	64.1%



	CoNSBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	MaNC	BaNC
SSS_1	74	-162	-88	-13	114	166	8	81	-47	-74
SSS_2	-14	-127	87	-151	-66	10	-141	-202	-126	-73
SSS_3	123	182	71	6	27	54	123	146	39	19
SSS_4a	140	106	92	59	44	13	46	130	-54	-48
SSS_4b	58	72	68	-24	10	7	26	42	-95	-54
SSS_4c	17	57	29	-57	-6	-8	20	78	-79	-40
SSS_5	10	-32	-18	-108	-55	-12	-71	-188	-149	-77

Figure 13: Overall SSS score par each college

Oversee the status; out of 8 target colleges, students from Sylhet Nursing College expressed their highest dissatisfaction about all the services under SSS. After analyzing the detail of the individual component status of SSS, it was found that accessibility of the information technology (SSS 2) and relevant learning resources (SSS 5) were not ensured in 6-7 out of 8 nursing colleges. Chattogram and Rangpur Nursing College students are taking a positive side regarding their IT resources and also, learning resources for students from the College of Nursing, Sher-E-Bangla Nagar as well (Figure 13).

Mymensingh, Chattogram, and the second-year Barisal student show a strong dissatisfaction towards the accessibility to the library services. (SSS 1, Figure 14). The interesting thing is that all the colleges do not have much difference between the second and fourth year; however, in Barisal, the result was completely opposite as you can see in Figure 14.

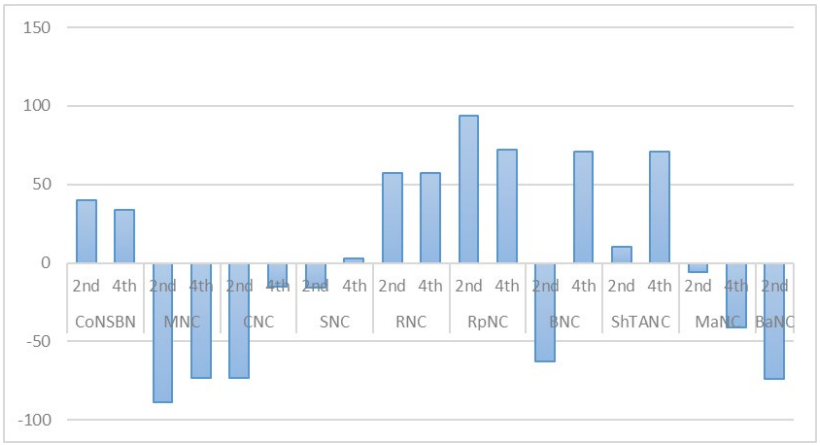


Figure 14: Accessibility to the library services

The students' need for welfare and counseling services were poorly met in Mymensingh and Sylhet Nursing College, although it is only fourth year those expressing it (SSS 4b & 4c, Figure 15 & 16).

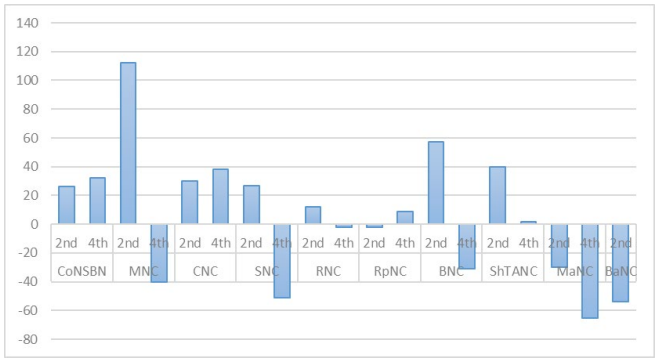


Figure 15: Fulfilling the requirement of welfare services

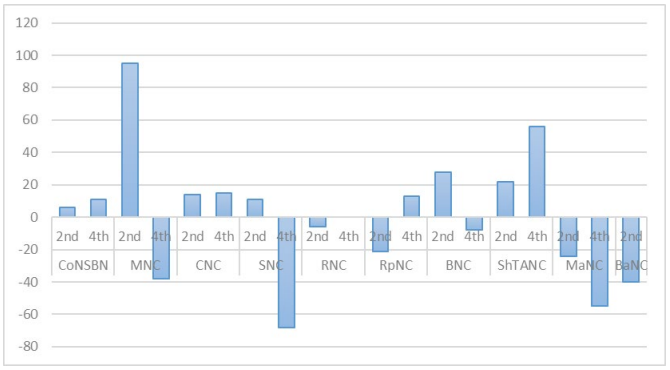


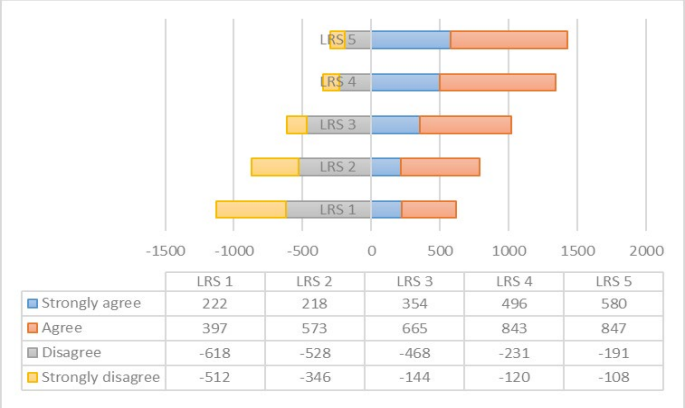
Figure 16: Fulfilling the requirement of counseling services

Learning Resource Scale status of the nursing colleges

Overall, there are more positive than negative scores, although possibly related to SSS 1. 64.6% of students mentioned that the library resources are not appropriate for their needs (Figure 19), and this was the highest negative reaction in the whole LRS result (Figure 17). Similarly, more than half (52.5%) of the students expressed negative responses about IT information and resource appropriateness. About 62.5% of students agreed with the availability of resources to help them to learn. The highest positive response was observed regarding the study materials as clear, concise, relevant, and up-to-date.

Table 22: Subjects of LRS

LRS 1	The library resources are appropriate for my needs?
LRS 2	Where it was used, the information technology on the appropriateness and in teaching and learning was effective?
LRS 3	It was made clear what resources were available to help me learn?
LRS 4	The study materials were clear and concise
LRS 5	Course materials were relevant and up to date



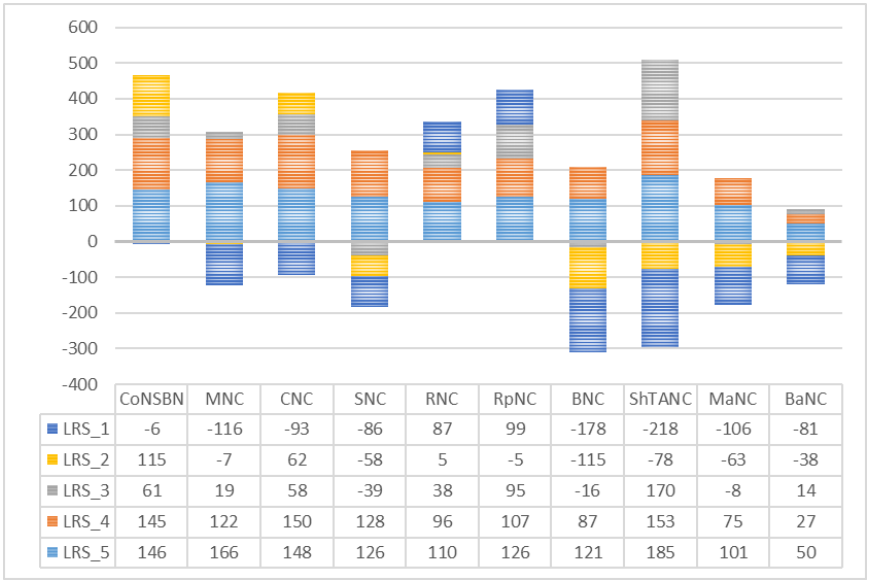
	LRS 1	LRS 2	LRS 3	LRS 4	LRS 5
Strongly agree	222	218	354	496	580
Agree	397	573	665	843	847
Disagree	-618	-528	-468	-231	-191
Strongly disagree	-512	-346	-144	-120	-108

Figure 17: Overall score of LRS

Table 23: Positive and Negative percentages of LRS

Category	LRS 1	LRS 2	LRS 3	LRS 4	LRS 5
Positive	619	791	1,019	1,339	1,427
Negative	1,130	874	612	351	299
Total	1,749	1,665	1,631	1,690	1,726
Positive (%)	35.4%	47.5%	62.5%	79.2%	82.7%
Negative (%)	64.6%	52.5%	37.5%	20.8%	17.3%

Among the 8 targeted nursing colleges, students of Barisal Nursing College showed the highest dissatisfaction about the amenities of LRS, followed by Shaheed Tajuddin Ahmad Nursing College (Figure 18).



	CoNSBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	MaNC	BaNC
LRS_1	-6	-116	-93	-86	87	99	-178	-218	-106	-81
LRS_2	115	-7	62	-58	5	-5	-115	-78	-63	-38
LRS_3	61	19	58	-39	38	95	-16	170	-8	14
LRS_4	145	122	150	128	96	107	87	153	75	27
LRS_5	146	166	148	126	110	126	121	185	101	50

Figure 18: Overall LRS score par each college

Only 2 out of 8 nursing colleges could satisfy the students with their appropriateness of library and 3 out of 8 nursing colleges for information technology resources in teaching and learning (LRS 1 & 2, Figure 19 & 20) which validates the same in Student Support Scale.

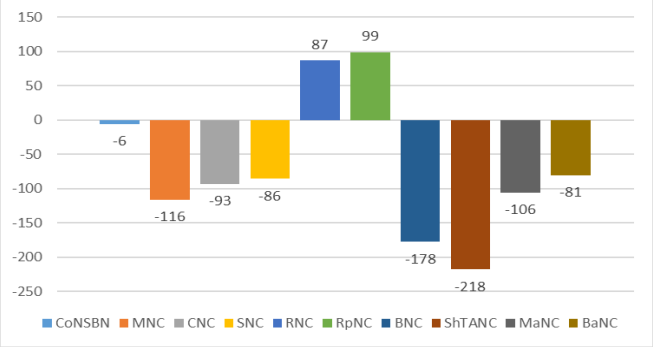


Figure 19: Appropriateness of the library resources

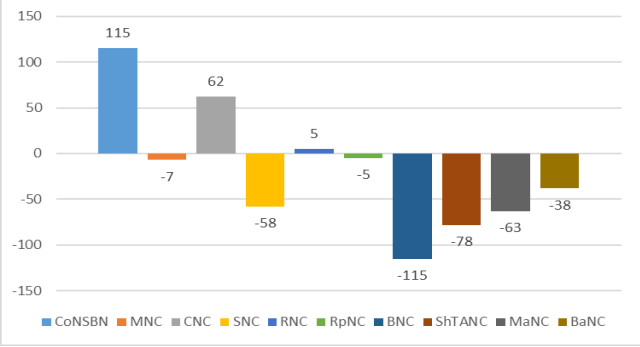


Figure 20: Appropriateness of IT in teaching & learning

Regarding the available resources which are required to support the student's to learning (LRS 3), the highest satisfaction comes from the students from Shaheed Tajuddin Ahmad Nursing College. Interestingly, all second-year students except Sylhet expressed a positive opinion of this aspect, although the fourth year of 3 out of 8 nursing colleges clearly showed dissatisfaction. Sylhet Nursing College is the only one where both second- and fourth-year show dissatisfaction with LRS 3. (Figure 21).

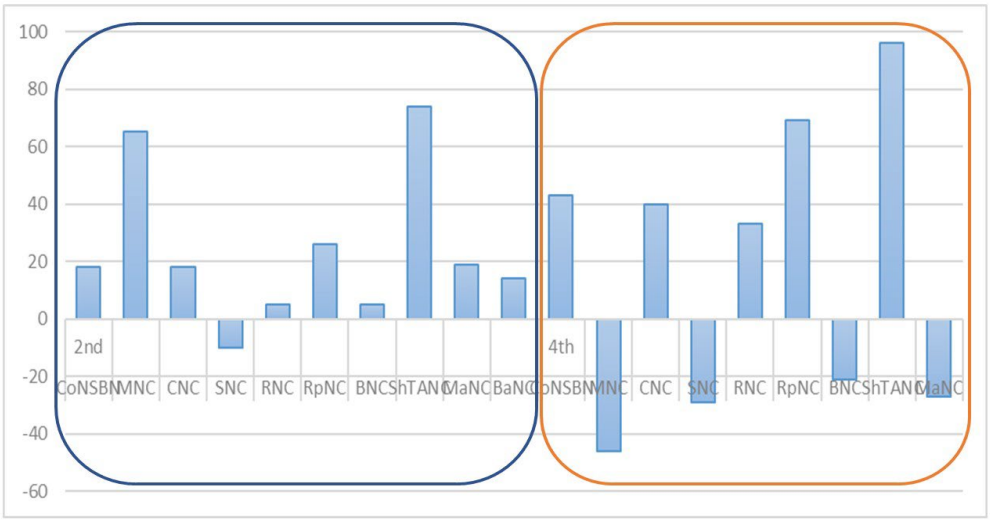


Figure 21: Availability of resources for helping the students to learn

On the other hand, the positive point regarding LRS is that nearly or above 80% of students expressed positiveness regarding the study materials, which are clear, concise, relevant, and also course materials are up to date (LRS 4 & 5, Table 23).

Information related to the Course Organization Scale status of the nursing colleges

Table 24 Subjects of COS

COS 1	The course was well organized
COS 2	I was given helpful advice when planning my academic program
COS 3	The course content was organized in a systematic way
COS 4	There was sufficient flexibility in my course to suit my needs
COS 5	I had enough choices of the topics I wanted to study

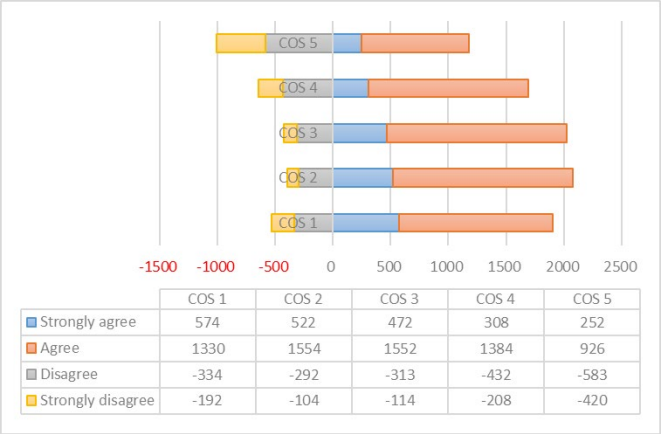


Figure 22: Overall score of COS

Table 25 Positive and Negative percentage of COS

Category	COS 1	COS 2	COS 3	COS 4	COS 5
Positive	1,904	2,076	2,024	1,692	1,178
Negative	718	500	541	848	1,423
Total	2,622	2,576	2,565	2,540	2,601
Positive (%)	72.6%	80.6%	78.9%	66.6%	45.3%
Negative (%)	27.4%	19.4%	21.1%	33.4%	54.7%

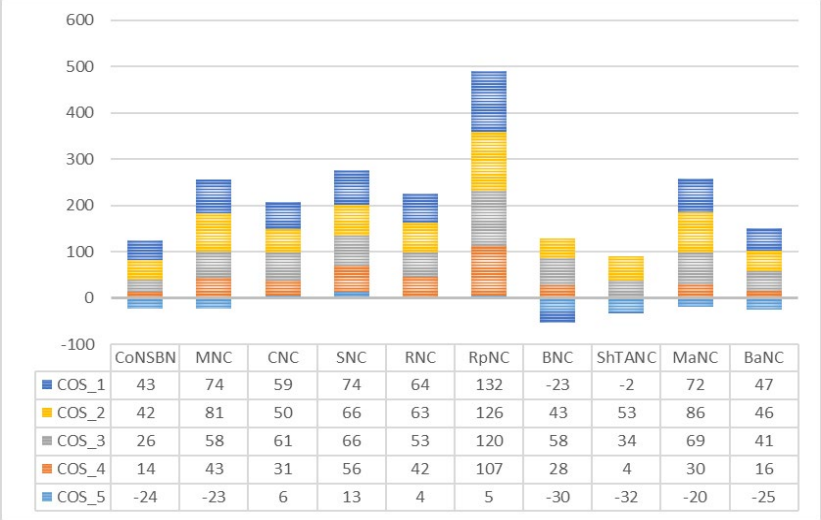


Figure 23: Overall COS score pars each college

The overall satisfaction regarding the Course Organization Scale was 64.8% (Table 19). Regarding the help, students gave highly positive reactions (80.6%), and they feel that they have been given helpful

advice when planning their own academic program (COS 2, Table 25). Also, 78.9% said that the course content was organized in a systematic way (COS 3, Table 25)

Except for Barisal Nursing College, the students are satisfied with the flexibility of the course that suits their needs (COS 4, Figure 24). Controversially, the students showed strong dissatisfaction because they thought they did not have enough choices in the topics they wanted to study. It was only 2 colleges (College of Nursing, Sher-E-Bangla Nagar, Dhaka & Chattogram Nursing College) showed some positive responses in this regard (COS 5, Figure 25).

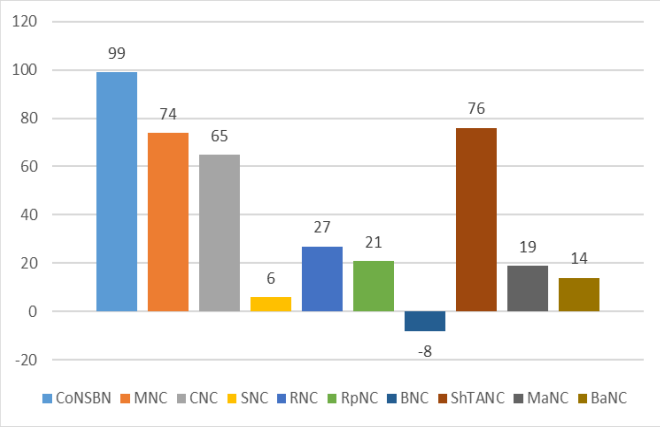


Figure 24: Flexibility of course to suit the need

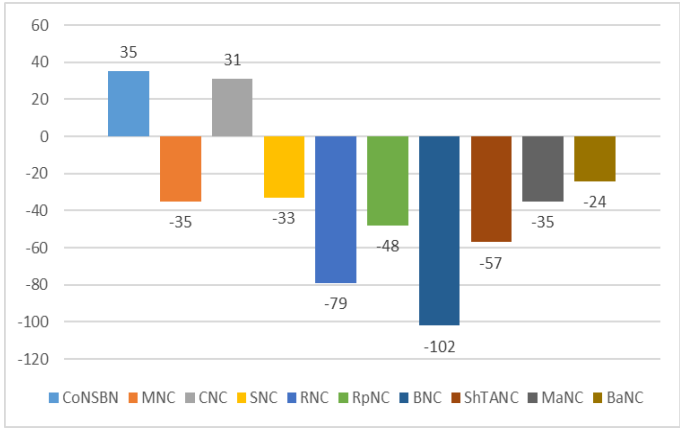


Figure 25: Options for choice of topics for study

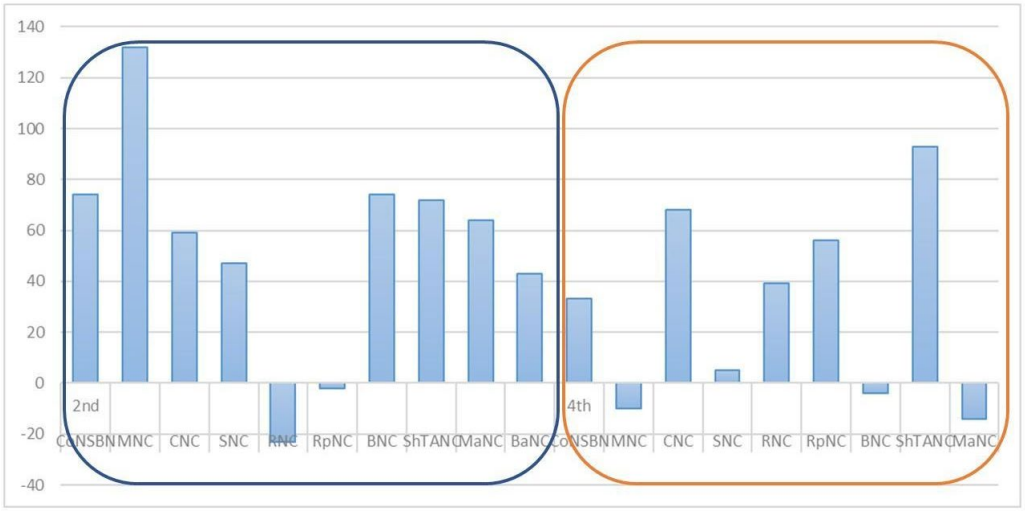


Figure 26: Course organization status

Here, it is to be noted that a completely opposite opinion was obtained among the 2nd and 4th-year students regarding the course organization in some colleges. In Rajshahi and Rangpur Nursing College, 2nd-year students are showing that they are not satisfied in this area when it was in Mymensingh and Barisal Nursing College that 4th-year students expressed that the course is not well organized (COS 1, Figure 26).

Learning Community Scale status of the nursing colleges

The overall Learning Community Scale (LCS) status shows satisfaction with 83.4% positive score (Table 19) however, one component is showing more dissatisfaction compared to the other subjects with 50.5% negative score (LCS 4, Table 27) and from this, we can see that students are not feeling that their ideas and suggestions are used during the course.

Table 26: Subjects of LCS

LCS 1	I felt part of a group of students and staff committed to learning
LCS 2	I was able to explore academic interests with staff and students
LCS 3	I learned to explore ideas confidently with other people
LCS 4	Students' ideas and suggestions were used during the course
LCS 5	I felt I belonged to the college community

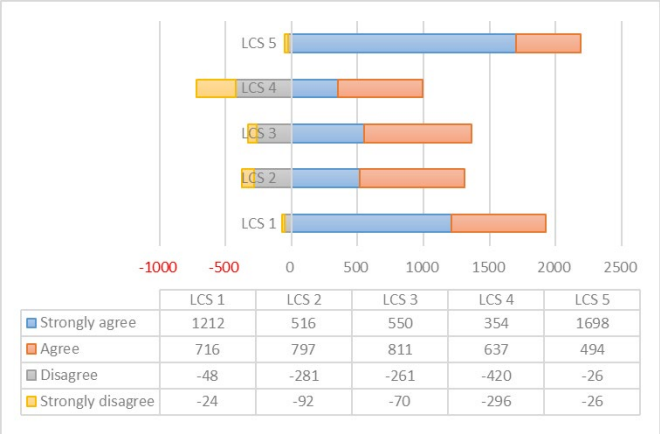


Figure 27: Overall score of LCS

Table 27: Positive and Negative percentage of LCS

Category	LCS 1	LCS 2	LCS 3	LCS 4	LCS 5
Positive	1,928	1,313	1,361	991	2,192
Negative	96	465	401	1,012	78
Total	2,024	1,778	1,762	2,003	2,270
Positive (%)	95.3%	73.8%	77.2%	49.5%	96.6%
Negative (%)	4.7%	26.2%	22.8%	50.5%	3.4%

LCS shows that students feel strongly that they belong to the college community with 96.6% positive score (Table 27). As related to this result, they have expressed that they feel that they are a part of a group of student's staff and are well committed to learning (LCS 1, Table 27) with 95.3% positive score.

From a score of 70% to nearly 80% of positiveness, all 8 college nursing students seem that they can explore their academic interests with staff and students and also shared that they learned how to explore ideas confidently with other people during their course (LSC 2 & 3, Table 27).

We found that the students feel that their ideas and suggestions were not used during the course with more negative than positive scores earlier. Let's go to the details par each college. We can see an interesting result which shown in Figure 28. 5 out of 8 target college students have the same thought, either positive or negative, between 2nd and 4th-year students, but the rest have completed the opposite with even quite a

few gaps. For example, both 2nd and 4th-year students from College of Nursing, Sher-E-Bangla Nagar, Chattogram, and Barisal Nursing College have positive thoughts towards this subject then Rajshahi Nursing College is the only one showing a negative score for both 2nd and 4th year. For the rest of the 3 colleges, in Mymensingh and Sylhet Nursing College, it was the 4th year that marked negative scores, then it was the complete opposite in Rangpur Nursing College, where the 2nd year showed more negative scores than the 4th year students.

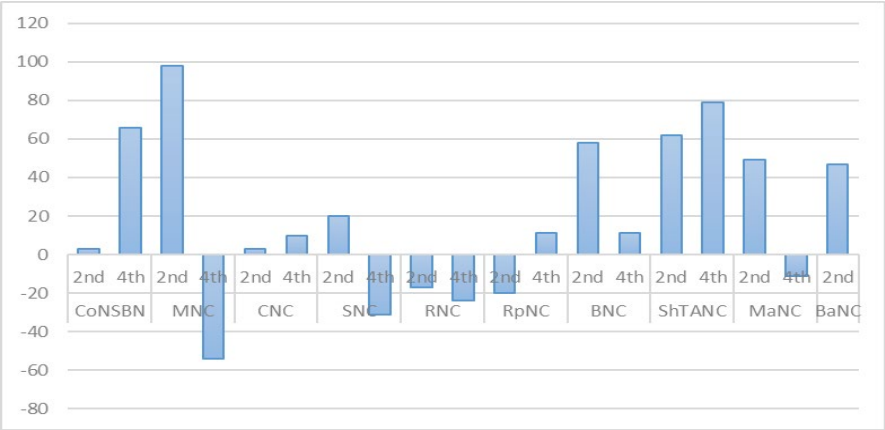
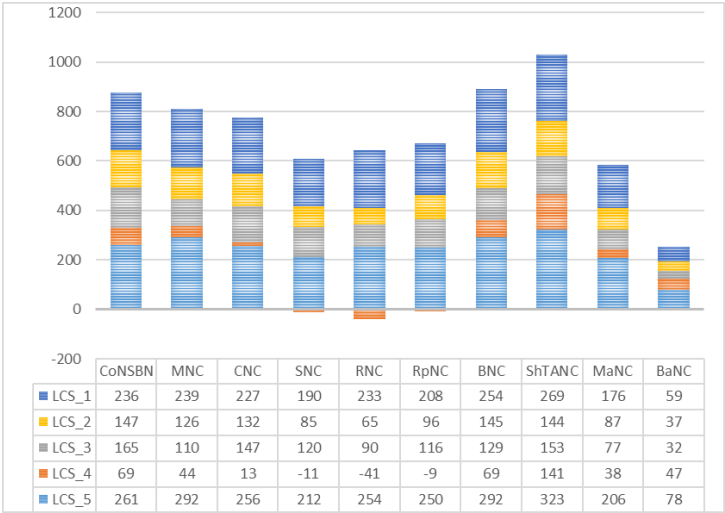


Figure 28: If student's opinion reflexed on the course

Overall, except few negatives in LCS 4 subjects, very high positive scores are seen in this category, and it may be one of the strengths of the nursing college in these 8 target colleges (Figure 29).



	CoNSBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	MaNC	BaNC
LCS_1	236	239	227	190	233	208	254	269	176	59
LCS_2	147	126	132	85	65	96	145	144	87	37
LCS_3	165	110	147	120	90	116	129	153	77	32
LCS_4	69	44	13	-11	-41	-9	69	141	38	47
LCS_5	261	292	256	212	254	250	292	323	206	78

Figure 29: Overall LCS score par each college

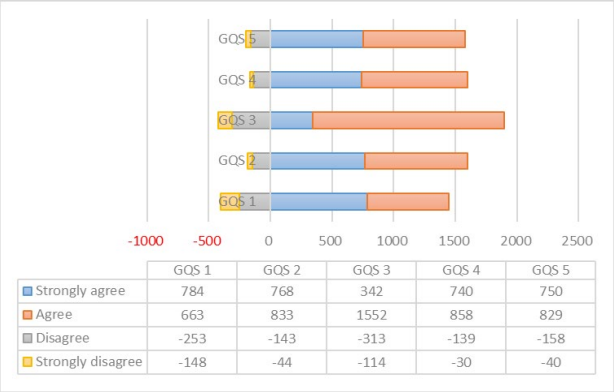
Graduate Qualities Scale status of nursing colleges

Overall, the average positiveness of GQS is 88.7%, the highest among the 6 scales (Table 19). The highest among each score in GQS is GQS 6 with 97.3% positiveness, followed by GQS 4 with 88.9%. This score represents that the students considered what they learned valuable for their future and expressed that they have learned how to apply principles from this course to new situations. 87.4% answered that the course

positively provided them with a broad overview of their field of knowledge (GQS 2), and 86.9 % shared that the course developed their confidence to investigate a new idea (GQS 5, Table 29).

Table 28: Subjects of GQS

GQS 1	College stimulated my enthusiasm for further learning
GQS 2	The course provided me with a broad overview of my field of knowledge
GQS 3	My college experience encouraged me to value perspectives other than my own
GQS 4	I learned to apply principles from this course to new situations
GQS 5	The course developed my confidence to investigate new ideas
GQS 6	I consider what I learned valuable for my future



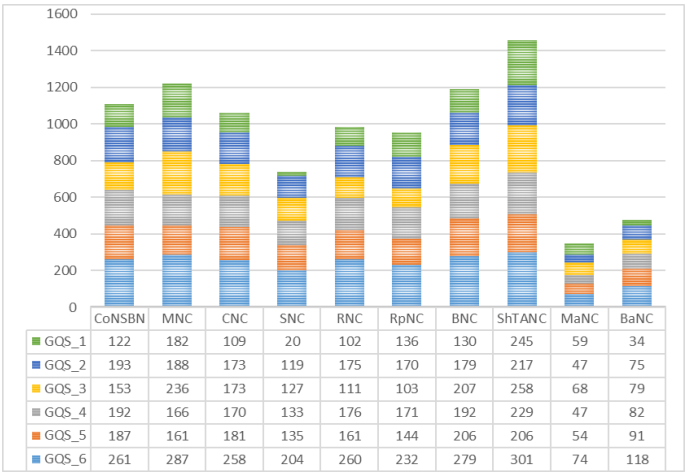
	GQS 1	GQS 2	GQS 3	GQS 4	GQS 5
Strongly agree	784	768	342	740	750
Agree	663	833	1552	858	829
Disagree	-253	-143	-313	-139	-158
Strongly disagree	-148	-44	-114	-30	-40

Figure 30: Overall score of GQS

Table 29: Positive and Negative percentage of GQS

Category	GQS 1	GQS 2	GQS 3	GQS 4	GQS 5	GQS 6
Positive	1,447	1,601	1,894	1,598	1,579	2,125
Negative	549	231	541	199	238	59
Total	1,996	1,832	2,435	1,797	1,817	2,184
Positive (%)	72.5%	87.4%	77.8%	88.9%	86.9%	97.3%
Negative (%)	27.5%	12.6%	22.2%	11.1%	13.1%	2.7%

GQS 3 showed the highest positive among all the scores with 1894 however, it scored nearly the highest negative with 541 at the same time, which resulted in the total lower positiveness than other categories despite having the highest positive score (Table 29). This result shows that their college experience encouraged them to value perspectives other than their own. Also, the lowest positive score still gained 72.5% (GQS 1); therefore, the student's enthusiasm which they feel if the college simulates them, seems not too low either.



	CoNSBN	MNC	CNC	SNC	RNC	RpNC	BNC	ShTANC	MaNC	BaNC
GQS_1	122	182	109	20	102	136	130	245	59	34
GQS_2	193	188	173	119	175	170	179	217	47	75
GQS_3	153	236	173	127	111	103	207	258	68	79
GQS_4	192	166	170	133	176	171	192	229	47	82
GQS_5	187	161	181	135	161	144	206	206	54	91
GQS_6	261	287	258	204	260	232	279	301	74	118

Figure 31: Overall GQS score par each college

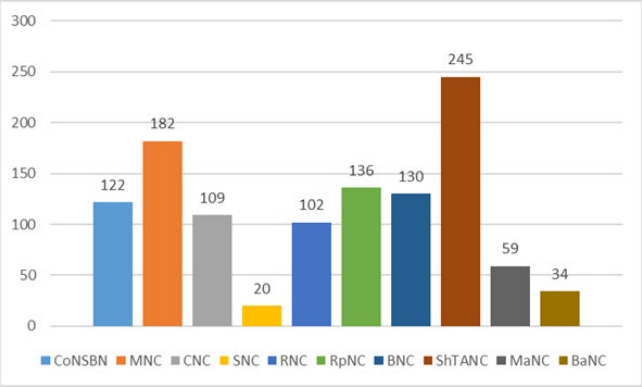


Figure 32: GQS 6 score by college (Total)

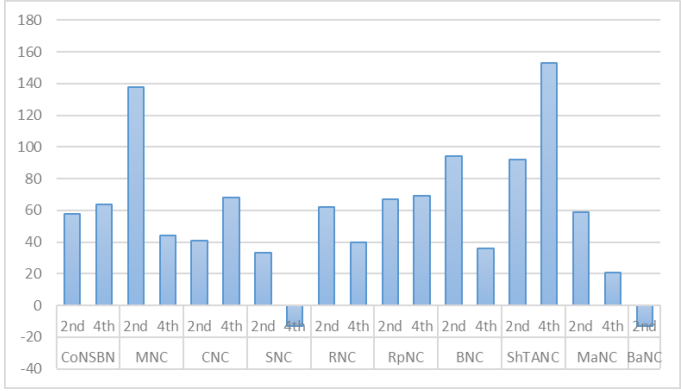


Figure 33: GQS 6 score by college (by each year)

A Remarkable finding in GQS is seen in Figures 32 and 33. These figures are both about GQS scores, which show if the students feel what they are learning is valuable for their future. These showed the GQS score 6, which showed the highest positiveness among all the GQS scores and moreover, all the scaling, as we said earlier. Figure 32 is the total score by college, and figure 33 by each student's year. Unlike other GQS scores, this is the only result that there are so many gaps seen between the colleges and between their years. 4th year Sylhet students are the only ones showing negative results in the whole GQS score and differences between the years. This can teach us that we cannot think like we understand the result only by the total or average but to look into the individual colleges or year or even per person, at a very ground level.

Information related to the Intellectual Motivation Scale status of nursing colleges

Table 30: Subjects of IMS

IMS 1	I found my studies intellectually stimulating
IMS 2	I found the course motivating
IMS 3	The course has stimulated my interest in the field of study
IMS 4	Overall, my college experience was worthwhile

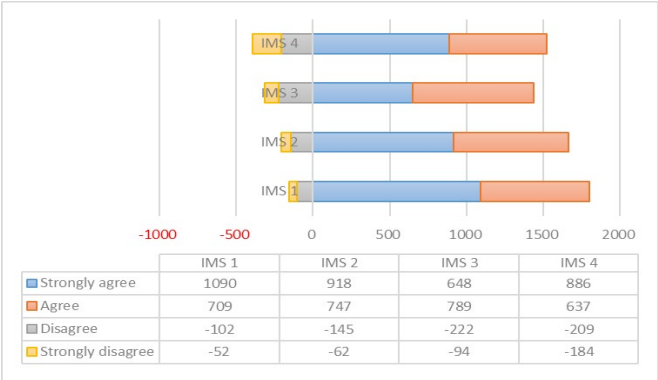


Figure 34: Overall score of IMS

The lowest negative responses were noticed on this scale. The highest (more than 86%) students mentioned that the course is intellectually stimulating and motivating for them, and more than 72% of students were aligned that the course has stimulated their interest in the field of study and that their college experience was worthwhile (Table 31).

Table 31: Positive and Negative percentage of IMS

Category	IMS 1	IMS 2	IMS 3	IMS 4
Positive	1,799	1,665	1,437	1,523
Negative	206	269	410	577
Total	2,005	1,934	1,847	2,100
Positive (%)	89.7%	86.1%	77.8%	72.5%
Negative (%)	10.3%	13.9%	22.2%	27.5%

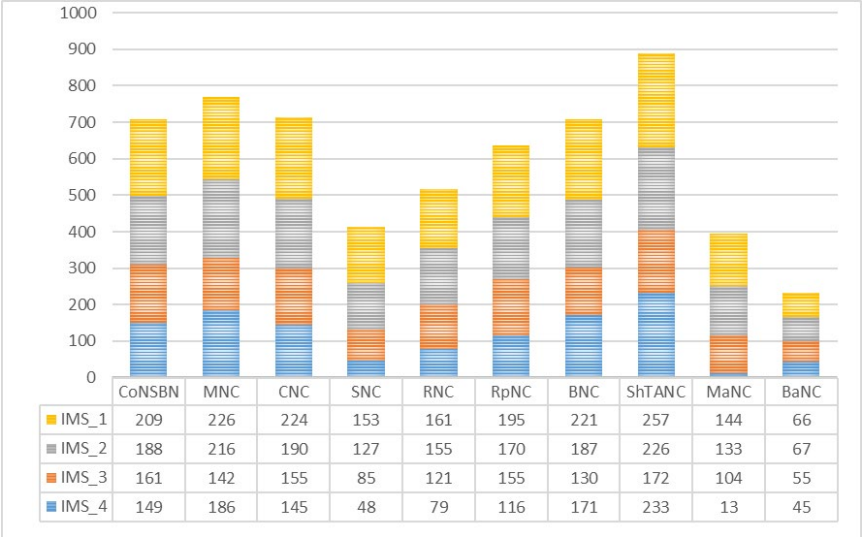


Figure 35: Overall IMS score par each college

However, the same as the GQS result, when you break down a par for each college and also par for each year, you can only find a negative result in the 4th year of Sylhet Nursing College (Figure 36). Here it shows that the students feel whether their college experiences were worthwhile or not. They are the only ones showing negative results in the whole IMS score and differences between the years. With the GQS result, there seem to be signs for a more investigation for the 4th year of Sylhet Nursing College students.

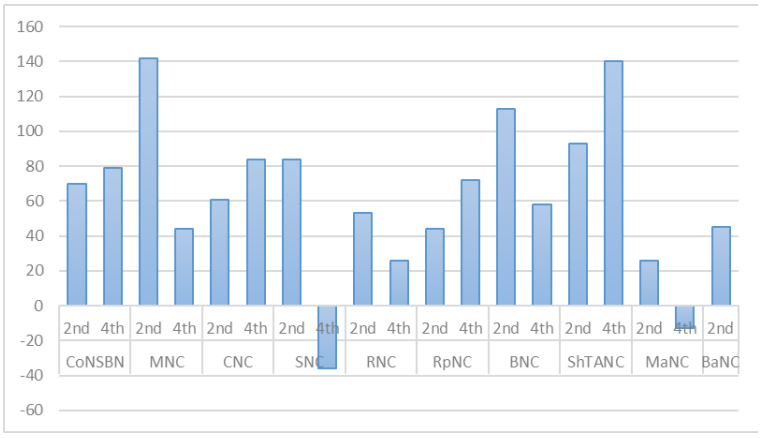


Figure 36: Students satisfaction towards the course

2.3 Situation of Partner Hospitals

Overall situation of the hospitals

Table 32: Overall situation of the Hospitals

Overall situation of the hospitals	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH	DGHM	SHB
Number of Bed	850	1,000	1,313	900	1,200	1,000	1,000	500	250	100
Number of departments	35	43	26	32	25	72	46	30	8	6
Number of wards	32	36	43	32	57	40	35	15	12	3
Number of Pts in IPD (average)	1,000-1,200	2,770	>2,700	2,200	2,500	2,100	1,800	2,355	80	60 - 70
Number of Pts in OPD/year	432,000	1,052,304	576,000	900,000	912,000	825,600	554,800	331,929	321,480	115,200
Number of Pts in OPD/month	36,000	87,692	48,000	75,000	76,000	68,800	45,600	29,912	26,790	9,600
Number of Pts in OPD/week	9,000	20,461	12,000	17,500	19,000	17,200	10,640	10,489	6,251	2,400
Number of Pts in outpatients/day	1,500	2,923	2,000	3,000	2,730	2,500	1,520	1,760	893	400
Average admission rate (bed occupancy rate)	141%	277%	205%	244%	208%	210%	180%	471%	32%	70%
Number of hospitalization day (on average)	4-5 days	5 days*	5 days*	5 days	3-5 days	6 days	7 days	2 days	5 days	3-4 days

*More days of hospital stay in Cardiology & Orthopedic departments; OPD, outpatient department; IPD, inpatient department

The notifiable finding from Table 32 is too high a bed occupancy rate in 8 hospitals. Its rate varies from 141% up to 471%. These hospitals are all the target hospitals for the CBNS-II project, which makes it easy to guess how those health professionals are busy during the clinical practice placement for the nursing students.

Also, the nurse and patient ratio will be used to measure a patient's safety and quality of care in the hospital. There is no fixed standard for its calculation; however, some studies suggested the nurse: patient = 1 : 4 for one of the measurements as it relates to the mortality rate (1:4 to 1:6 raised the patient mortality rate by 7% and with further increase in nurse-patient ratio to 1:8, the mortality rate increased to 14%)[1]. On top of that, 45% of posts recommended covering leaves and national holidays.

Nurse-patient ratio will be bare depending on the time of the shift and the type of the ward, though used 1:4 as an average par each shift par hospital here. Nurse's shift in the hospital in Bangladesh has three shifts (morning shift 8:00-14:00, afternoon shift 14:00-20:00, and evening shift 20:00-8:00), and the actual nurse-patient ratio has been calculated below (Table 33).

[1 : (Required number of in-service Ns for nurse : patient =1:4)/actual number of in-service Ns=nurse : patient]

[1] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7491754/

Table 33: Number of required nurses to obtain nurse : patient ratio as 1:4

	ShS MCH	MMCH	CMCH	SO MCH	RMCH	Rp MCH	SB MCH	ShTA MCH	DGHM	SHB
No of Pts in IPD (average)	1000-1200	2,770	>2,700	2,200	2,500	2,100	1,800	2,355	80	60 - 70
No of in-service Ns (filled up posts)	669	1067	1214	874	1200	955	915	403	225	36
Current Ns : Pt ratio	1 : 7.8	1 : 11.3	1 : 9.9	1 : 10.9	1 : 9.1	1 : 9.6	1 : 8.6	1 : 14.1	1 : 1.5	1 : 8.5
Required no of in-service Ns for Ns:Pt =1:4 *	1,305	3,012	3,012	2,393	2,719	2,284	1,958	1,419	87	76

*(No of Pts in IPD/4)*3+(No of Pts in IPD/4)*3*0.45

The bed occupancy rate is 2-4 times higher in most of the hospitals (except Manikganj and Bandarban), which makes the Nurse : Patient ratio in the 8 CBNS-II target hospitals very high from least 1:7.8 (ShSMCH) to a maximum of 1:14 (ShTAMCH). On top of that, there are 1,500 to 3,000 patients in outpatients / day. During this busy schedule, it is very difficult for the in-service nurses to spare any time for mentoring the nursing students in their clinical practice. So, a separate sanctioned post is needed in each hospital as a Clinical Supervisor/Instructor who will be dedicated to the students only.

The overall situation of the nurses

Table 34: Overall situation of the nurses

Overall situation of the nurses	ShS MCH	MMCH	CMCH	SO MCH	RMCH	Rp MCH	SB MCH	ShTA MCH	DGHM	SHB
Number of Nursing Superintendent	1	1	1	1	1	1	1	1	0	0
Number of deputy Nursing Superintendent	1	2	1	1	1	1	0	1	0*[1]	0
Number of Nurse Supervisor	14	11	19	20	23	17	22	6	4	2
Number of Clinical Supervisor	0	0	0	0	5*[2]	17*[2]	1*[2]	0	0	4*[2]
Number of senior staff nurse	587	1,067	1,214	850	1,133	955	863	333	228	36
Number of staff nurse	66	6	54	55	53	10	52	5	0	8
Number of total in-service nurses (total sanctioned)	692	1,093	1,238	881	1,211	1,003	930	404	228	56
Number of in-service nurses (filled up posts)	669	1,067	1,214	874	1,200	955	915	403	225	36

*[1] joined but because of precession NSI is in another place

*[2] This are the nursing supervisor who are given the additional responsibility to supervise the nursing students in their clinical practice,

In the hospitals, all nurses start their career as Senior Staff Nurse (SSN) which is grade 10 at the entry-level and upgraded to grade 9 when they become Nursing / Deputy Nursing Superintendent this means, there are only 2-3 positions for grade 9 (Table 36). In result, there are number of Master or PhD Degree holders (Table 35), but they are all in one grade, grade 10, irrespective of their working experience. There is no further career path for the nurses currently in place. There is no sanctioned post for a Clinical Supervisor / Instructor to mentor the nursing students during their clinical practice as recorded in any hospital, and the Nursing Supervisor is taking that role in 4 out 10 hospitals (Table 34).
About the clinical ladder, the nurses mentioned that there is no progress or upgradation of the nursing positions even after completing the graduation and post-graduation course. Sometimes the nurses get the opportunity for higher study and training to enhance their skills, but in the end their position still remains the same. Also, they don't know about the DGNM future implementation plan regarding this.

Table 35: Educational qualification of nurses

	Sh SMCH	MMCH	CMCH	SO MCH	RMCH	Rp MCH	SB MCH	ShTA MCH	DGHM	SHB
Master degree (number)	N/A	85	112+5 *1	70	200	70	45	50	9	10
Bachelor degree (number)	N/A	88	115 48*2	230	600	150	75	78	47	26
Diploma (number)	N/A	888	93	578	4,000	762	795	282	175	36

*1 MPH+MSC (on going), *2 BSc+Post-basic BSc
N/A, not available as the NSI couldn't provide the educational backgrounds of the nurses

Table 36: Career Ladder of Clinical Nurses

Career ladder of nurses	ShS MCH	M MCH	CMCH	SO MCH	R MCH	Rp MCH	SB MCH	ShTA MCH	DGSM	SHB
Number of nurses, grade 9	1	3	3	4	2	2	2	1	1	4
Number of nurses, grade 10	82	1,082	1,211	870	1,998	953	863	403	232	22
Clinical Supervisor / Instructor position	0	0	0	0	0	0	0	0	0	0

Clinical practice environment of the nursing students

Table 37 describes the situation of nursing students facing clinical practice placement. On average, all hospitals are accepting more students than their capacity, including for an evening shift however, 50% of the hospitals are not receiving a scheduled calendar. Despite all the departments accepting nursing students, there is no existing manual for mentoring nursing students in clinical placement at 8 out of 10 hospitals. The clinical supervisor / instructor is not well recognized in any hospital except RMCH, RpMCH and SHB replied with some number of them. In Chattogram, Sylhet and Manikganj hospitals, the Ward In-charge and Nursing Supervisor supervise them, but it has been reported that there is no specific mentoring system. Currently, in most hospitals, it is the Nursing Superintendent, Nursing Supervisor or Ward In-

charge who is the focal person of the nursing students. For this reason, most of the questions related to clinical supervisor / instructor were answered as not applicable. Most difficult aspects of teaching in the clinical practice are management because there is no designated post for clinical supervisor.

On the other hand, in the nursing college, the principal is the focal person to makes the decisions for the clinical practice of nursing students. An official letter with a clinical roaster plan (department-wise distribution of students) is sent to the Director / NSI before the clinical placement and instructors from the nursing colleges supervise the students in a roaster system. Except for MMCH and SBMCH, the Supervision plan for nursing students is shared at the ward level as instructed by the Nursing Superintendent, although only half of the hospitals replied that nursing supervisors and/ or ward in-charge take the responsibility of portfolio/assignment for nursing students.
Only 4 nursing colleges have a committee for the collaboration of clinical nursing practice between the college & hospitals formed by the Director of the hospital, NSI, NS & Principal though this committee is not functional in most of the places. The Principal and NSI of the rest of the nursing colleges think that there should be such a committee in each hospital for the smooth conduction of the clinical placement of nursing students.

Table 37: Clinical practice of the nursing students

Clinical practice of the nursing students	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH	DGHM	SHB
Number of student's capacity to accept	200	All students	300	438	700	1,000	100	250	500	76
Number of students actually accepting	400	400 to 500	500	82	600	500	As Govt require	120	No limit	50
Shared schedule calendar for clinical practice of students	No	No *[1]	No	Yes	Yes	Yes*[2]	No	Yes*[2]	Yes	No
Have evening clinical practice for nursing students	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes*[3]	Yes
Department or ward where clinical placement for nursing students	All dept.*[4]	All dept.	All dept.	All dept.	All dept.	All dept.	All dept.	All dept*[5]	All dept.	All dept.
Have any existing manual to mentor nursing students	No	No	No	No	Yes*	No	No	Yes*	No	No
Criteria supervision-qualification	N/A	BSc, Diploma	N/A	N/A	N/A	N/A	N/A	MPH	N/A	N/A
Criteria supervision-training	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Criteria supervision-year of experience	N/A	30	N/A	N/A	5 to 7	30	N/A	10 to 12	N/A	5
Criteria supervision-specialty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of clinical supervisor /wards & hospital	No	No	No	No	23	17	No	7	No	4
Number of clinical supervisor /nursing students/day	N/A	N/A	N/A	N/A	1/140	1/59	N/A	1/120	N/A	1/15
Number of CNT at each ward (average)	N/A	N/A	N/A	N/A	2.5	2.4	N/A	2.1	N/A	1.3

Clinical practice of the nursing students	ShS MCH	M MCH	CMC H	SO MCH	RMC H	Rp MCH	SB MCH	ShTA MCH	DGHM	SHB
Number of CNT/student/ hospital/wards/days	N/A	N/A	N/A	N/A	23	17	N/A	7	N/A	4
Focal person for clinical practice for nursing students at the hospital & each ward	N/A	N/A	NSI	NSI	WI	NS	NS	NSI	NS & WI	NS & WI
Focal person at Nursing college	Principal	Principal	Principal	Principal	Principal	Principal	Principal	Principal	Principal	Principal
Supervision plan for nursing students at the ward level	Yes*[6]	N/A	Yes*[7]	Yes	Yes	Yes	No	Yes	Yes	Yes
Portfolio/assignment responsibility for nursing supervisors	Yes	No	Yes	No	Yes	Yes	No	Yes*[8]	No	No
Number of working group or committee related to the clinical nursing practice between the college & collaboration hospitals	N/A	1	1	N/A	N/A*[9]	1*[10]	N/A	1	N/A*[11]	N/A

NSI, Nursing Superintendent; NS: Nursing Supervisor; WI: Ward In-charge; N/A: Not available

*[1] Schedule provided by college; *[2] But not documented; *[3] Only 4th year have night duty/not regular; *[4] According to curriculum; *[5] According to curriculum but except ENT and Mental Health; *[6] Decided by Ward in-charge;

*[7] Decided by NSI; *[8] Verbal order of NSI is followed by NSs

*[9] But it is needed to control students; *[10] A committee is present with Director, NSI, NS & Principal; *[11] Govt. official Order in Private;

Training of the Clinical Supervisor/Instructors

Only Rajshahi and Rangpur Medical College Hospitals mentioned that the Nursing Supervisors (who mentor the students in clinical practice) received a few training courses, which increased their capacity, but these trainings are not specifically related to mentoring the students. Actually, there is no existing Master Trainer or CNT training held in the hospitals.

Table 38: Training of the Clinical Supervisors/Instructors

Training of the Clinical Supervisors/Instructors	ShS MCH	MMC H	CMC H	SO MCH	RMC H	Rp MCH	SB MCH	ShTA MCH	DGH M	SHB
Number of training courses for clinical supervisor	N/A	N/A	N/A	N/A	6	*[1]	N/A	N/A	N/A	N/A
Focal person of the training	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Frequency of revision	N/A	N/A	N/A	N/A	Yes*[2]	Yes*[3]	N/A	N/A	N/A	N/A
Training materials	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Feedback of the nurses	N/A	N/A	N/A	N/A	*[4]	N/A	N/A	N/A	N/A	N/A
Nursing student Mentors trained by an outside organization (Government, NGO or other donors)	No	No	Yes*[5]	N/A	No	No	No	No	No	Yes
Any existing trainer (TOT) become master trainer	No	No	No	No	No	No	No	No	No	No
Number of master trainer	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Training of the Clinical Supervisors/Instructors	ShS MCH	MMC H	CMC H	SO MCH	RMC H	Rp MCH	SB MCH	ShTA MCH	DGH M	SHB
Number of CNT training held each year	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*[1] Based on courses; *[2] Once in a month, *[3] 4 times in a year *[4] They try to improve: *[5] JICA- waste Management

Challenges & good practice in clinical nursing training in hospital

From the survey, we now know that there is no CNT in the hospital as posted actually and also no provision for clinical nurse training for the clinical supervisors in the hospitals. But when we asked the nurses, they mentioned a few challenges regarding the supervision of the students in the hospital, i.e. unsuitable working environment due to OPD and wards overloaded by patient attendance. A lot of patients and attendance make the environment very complex sometimes. Moreover, lack of materials, lack of manpower (including supporting staff), lack of proper training, and no personal benefit demotivate the nurses to provide ideal efforts in students' supervision. Also, they felt a lack of security and safety in the working place (in SHB).

Regarding good practice, the nurses of a few nursing colleges stated that after training, they gained knowledge on effective & quality nursing care, and MMCH became three times champions in nursing care over the country.

Training of In-service nurses

Table 39 showed that no in-service nurses received any training for mentoring the students in clinical placement. But for non-CNT nurses, 2 to 10 training are held each year in each hospital on different topics except Sylhet and Barisal Nursing Colleges. Among those, 14-day Orientation training was arranged by DGNM for all the newly qualified nurses before they joined their duty, but the nurses of Rajshahi, Rangpur and Shaheed Tajuddin Nursing Colleges didn't receive such orientation training from DGNM. The following are the common training (1-7 days duration) which were held in the hospitals –

- Infectious disease control,
- Waste management,
- Disaster management,
- Emergency management,
- Cardiac/Pediatric/Geriatric Nursing, ICU,
- Covid-19 management
- Critical nursing care,
- Adult nursing,
- Community nursing,
- Reproductive health care,
- Evidence-based nursing,

In few nursing colleges, the training held on –

HIV/AIDS, VIA, English language, PDCA, Breastfeeding, End of life care, Helping babies breath, clinical training on nutrition & management of malnutrition, CPR training etc. In Bandarban, special training on Malaria control was held.

Table 39: Training of In-service Nurses

Training of In-service nurses	ShS MCH	MM CH	CM CH	SO MCH	RM CH	Rp MCH	SB MCH	ShTA MCH	DGH M	SHB
Number of in-service nurses who have received training out of all in-service nurses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of in-service nurses who have received training out of all in-service nurses who look after the nursing students	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
In-service training plan for non-CNT in related subjects	No	No	Yes *1	No	Yes* 1	No	No	No	No	No
Number of in-service trainings held each year	5-6	4-5	2-3	No	7	8	No	3	4	8 to 10
Number of nurses who have received in-service training in the past 12 months	37*2,3	100	118 *1	35	500	200	N/A	35*1	40*1,2	36*1, 2,4
Have any training program for newly qualified nurses (by government, local lead hospital)	Yes*2	Yes *2	Yes *2	Yes*2	No	No*4	Yes*2	No*5	Yes*2	Yes*

*1Infectious disease control, Waste management, Disaster management, Emergency management, Cardiac/Pediatric/Geriatric Nursing, ICU, Covid-19 management; *214-day Orientation Training by DGNM;
*3Critical nursing care, Adult nursing, Community nursing, Reproductive health care, Evidence based nursing,
HIV/AIDS, VIA, English language, PDCA, Breast feeding, End of life care, Helping babies breath, clinical training on nutrition & management of malnutrition, CPR training *4 Planned but looking for DGNM *4Malria control
*5 Orientation program to introduce the hospital only; N/A, Not available

Challenges & good practice in in-service training per each hospital

Other information

Table 40 describes the research activities of the nurses. Only 9 nurses (RpMCH-1, ShTAMCH-3, DGHM-1, SHB-4) were found to be involved in the research work but there is no published paper as evidence of their research. No seminar or forum is arranged systematically to strengthen the capacity of existing post-graduate nurses.

Table 40: Activities for Strengthening the capacity of nurses

Other activities	ShS MCH	MM CH	CMC H	SO MCH	RMC H	Rp MCH	SB MCH	Sh TAM CH	DGH M	SHB
Number of nurses conducted nursing research	N/A	N/A	N/A	N/A	N/A	1*1	N/A	3	1	4
Number of published papers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminar or forum for strengthening the capacity of existing post-graduate nurses	No	No	Yes*2	No	No	No*3	No	No	Yes*4	No

*1 PhD person *2 on Ward Management *3 but meetings held *4 CS office Training

2.4 Nurse's opinion regarding their working environment

We interviewed 392 nurses from the 8 partner hospitals using a self-administered questionnaire consisting of their personal information and '*Practice Environment Scale of the Nursing Work Index'*. This scale was further divided into 7 different subsections to explore the current situation of the nurse's practice environment.

Overall characteristics of the respondents in the 8 partner hospitals

Among the total nurses, 89.8% were females (352) and 10.2% were males (40), 88% of them were married, 71.7% were bedside nurses (281) and 28.3% were leader nurses (111), including Nursing Supervisors and Ward In-charge. In contrast, RMCH reported all the bedside nurses (62) (Figure 37, 42 & 38).

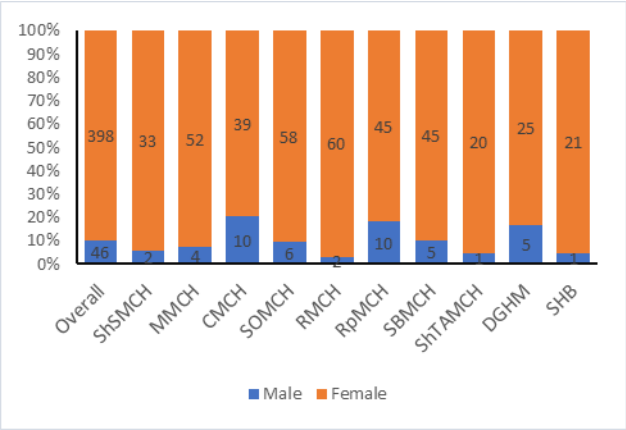


Figure 37: Gender distribution of the SSN

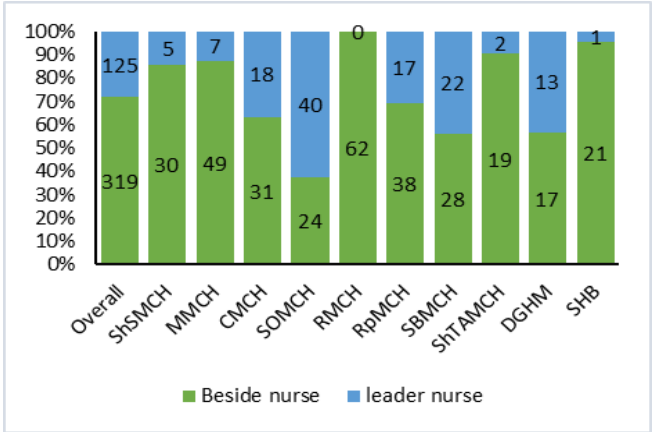


Figure 38: Distribution of the SSN based on their position

On the other hand, 30.6% of nurses were specialist nurses (120) placed who are trained in specific areas like pediatrics, psychiatry, dental, ICU, orthopedics, neurology etc. and the rest (69.4%) were non-specialist nurses (272) (Figure 39).

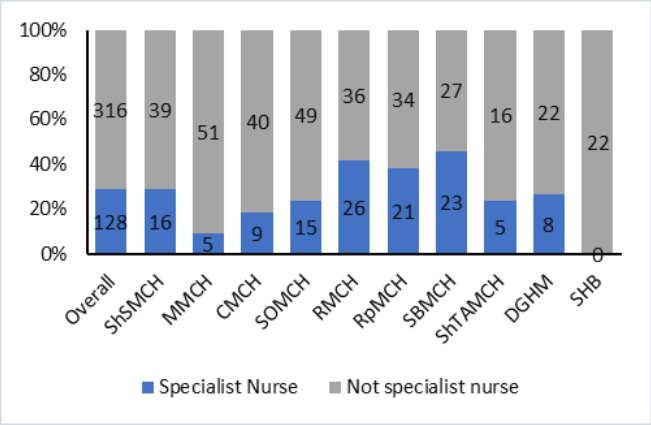


Figure 39: Distribution of the SSN based on their specialty

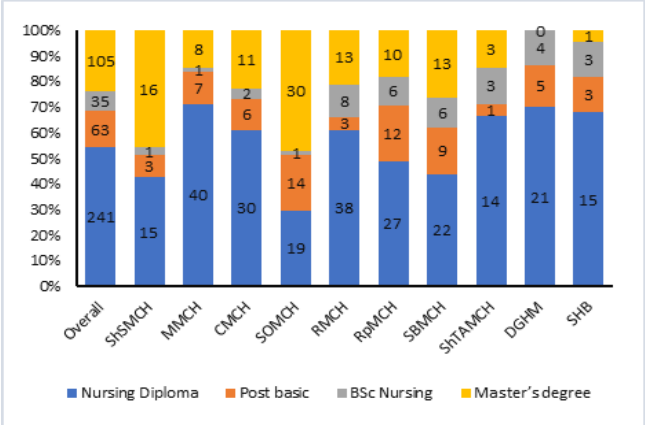


Figure 40: Distribution of the SSN based on their educational qualifications

More than half (52.3%) of the respondents have completed their Nursing Diploma (205), followed by 14.0% Post Basic (55), 7.1% BSc Nursing (28), and 26.5% Post graduation (104) either in nursing or in public health (Figure 40). Majority (95.4%) of the nurse's contract type was permanent (374), whereas 26.5% of nurses in Chattogram Nursing College were employed on a temporary basis (13) (Figure 41).

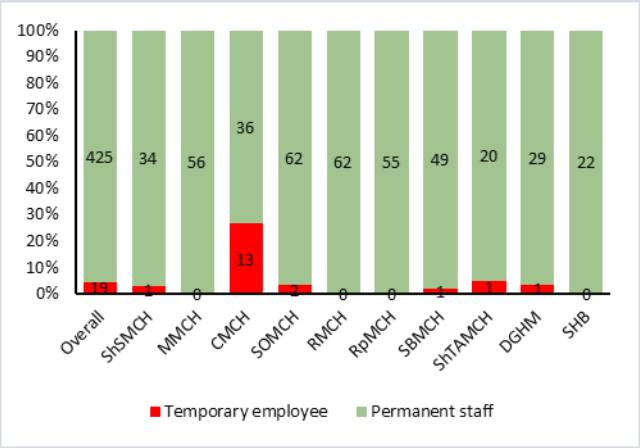


Figure 41: Distribution of the SSN based on their contract type

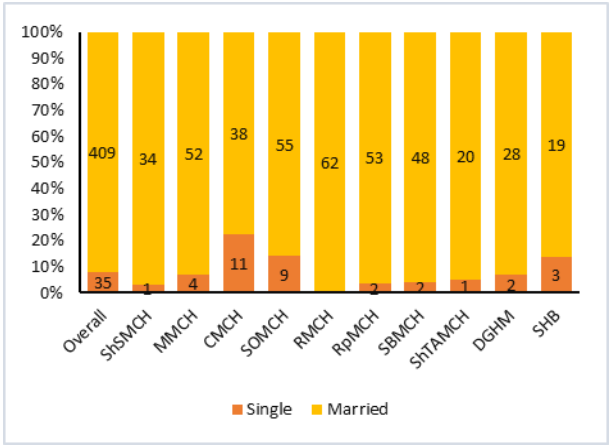


Figure 42: Marital status of the SSN

Practice Environment Scale of the Nursing Work Index

The Practice Environment Scale of the Nursing Work Index comprises of seven domains, namely, Training opportunity for Nurses (TON), Career development (CD), Nursing team (NT), System to assure quality nursing care (SAQNC), Nursing care and its quality (NCQ), Relationship with co-worker (RC), Treatment for Nurses in the hospital (TNH).

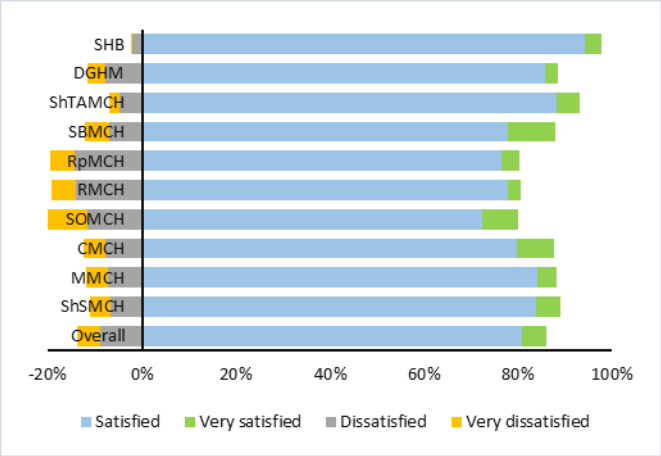


Figure 43: Total Satisfaction of the Nurses regarding Practice Environment Scale

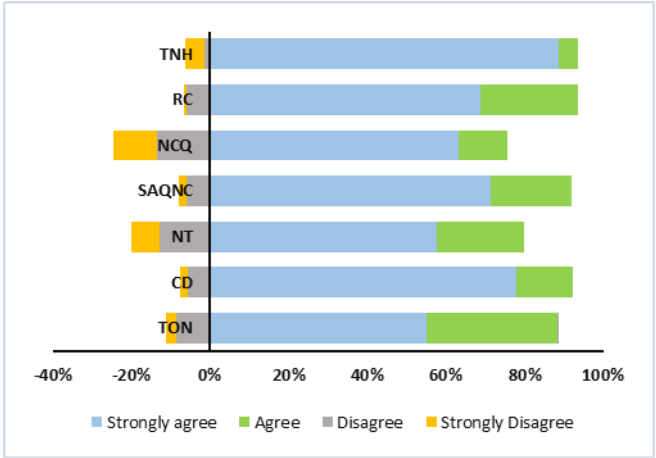


Figure 44: Distribution of the individual scale responses

As a whole, the total satisfaction of the Practice Environment Scale was found 80% in all partner hospitals (Figure 43).

More positive responses were noticed for TNH, RC, SAQNC, CD and TON domains covering more than 80%, whereas opposite responses were remarkable for the NCQ and NT domains (Figure 44).

It was found that 84% of nurses were satisfied with their training opportunities, and the rest, 16% were dissatisfied (Figure 45). In contrast, more dissatisfaction was reported in RpMCH and RMCH, and the reasons behind it were less frequency of training where all the staff could not be accommodated, training was not conducted timely, duration of training was not satisfactory, lack of manpower and facilities in the hospital, few think that they are not trained according to planning. Figure 46 also reported similar findings regarding satisfaction on career development (CD) as TON. The reasons behind dissatisfaction were explored as mismanagement, lack of staff nurses, facilities, and training materials, less training offered than nurses quantity, training on special areas not offered, not getting placement according to training specialties, and no implementation scope as there is no manpower.

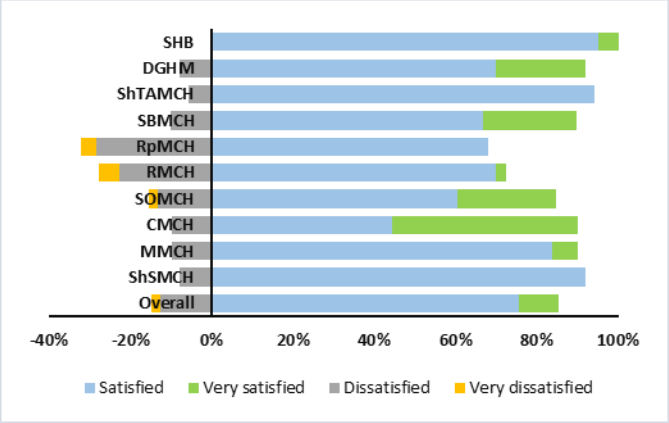


Figure 45: Satisfaction on the training opportunity for nurses (TON)

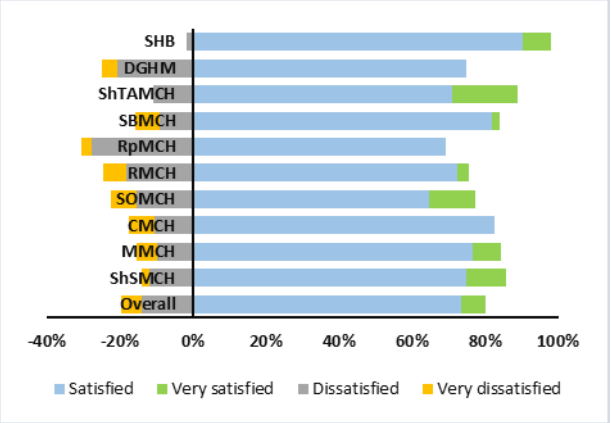


Figure 46: Satisfaction on career development (CD) of the nurses

Almost equal responses were observed regarding the nursing team, irrespective of their location (Figure 47). Regarding the satisfaction of the nurses with the system to assure quality nursing care (SAQNC), more dissatisfaction was reported in Rangpur Medical college hospital, Rajshahi Medical College Hospital, and Sylhet Osmani Medical College Hospital (Figure 48).

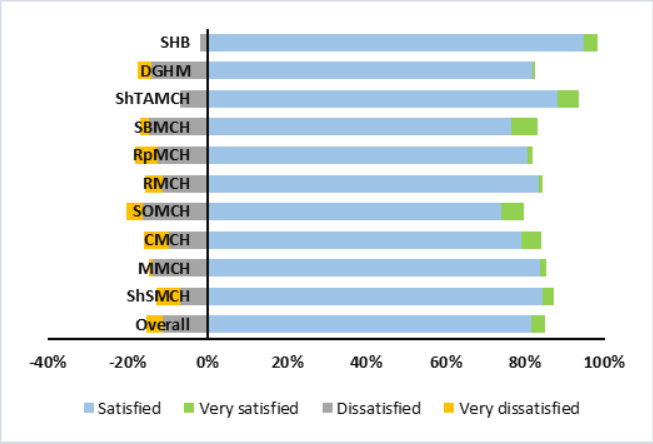


Figure 47: Satisfaction of the nurses on the nursing team (NT) of the hospital

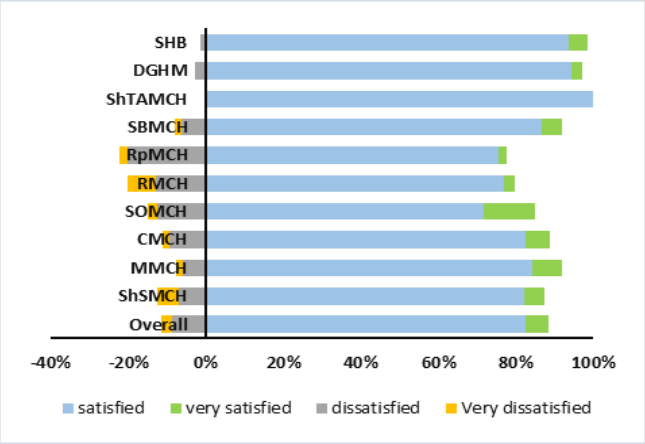


Figure 48: Satisfaction of the nurses on the system to assure quality nursing care (SAQNC)

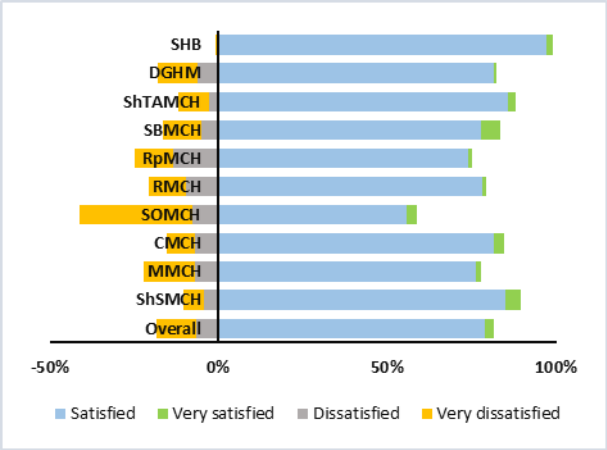


Figure 49: Satisfaction of the nurses on the nursing care and quality (NCQ)

Nurses from SOMCH were more dissatisfied with nursing care and quality (NCQ) (Figure 49). Figure 50 shows almost similar satisfaction for all hospitals except Sher-E-Bangla Medical College Hospital, Barisal, for the relationship with the co-workers (RC). Figure 51 represents the satisfaction of the nurses with the treatment for nurses in the hospital (TNH), and remarkable dissatisfaction was present in RMCH, RpMCH and SOMCH.

Other than mismanagement and lack of facilities/manpower/logistic support here, some new obstacles were explored as overloaded patients compared to the nursing staff – nurse-patient ratio is not maintained, excess patient's visitors, behavioral problems of the attendants, too much workload, lack of supporting staff like word boy or cleaner, lack of security, poor organization and supervision. Overall, they expressed that the working environment is unsuitable for providing quality services; there is no proper guideline for this, quality of care is hampered due to additional or out-of-the-way works, and the authority takes no necessary initiatives for the improvement of quality nursing care.

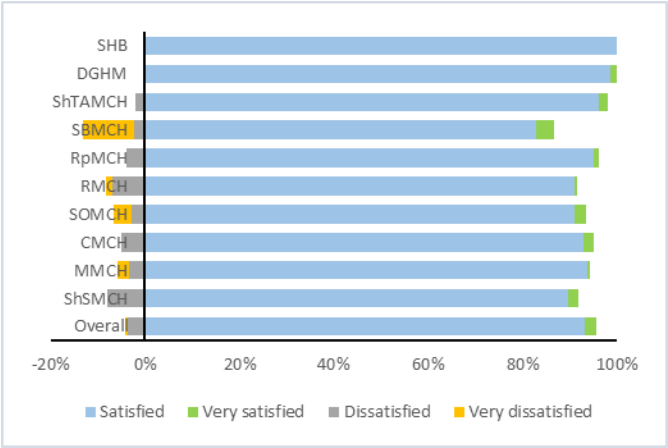


Figure 50: Satisfaction of the nurses on the relationship with the co-workers (RC)

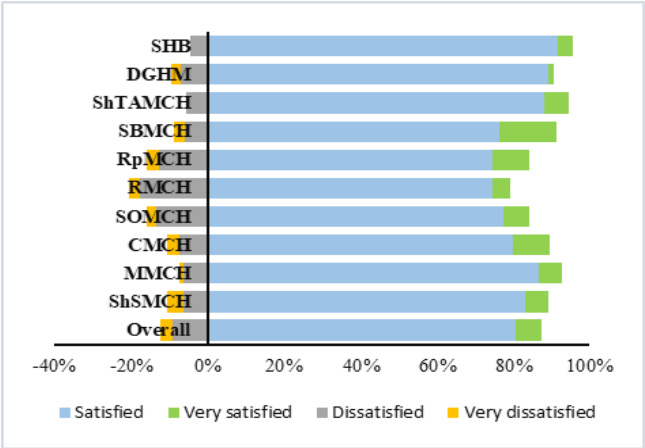


Figure 51: Satisfaction of the nurses on the treatment for nurses in the hospital (TNH)

Figure 52 shows that nurses experienced ≥10 years were more satisfied compared to their counterparts on the established post-exposure occupational management system.

More than 80% of nurses, irrespective of their experience, reported that nurses have the opportunity to attend academic activities domestically and abroad (Figure 53). About 72.8% of nurses were satisfied with clear guidelines on the roles and responsibilities of nurses (Figure 54) and the rest mentioned that the guideline is not clear and no clinical supervision as their reason for dissatisfaction, and they think the guideline should be updated.

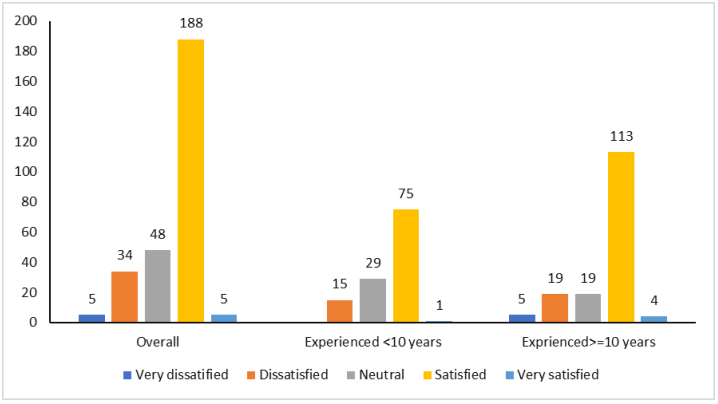


Figure 52: Satisfaction of SSN on established post-exposure occupational management system

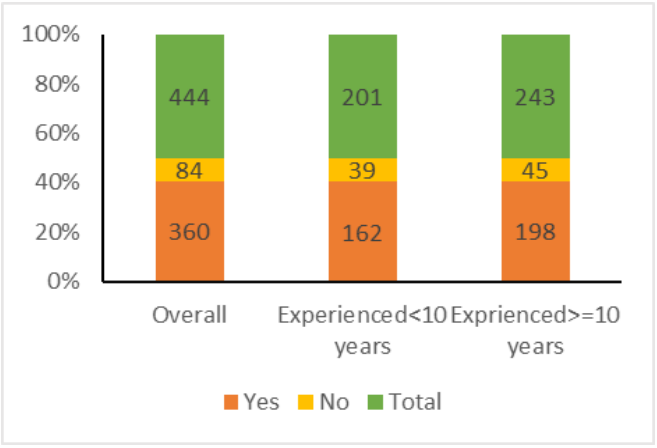


Figure 53: Nurses have the opportunity to attend academic activities domestically and abroad

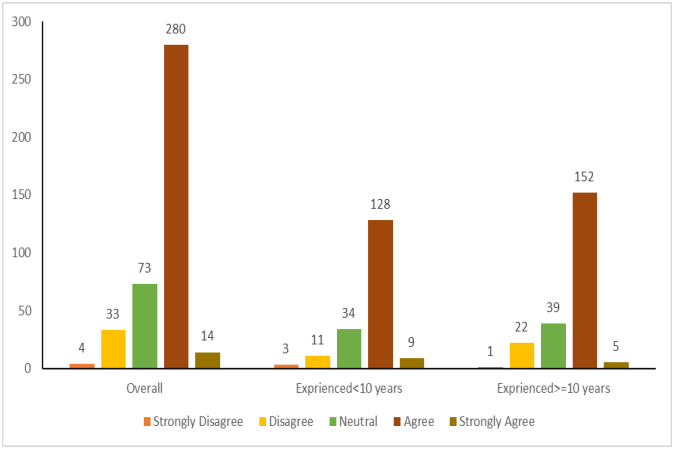


Figure 54: Satisfaction of SSN on clear guidelines on the roles and responsibilities of nurses

About 63.1% of nurses were satisfied with the existing working process with clear guidance that is easy to implement and 66.3% of nurses with experienced ≥10 years were more satisfied with it (Figure 55). Figure 56 shows 52.5% of nurses were satisfied with nurses with good job performance are encouraged and recognized in a timely manner, and almost similar findings were reported irrespective of their experiences.

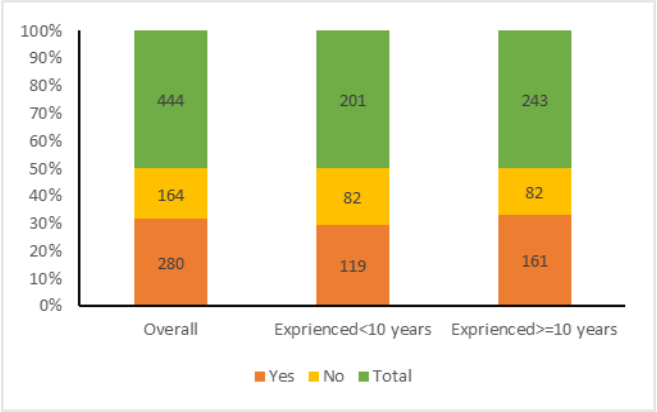


Figure 55: Presence of work process with clear guidance that is easy to implement

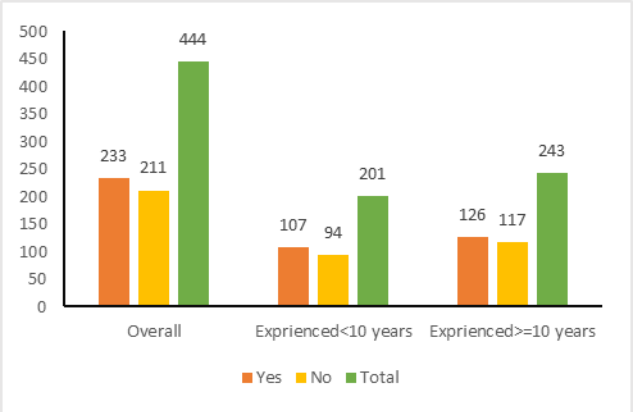


Figure 56: Nurses with good job performance are encouraged and recognized in a timely manner

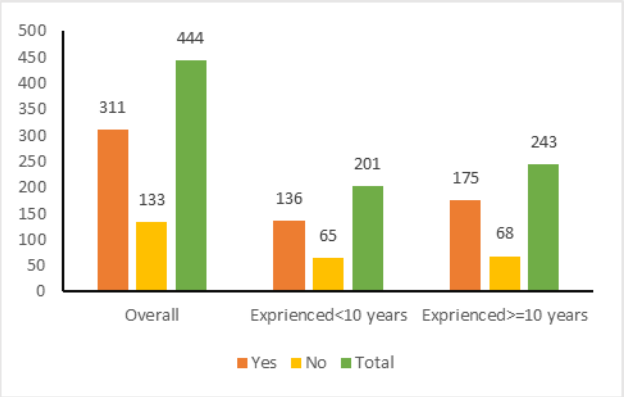


Figure 57: Nurses can assess patients and deliver individual nursing care based on the assessment results

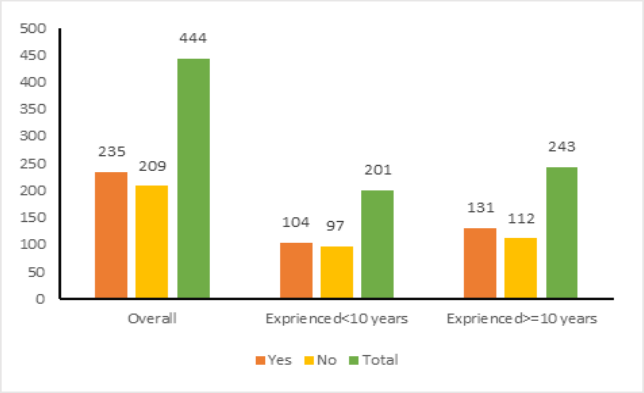


Figure 58: Hospital is well-equipped to improve the efficiency of nursing work

About 70% of nurses reported that Nurses could assess patients and deliver individual nursing care based on the assessment results (Figure 57). More than half of the nurses (52.9%) reported that their hospital is well-equipped to improve the efficiency of nursing work, whereas 61.2% of nurses were satisfied with it (Figures 58 & 59). Regarding dissatisfaction, few mentioned the lack of logistic support, manpower, equipment, training and inappropriate distribution of work.

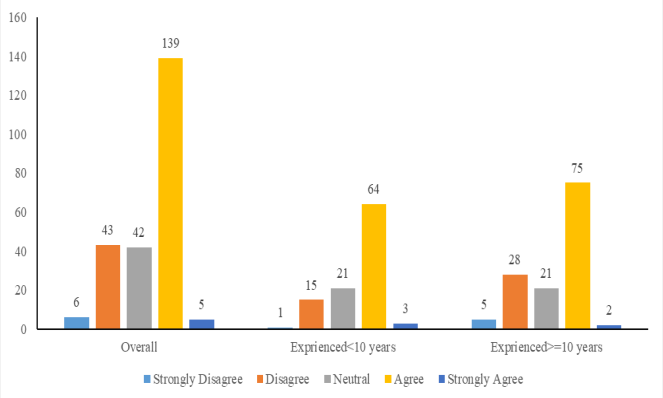


Figure 59: Satisfaction of SSN on hospital is well equipped to improve the efficiency of nursing work

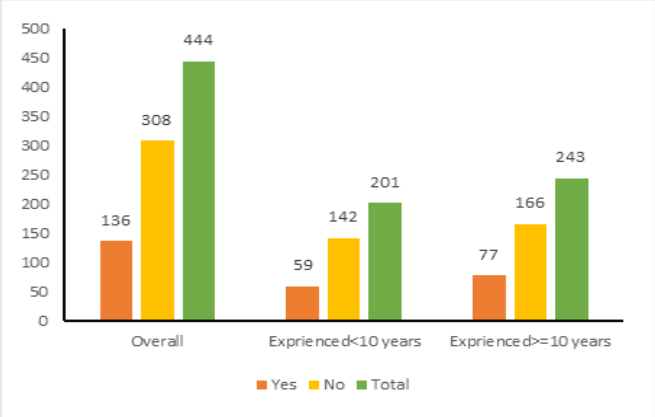


Figure 60: Usually there are no frequent job changes among nursing backbones (TNH 20)

Figure 60 shows 30.6% of nurses reported that there are no frequent job changes among nursing backbones. Figure 61 shows 70.1% of nurses were satisfied with the salary of nurses compared to other professions. Figure 62 shows 72.0% of nurses were satisfied with the hospital salary system and 8.7% were dissatisfied. Regarding dissatisfaction, they mentioned poor salaries compared to their hard work and there is no risk allowance.

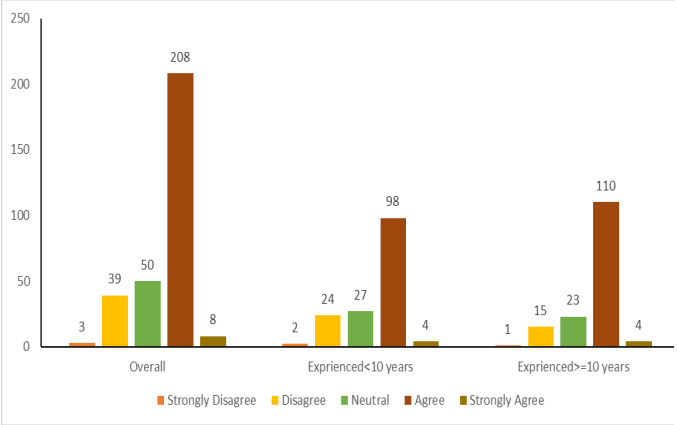


Figure 61: Satisfaction on the salary of nurses compared to other professions

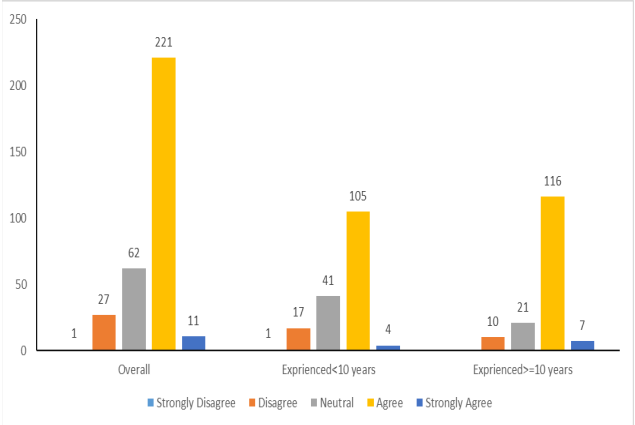


Figure 62: Satisfaction on the reasonable hospital salary system

Figure 63 shows a well-functioning nursing working system in their hospital, and almost similar responses were recorded except for Mymensingh Medical College Hospital.

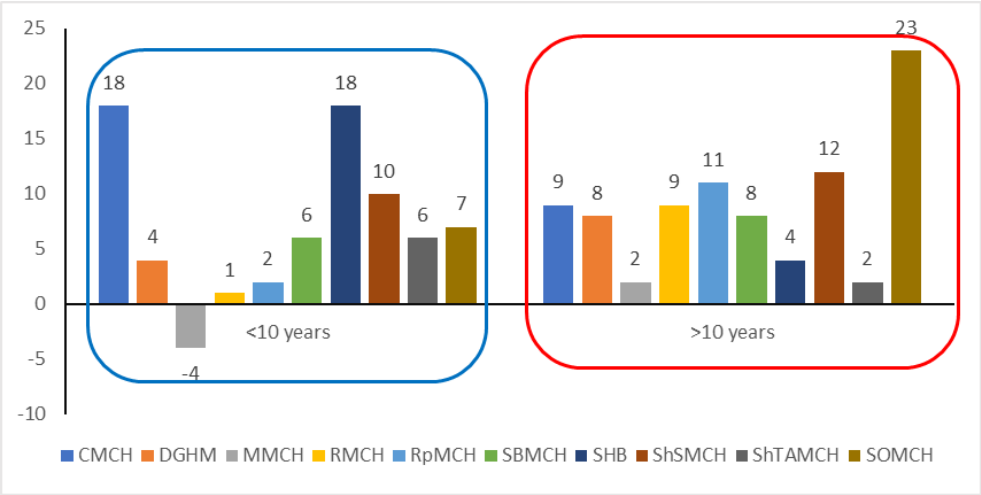


Figure 63: Satisfaction of SSN on well-functioning nursing working system by their hospital (NT 6)

Needs of the nurses analyzed based on the open remarks

The nurses provided their open comments about their needs when they were asked to do so, the responses were as follows; they need workplace safety and security, the number of visitors should be controlled, a salary structure should be handsome, harassment should be stopped, execution of roaster for maintenance of duty, risk and overtime allowance. Also, some of them opined as a weekly two days day off duty, department and subject-wise training required, hospital administration should be more caring towards nurses, respect their workplace, more nurses should be appointed, and need to ensure higher education for nurses, sector, and management properly. The credit they deserve should be provided; ensure transport support for nurses, they should be promoted based on their degree, and a daycare center should be established.

2.5 Clinical Supervisors / Instructors' Situation

A total of 87 nurses interviewed from the 7* targeted nursing hospitals who supervise the students in their clinical placement in different wards. They are basically the nursing supervisor or ward in charge who look after the nursing students in the wards as instructed by the nursing superintendent. Questions about their work experience, the experience of supervising students, an opportunity of receiving any specific training for mentoring students, or any in-service training were asked.

** ShSMCH was excluded from the analysis for this part as it does not have any in-service nurses who supervise the students from CoNSBN..*

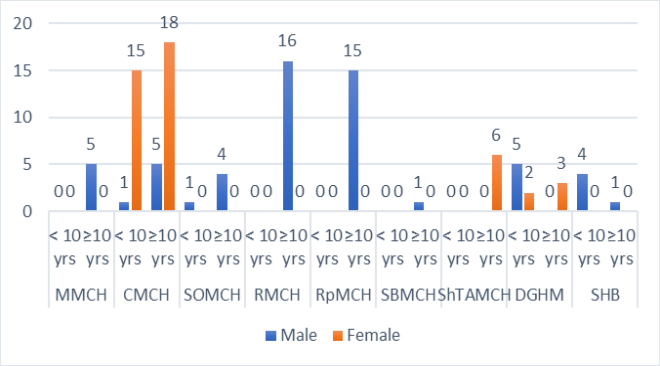


Figure 64: Male and Female ratio

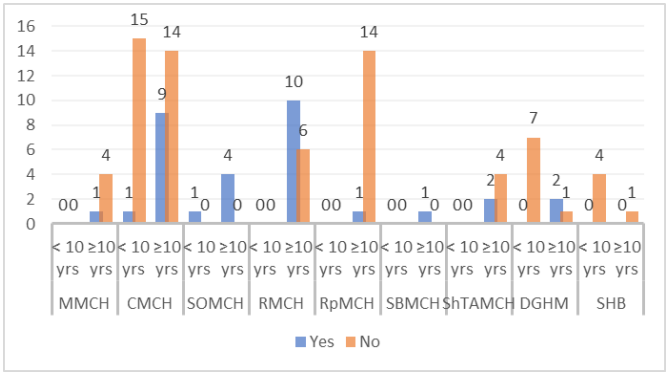


Figure 65: Any specialized area

About 88.2% of the clinical supervisors were females, whereas 11.8% were male. No male clinical supervisor was reported from Mymensingh Medical College Hospital, Sylhet Osmani Medical College Hospital, Rajshahi Medical College Hospital, Rangpur Medical College Hospital, whereas no female clinical supervisors were reported from Sher-E-Bangla Medical College Hospital (Figure 64). Only 31.4% of clinical supervisors were specialist nurses, whereas the rest had no specialization (Figure 65). More than half (55.9%) of the respondents have completed at least a nursing diploma, and 29.4% have completed the master's degree in either nursing or public health (Figure 66). All (100.0%) of the clinical supervisors in Rangpur Medical College Hospital have nursing diploma and there is only one clinical supervisor in Sher-E-Bangla Medical College Hospital who holds master degree.. Figure 67 shows that except for eight clinical supervisors, all others (104) were the permanent staff.

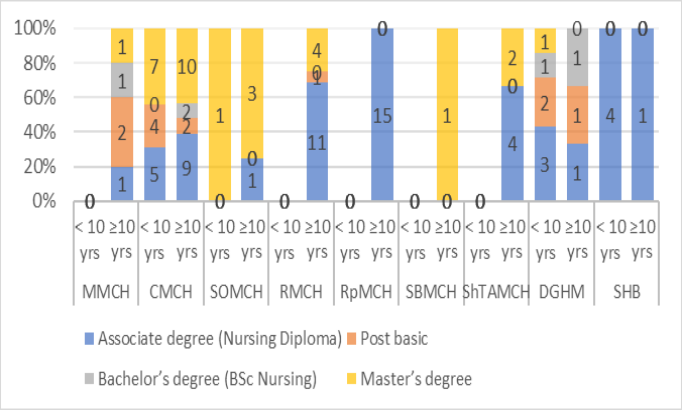


Figure 66: Distribution of the respondents based on their educational qualifications



Figure 67: Distribution of the respondents based on their contract agreement

Only 10.8% received in-service training before students' supervision whereas none of the clinical supervisors from Mymensingh Medical College Hospital, Sher-e-Bangla Medical College Hospital, and Shahid Tajuddin Medical College Hospital reported receiving any in-service training before student's supervision (Figure 68).

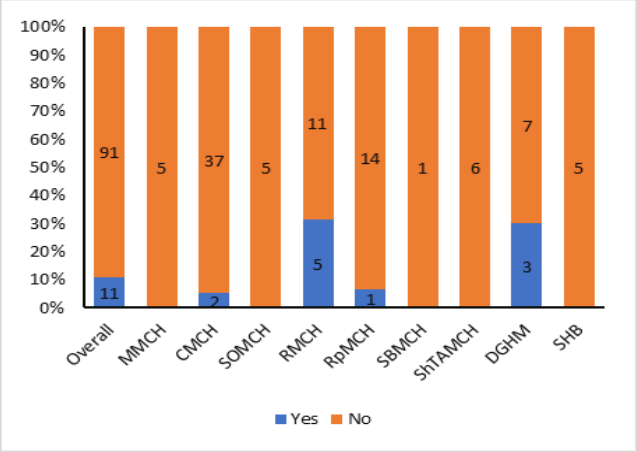


Figure 68:: In service training receiving status of the respondents before becoming clinical supervisor

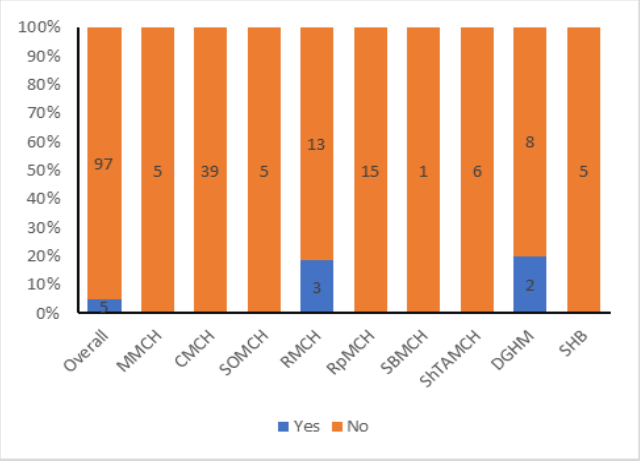


Figure 69: Distributed of the respondents based on received any training specific to become a supervisor for the student?

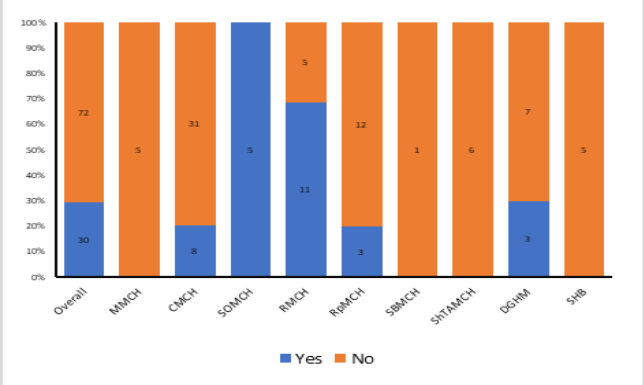


Figure 70: Are there any regular workshops / meetings with lecturers / teachers from the college where the student comes from?

On the other hand, Figure 69 shows that only 4.9% (5) clinical supervisors received the specific training to become a student supervisor, and among them, 3 are from Rajshahi Medical College Hospital, and the rest of them had no training to supervise the students. Only one-third (32.4%) of clinical supervisors had opportunities to attend regular workshops / meetings with lecturers / teachers from the college where the student comes from (Figure 70).

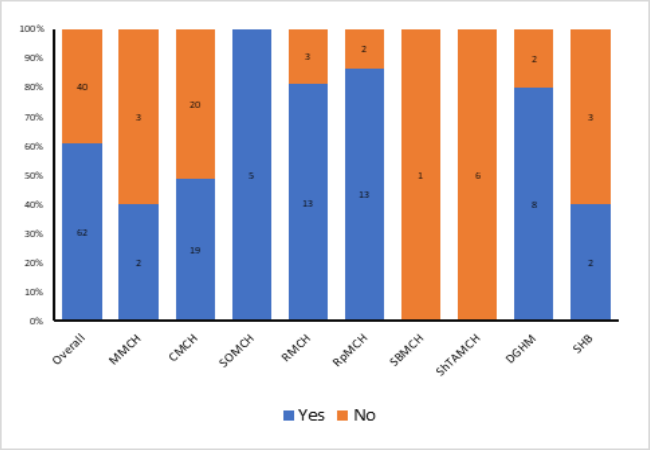


Figure 71: Are lecturers / teachers from the colleges reachable during the student's practice placement?

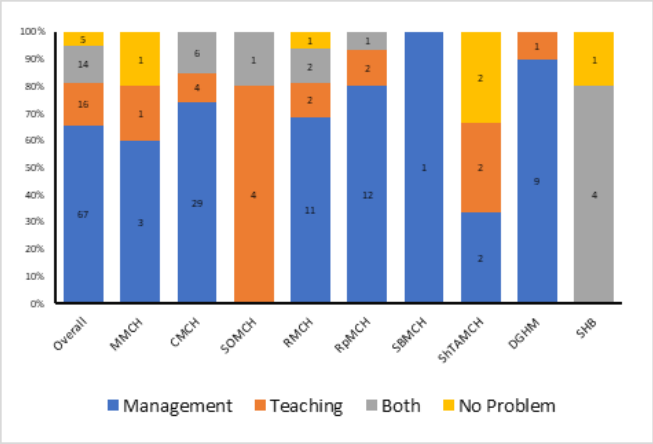


Figure 72: What are the most difficult aspects of teaching in-clinical practice?

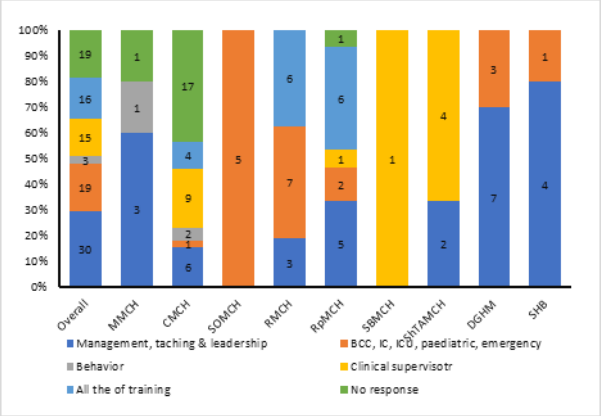


Figure 73: If there is training to support the nurses in supervising nursing students, what subject will be most required / helpful?

Figure 71 shows that 29.4% of clinical supervisors could not reach the lecturers / teachers from the colleges during the student's practice placement. About 85.3% of the clinical supervisors thought that management is the most difficult aspect of teaching in clinical practice (Figure 72). According to the statement of the clinical supervisors, they need more training in management, teaching, and leadership whereas, some are requested for behavioral change communication, information communication, ICU, pediatrics, emergency, and behavior (Figure 73).

Training expected by the clinical supervisors / instructors

About 75% of respondents expect training in Management and Leadership, Behavioral Change Communication (BCC), Nursing care, Clinical teacher training, Teaching methodologies, Behavioral and emotional skill development, Education & ICT. The rest (25%) were expecting different training, as mentioned below.

Table 41 Desired training by the clinical supervisors / instructors

Training Subjects	Number	%
Management and Leadership	29	25.9
Behavioral Change Communication (BCC)	14	12.5
Nursing care	11	9.8
Clinical teacher training	10	8.9
Teaching methodologies	8	7.1
Behavioral and emotional skill development	7	6.3
Education & ICT	7	6.3
Pediatrics	5	4.5
ICU & Emergency	4	3.6
Infection control	4	3.6
Burn	3	2.7
English language	3	2.7
OT	3	2.7
BLS	2	1.8
Refresher training	1	0.9
Simulation training	1	0.9
Total	112	100

List of desired trainings are arranged according to the most responses by the clinical supervisors / instructors

2.6 Summaries of KII

KII findings

For qualitative data we conducted seven KII (Key Informant Interviews) with stakeholders using KII Guidelines. These interviews were either recorded in a tape recorder or field notes were taken. All recorded interviews were later transferred to text format. Some key areas (contents) were identified from these interviews and narrated here as summary findings.

KII findings of DGNM

Backgrounds

DGNM is an administrative controlling body of nursing and midwifery services in the Government sectors in Bangladesh. Apart from this, the admission of students in all nursing and midwifery educational institutions at the government level and administrative activities of the educational institutions are also managed by the DGNM.

The key role of DGNM includes:

• The DGNM is the chief executive authority for all administrative management of nurses and midwives at the government level.

• Ensuring proper supervision and monitoring of nursing, midwifery, and non-nursing officers working across the country under the DGNM.

• Recruitment, posting, transfer, retirement, disciplinary activities of nursing, midwifery, and non-nursing officers.

• Formulation of development projects, adoption, and implementation of strategic plans for the development of the nursing and midwifery sector at the national level.

• Implementation of operational plans, budget management, and official nursing and midwifery sector procurement.

• Regulation and management of all nursing and midwifery educational institutions at the government level.

• Working in coordination with Bangladesh Nursing and Midwifery Council, other departments at national and international cooperative organizations in nursing and midwifery services, and education-related activities as a department under the Ministry of Health and Family Welfare.

• To provide other services as per the service commitment of the Department.

Regarding career development, it was noted that initiatives (proposal submitted) were already taken by DGNM to create a Clinical Nurse Teacher Position (CNT) in each partner hospital (10 for Medical College Hospital and 5 for District Hospitals like Sadar Hospital) and the final decision is still pending and can be executed only after the approval of the Ministry of Health. A draft Organogram is prepared for Nursing College and submitted to the Ministry for approval. The nurses' job description has also been revised and supplied to the hospital. All nursing colleges are monitored by a local committee, and there is no existence of a Nursing College Management System. Presently there is no career pathway for nurses, but DGNM has the plan to develop such in the future.

For Continuous Professional Development (CPD), there is nothing offered for Nursing Instructors (nursing college tutors) though some funds were generated from donors' agency/development partners to train them. Two weeks of orientation training for newly employed nurses for capacity building are in place but need sufficient funds for continuation of this training. Arrangement of seminars and lectures for nursing instructors could not be arranged in a regular fashion due to a shortage of funds. Core competencies of Nurses are discussed during the orientation training of new nurses.

Regarding the capacity building for their own nursing officers in DGNM, there are no fixed criteria for the selection of Senior Administrative positions in nursing service. Even after this selection process, formal training for these administrators are not available.

KII findings of BNMC

Backgrounds

In Bangladesh, nursing registration for BSc nurses is given by Bangladesh Nursing & Midwifery Council after the successful completion of 4-year academic programs with six months of internship training. Before nurses are registered with the Council, they have to qualify for examinations conducted by BNMC. As there is no existence of Central Nursing College Management System so all academic activities of nursing colleges are monitored by a local management committee where BNMC plays an advisory role. Accreditation is another important activity of BNMC.

The following are important parts of the interview of the Registrar of BNMC: In Bangladesh accreditation process following the Government of Bangladesh regulation started very recently. But still, there is no fixed body to conduct accreditation and review the criteria of accreditation. Generally, BNMC forms a 3 members committee on a case basis as external members for accreditation. All three external members must be from different nursing colleges, excluding the applicant college. Until today only Dhaka Nursing College got accreditation. No other nursing college applied for it, as none of them completed their Self-Assessment process using

the document (Self-Assessment Tools) developed by DNMC. In addition, the accreditation process demands an additional budget to complete. Thus, the lack of sufficient financial assistance from the Government is another challenge that BNMC faces as obstacle to carrying out this activity by DNMC. Nursing colleges that can complete the self-assessment only can apply to BNMC for further evaluation for accreditation. Only after securing a passing score can a nursing college get accreditation.

KII findings of NIANER

Backgrounds

The Prime Minister of Bangladesh initiated the National Institute of Advanced Nursing Education and Research (NIANER) during her visit to Korea in May 2010. It is the only higher education and research center for nurses in Bangladesh. NIANER conducts both academic training and research activities in different settings like a hospital and community along with community work. It received funds from BMRC as a research grant.

We interviewed the Director of NIANER. The following are the brief of the interview findings: NIANER has given simulation lab training by bringing 2 teachers from each of the 12 nursing colleges to establish a well-developed simulation lab. So far, they conducted 27 skill-based training last year. Unfortunately, NIANER cannot provide any training for master trainers. They also do not provide any training for senior staff nurses who teach nursing students during clinical practice. Although in addition to that, they also organized a training workshop for nursing faculty members on research methodology, teaching methodology, preceptor, and ethics in 2019 with the support of the University of Korea before the COVID pandemic in 2019". NIANER expressed that they want to work with JICA in different aspects, such as improving nursing research activities, arranging teacher development training for enhancing their capacity, give training to a senior staff nurse who works as clinical supervisor of nursing students for buildup their skill and capacity building in clinical side, developed leadership and administrative skill to improved supervision and monitoring system.

KII findings of UNFPA

Backgrounds

UNFPA provided support for curriculum development, capacity building of faculty, and laboratory facilities for the midwifery program in Bangladesh. They also funded the establishment of 68 midwifery care centers for clinical practice of midwifery programs. Their main concern is to provide logistic support and faculty development for nursing colleges.

We interviewed the consultant of UNFPA, and some of the observations regarding the management capacity of nursing administrator stated by the interviewee are noted here: There is no post for a nurse manager; generally, staff nurses do supervisory work in institute level or hospital and the district public health nurse work as a nurse manager at the district level. Another

important observation from capacity building training is that it is attended by those not interested in receiving it, which means there is a mismatch in the selection process. Another observation is, after completion of training, most of the nurses transferred to another hospital, so trained personnel are not utilized properly. Some nurses are trained as faculty for nursing colleges but work as nursing instructors, where dissatisfaction is created. Finally, the consultant of UNFPA mentioned that it would be great if all development partners who provide support for capacity building for Nursing education in Bangladesh, like JICA, UNFPA, and Pro-nurse organizations, could work together.

KII findings of GAC/ProNurse

Backgrounds

In 2014, the Canadian Association of School of Nursing (CASN) joined an initiative called ProNurse to start their project, which aims to improve the quality of gender-responsive education and enhance the professional status of nurses in Bangladesh. Outputs include implementing an accreditation program for nursing education programs in Bangladesh. A 5-year project (2021-26) funded by Global Affairs Canada led by Cowater International and delivered in association with the University of Montreal, and CASN. The team is collaborating closely with the Directorate General of Nursing and Midwifery (DGNM), the Bangladesh Nursing and Midwifery Council (BNMC) and the Bangladesh Ministry of Health and Family Welfare (MOHFW). In 2022, CASN traveled to Bangladesh and guided important workshops with the Bangladesh Nursing Midwifery Council's Competency Review Working Group. The parties worked together to review and update the Bangladesh accreditation program for nursing programs and refine nursing education competencies as part of Cowater International's ProNurse project to increase the professionalization of the nursing sector in Bangladesh.

We interviewed one of the officials of GAC/ProNurse regarding their observation in terms of nursing education competencies: They shared that the Government of Bangladesh has not approved the Clinical Nurse Trainer, and there is a lack of subject-based nursing instructors. One interesting comment was made regarding capacity building training of administrative staff nurses. They had also shared that at the beginning, few participants joined the training but later on, when nurses realized the importance of training, the number of participants slowly increased.

KII findings of DNC and DMCH

Interviewees of another two KII were the Principal of Dhaka Nursing College and the Director of Dhaka Medical College Hospital to assess the status of current nursing education and changes of good clinical practice after implementing CBNS Phase I training.

Following are the milestone changes notified by the principal of Dhaka Nursing College: With the help of JICA, they can now offer part of standard nursing education. DNC also observed significant

changes in their faculty members. They can understand how freely they are doing and how much confidence level they have developed. At present, five full-functioning committees are looking after the quality of education and research. Meanwhile, one research paper was published. The nursing students in DNC became more confident in their clinical practice placement as they are much better monitored by trained and skilled faculties. After implementing phase I, they face no challenges with mentoring systems in place. But they feel that JICA should continue their support for the sustainability of the quality of nursing education until they have a sufficient number of well-trained faculties.

DNC principal also added a module has been developed for Clinical Nurse Trainers, and criteria have also been set up for the selection of trainers (Staff Nurses). Accordingly, 40 nurses were selected from the hospital for 1st batch, which successfully completed training under the CBNS-I project. JICA has provided all the support and equipment to train nurses as CNT. Now academic teachers and CNT work together in students' clinical practice sessions. They are also willing to work with JICA to implement the CBNS-II project. They also want JICA to do the follow-up of the phase 1 project.

Chapter 3: Activities and Evaluation Indicators

Output 1	**Indicator 1-1**	**Activities**
Management capacity for nursing administration is strengthened.	Policies and strategies for BSc Nursing education are updated.	Investigate the current situation of nursing administration in Bangladesh and specify issues for sharing experiences of Japan.
		Formulate a career path for nurses
		Promote nursing college accreditation
		Train organizational and administrative nurse managers/administrators in selected issue
Output 2	**Indicator 2-1**	**Activities**
Implementation system of nursing education for BSc is strengthened at the target public nursing colleges.	Nursing education fulfilling the standards is carried out.	Assess the situation of public nursing colleges and determine the target colleges
		Establish the system for improving the quality of teacher's skill (mentoring, teaching quality evaluation) in the target public nursing colleges
		Establish the system of strengthening clinical nursing practices.
		Strengthen the system of promoting nursing research activities.
		Provide subject-based nursing for nurse educators (ex. fundamental nursing, community nursing etc.)
Output 3	**Indicator 3-1**	**Activities**
Implementation system of clinical nursing practices is strengthened at the collaborative hospitals.	The percentage of trained Clinical Nurse Teachers (CNTs) among all clinical nurses.	Assess the situation of implementation of clinical nursing practices and in-service training on clinical nursing practices at the collaborative hospitals which accept students from target nursing colleges.
	Indicator 3-2	
	The percentage of trained CNTs for students.	Conduct CNTs training.
	Indicator 3-3	.
	The percentage of trained clinical nurses among all clinical nurses.	Provide in-service training for nurses to improve clinical practices
		Establish the system for promoting CNTs training and deployment as well as in-service training on nursing clinical practices.
		Make policy recommendation regarding clinical nursing practice system
Output 4	**Indicator 4-1**	
Networking of nursing colleges and the related	Seminars and forums regarding nursing are held XX times a year.	Share the knowledge (such as training tools) of Phase1 and Phase2-output2 for strengthening the implementation system of nursing education.

organizations is strengthened.		Share the knowledge (such as training tools) of Phase1 and Phase2-output3 for capacity development of CNTs.
		Support organizing forums and seminars for capacity development of post graduate nurses (Possible theme will be instruction method for newly graduated nurses, fundamental nursing skills and others.)

3.4 Rethinking of Tentative Evaluation Indicators

After the intervention the following indicators can be used in the End line survey:

1. Number of Master trainer.
2. Number of Clinical Teacher/Supervisor/Instructor in the hospital.
3. Number of targeted nursing colleges who has completed self-assessment or in the process of Accreditation.
4. Number of targeted Nursing Colleges applied for Accreditation.
5. Number of Nursing supervisors of the partner hospitals (who take care of the student nurses during clinical practice session) completed training on Subject based teaching - Training from DGNM or other stakeholders or Development Partner Organizations.
6. Evidence of improvement of networking among other nursing educational institutions at home and abroad.

Chapter 4: Discussion, Conclusions, and Recommendations

4.1 Discussion

This baseline survey was conducted to strengthen the nursing education system and clinical nursing practices in Bangladesh. For this, the present status of nursing colleges and partner hospitals were assessed, and the gaps were identified where JICA, in collaboration with the Govt. of Bangladesh, can provide support to ensure the quality of nursing education. With this aim, 8 nursing colleges were targeted by JICA for BLS in the CBNS-II project. A series of questionnaires were used to collect information from the targeted colleges and stakeholders on the educational environment, administrative issues, teaching faculties, and students' opinions on nursing education, including the situation of the nursing working environment and clinical supervision modalities.

According to the guideline for self-assessment tools of accreditation developed by the Bangladesh Nursing and Midwifery Council, 7 nursing colleges qualified out of 8 targeted colleges achieving 60%-<70% score. We mainly used the total scoring system in five standards where the passing score is at least 50% in each standard. The highest scorers are Rajshahi Nursing College, Sylhet Nursing College and the College of Nursing, Sher-E-Bangla Nagar, Dhaka, conversely, Mymensingh Nursing College could not qualify due to not achieving the passing score. The reason behind this is the lack of infrastructure, the required number of nursing instructor, and the absence of clinical supervisors / instructors for mentoring the nursing students in the clinical setting. Also, it was observed that none of the nursing colleges fulfilled the criteria of the required ratio between the instructors and nursing students both in the classroom courses and clinical placement, which was supposed to be 1:20 and 1:8, respectively. Lack of individual prospectus, master plan and / or resource plan in the colleges also dissatisfy the assessment criteria. On the contrary, the positive side was all the instructors, and the guest teachers held a required educational background in all the colleges and they taught using a well-recognized teaching method following the curriculum.

For gathering information regarding nursing education from the students, 1397 students from 8 targeted nursing colleges were interviewed using a self-administered structured questionnaire. Data were analyzed using 6 different scales: out of these 6 scales, the highest satisfaction level was observed in the 'Graduate Qualities Scale' and 'Learning Community Scale'. Whereas the lowest satisfaction level was observed in 'Student Support Scale' and 'Learning Resource Scale'. Inadequate number of books in the library, poor IT and English linguistic lab facilities were the main reasons for dissatisfaction. Other than this, the course seems to be well accepted by the students in terms of feeling interesting, knowledge sharing and well organized.

Information on healthcare facilities in the partner hospitals was collected through interviews with the Director of the Hospital and the Nursing Superintendent. In total, 16 in-depth interviews were conducted through a prior interview schedule using a semi-structured questionnaire. The bed occupancy rate was observed to be 2-4 times higher than the WHO standard, with a high Nurse: Patient ratio ranging from 1:7.8 to 1:14 in most targeted hospitals.

On a further query regarding the nursing career ladder system, the scope of upgradation is very limited since only one promotion grade can be offered. On the other hand, sanctioned posts are also limited if there is no post for the Clinical Supervisor to supervise the students in their clinical placement. The quality of clinical supervision is further compromised due to the inadequate training of the in-service nurses and the absence of specific guidelines for clinical mentoring of the students. Moreover, the lack of coordination between the nursing college and its partner hospital hinders the quality of clinical teaching for nursing students.

In this regard, it can be stated that presently DGNM has no plan for a career pathway in terms of upgrading the nurses. But some initiatives have already been taken by DGNM to create a Clinical Nurse Teacher Position (CNT) in each partner hospital (10 for Medical College Hospital and 5 for District Hospitals like Sadar Hospital) which currently needs the approval of the Ministry of Health. The revised Organogram for the Nursing College is waiting for the Ministry approval. The job description of the nurses has also been revised.

A total of 392 nurses were interviewed from the 8 partner hospitals using a semi-structured self-administered questionnaire to collect information on their working environment. '*Practice Environment Scale of the Nursing Work Index'* was used to analyze the data. In this scale there are 7 subsections: Training opportunity for Nurses, Career development, Nursing team, System to assure quality nursing care, Nursing care and its quality, Relationship with co-worker and Treatment for Nurses in the hospital. The total satisfaction level of the Practice Environment Scale was found to be 80% in all partner hospitals. However, there were certain areas of dissatisfaction, like frequency and duration of training for the staff, lack of training materials, lack of manpower and facilities in the hospital, and not getting placement after returning from training. Other than management issues, they identified a few more obstacles like excess patient visitors, behavioral problems of the attendants, lack of supporting staff like word boy or cleaner, lack of security, and poor organization and supervision.

In this regard, stakeholders from both Govt. and private sectors supported improving nursing education. NIANER organizes skill-based short training like nursing administration and leadership, simulation lab, research methodology, teaching methodology and also facilitates 2-year master training for the nurses. Whereas UNFPA provided support for curriculum development, capacity building of faculty and laboratory facilities for the midwifery program in Bangladesh.

In terms of getting information regarding mentoring of student nurses during their clinical placement, we interviewed 97 staff nurses who look after the students. There is no such post for Clinical Supervisor in the partner hospitals. In addition, only a few (10.8%) nurses received in-service training before they mentored the students. Of these, only 4.9% were directly linked to the supervision of nursing students. About one-third had the opportunity to attend regular workshops / meetings with lecturers / teachers from the nursing college.

4.2 Conclusions

As per the survey findings, we can conclude that out of 8 targeted nursing colleges, 7 can go to the next step of applying for accreditation with some reservations, especially the improving classroom, library, and IT facilities. Also, there is a need for specific subject-based training for nursing instructors to improve their teaching quality. Almost all students and faculties felt the importance of a position as a clinical supervisor in the hospitals and specific mentoring guidelines to improve nursing education. But most of the students expressed their satisfaction that the course is well-organized, knowledge sharing and the topics suit according to their needs.

On the other hand, the quality of nursing services was hampered due to overwork, uncontrolled visitors, insufficient nursing staff, lack of supporting staff like word boys or cleaners, non-availability of any career pathway, improper distribution of work, the limited scope of upgradation in terms of salary and poor management. Overall, they felt that the working environment is unsuitable for providing quality services, and the authority is also relaxed to take any necessary initiatives to improve quality of nursing care. They also felt the need for skill-based training and placement accordingly. But the good thing is DGNM organizes 14-day orientation training for every nurse before they join their duty and also organizes short training on different topics for enhancing nurse's knowledge. NIANER and UNFPA also extended their supporting hands for the capacity building of the nurses and improved the infrastructure.

4.3 Recommendations

Based on the findings of the survey, the following recommendations can be drawn:

General recommendations:

1. Appropriate efforts should be taken by the college authority to improve the academic environment, like allocating resources to purchase a sufficient number of books in the library, ensuring the availability of IT resources, and the quality of the labs and classroom facilities.
2. Initiatives should be taken to make Simulation skill labs available for the student nurses for their hands-on training.
3. There is an urgent need for a Master Trainer who can train existing staff nurses who take care of student nurses in their bedside clinical practice.
4. Stronger coordination between nursing colleges and affiliated hospitals should be maintained for high-quality clinical teaching for student nurses.
5. More nursing staff should be recruited to maintain the hospital's standard nurse: patient ratio.
6. The hospital authority should create a suitable working environment for the nurses by ensuring workplace security, adequate supporting staff, and proper management of the attendants of the patients.

Policy recommendations:

1. DGNM should ensure and do the needful for the establishment of the position of Clinical Nurse Teacher for mentoring the students in clinical placement.
2. DGNM may take the initiatives to train the staff nurse for the clinical supervision of the students.
3. DGNM can collaborate with development partners such as JICA, and UNFPA to conduct a Master Trainer and develop a specific guideline for clinical mentoring.
4. Regular monitoring of the nursing colleges should be strengthened by fixing a focal person for the individual college.
5. DGNM may focus on capacity building of the instructors and nursing staff by arranging subject-based training for the instructors and specialized clinical training for the nurses.
6. A strategy can be developed by DGNM on how to utilize the skill of experienced nurses by deploying them in the right place.
7. More networking and communication should be established, seeking support from international development partners and other stakeholders to establish a more supportive learning environment in nursing schools, like exchanging clinical teachers for knowledge and skill transfer.

Annexure

5.1 Questionnaire Part A

A. Provider-based nursing college questionnaire

Date:

Name of the College:

Name of interviewee:

Name of interviewer:

I. Program Director/Head data		
1.	Highest academic degree of the Program Head/ Director/Principal	a. Bachelor of Science in nursing b. Other bachelor degree c. Master of Science in nursing d. Master of Education e. Other Master's degree f. Doctor of nursing practice g. Doctor of philosophy in nursing h. Other doctoral degree
2	How many directors has the program had in the past 5 years (including interim directors)?	
3	Does the program director have dedicated administrative support? *[Administrative support includes general office management such as answering phones, doing clerical work, and a variety of other tasks.]*	Yes /No (If yes, please specify).
4a	Do the Head of the Nursing and Midwifery Educational Institution have autonomy in decision making within his/her jurisdiction, e.g., Administration of the Nursing and Midwifery Educational Institutions students, instructors, support staff	Yes/No [>Record of different committee formation >guest lecturers CVs, office order from NI Instructor-in-Charge/Principal >master plan, academic calendar, student clinical rotation plan with clinical learning objectives, student's results >notice board, website]
4b	Do the competencies of the Head of the college be approved by the BNMC?	Yes/No

5a	Does your college assess student learning, knowledge and skill development throughout the curriculum using reliable evaluation methodologies and tools?	Yes/No	
5b	Do you communicate the results to the students?	Yes/No	
6	What is the current Accreditation status?	a) Nothing proceeds b) self-assessment conducted c) in the process of Accreditation d) Accredited (year & result)	
7	Availability of educational philosophy (diploma/curriculum/admission policy) and consistency of educational philosophy and curriculum combination *(Document review, educational philosophy and curriculum)*		
II. Administrative data			
1	Is the college Organogram clear, updated, and publicly displayed?	Yes/No (If yes, collect the organogram)	
2	Does your college have a prospectus/master plan and a resource plan that is followed?	Yes/No (If yes, collect prospectus/master plan and the resource plan)	
3	Does your college have a human resource plan & budget? *(Document review)*	Yes/No (If yes, collect HR plan, annual budget plan and expenditure)	
4	Does your college have any academic calendar?	Yes/No (If yes, academic calendar)	
5a	Do you have any written administrative policies available to faculty and students?	Yes/No	
5b	Is there any evidence that students and faculty can have their inputs into policies and procedures?	Yes/No	
6	Does your college maintain well-organized and up-to-date records of *(Document review)*	a. student admissions b. student registration c. student transcripts d. student master roll call e. student personal file	Yes/No Yes/No Yes/No Yes/No Yes/No

		f. examination roll call book g. other administrative files systems?	Yes/No Yes/No
7	Do your college has record keeping for faculty credentials in place *(in the form of tables, paper/digital documents)*	Yes/No If yes, please describe	
8	Do your college has any quality improvement strategies, particularly related to	a. student outcomes? b. course evaluations?	Yes/No Yes/No
9	Has the nursing program experienced major organizational changes over the past year)? *[Major organizational changes may include, but are not limited to, new director, new assistant/associate director, staff layoff, faculty layoff, change in university leadership (e.g., provost or president), collapsing programs, economic efficiencies, etc.]*	Yes/No If yes, please specify……	
10	Financial resources	Budgetary scale Government fund only, independent resources, donor support, etc.	
III. Program Data			
1	In what year was the program founded? [Year the nursing program started. (Note: might be different from the year the college/university was founded.)	_ _ _ _ year	
2a	What is the program's current approval status?	a. Full approval b. Conditional/ probationary approval c. non-approved d. Other →Specify	
2b	Please provide a syllabus		
3	Does your college admit students with a background education according to the government admission policy?	Yes/No [> the admission register, selection list, student transcripts, and citizenship certificate (in case of foreign student]	
4	What types of learning modalities does the program offer?	a. In person only b. Online, if yes, answer Q5 c. Hybrid	
5	What percentage of your program is online? {Sliding scale percentage}	**…… %**	

6	Does the program administer a formal student orientation process? *[A formal student orientation is a process of introducing new nursing students to program and healthcare facility policies, procedures, and technologies. This may include, but is not limited to, the following with the student: student responsibilities/expectations, professional dress/ behavior codes, etc.]*	Yes/No If yes, please specify the contents and duration of the orientation
7	Does the program offer support services to help low socioeconomic students in accessing available resources? *[e.g., peer mentoring services, tuition assistance, a work-study program, etc.)? [Students have books and resources throughout the program and the program has strategies to help students who can't afford books and resources.]*	Yes/No If yes, please specify
8	Does the program have a formal remediation process in place for students needing academic support or who commit errors/near misses in their clinical experiences? *[The remediation process is designed to promote success for students who are at risk of failure and should include the following elements: a description of the deficient areas; an outline of specific, measurable goals to demonstrate success; an individualized plan for each student; time frame for completion, agreed upon by the faculty and student.]*	Yes/No If yes, please specify
9	How many hours do students spend in direct patient care per week?	_____hours
10	Among them, how many hours are faculty-supervised?	_____hours
11	Do your clinical settings use different varieties of patients?	Yes/ No
12	Do you practice the opportunities in clinical experiences for promoting safety and quality?	Yes/No If yes, please specify
13	Does this program cover 50% or more of clinical experiences?	Yes/No

14	What is the number of hours in the clinical placement enough to cover the requirement in the curriculum per each academic year?	1st year 2nd year 3rd year 4th year (With evidence)
15	Does the program offer simulated clinical experience? [A technique that creates a situation or environment to allow persons to experience a representation of a real event for the purpose of practice, learning, evaluation, testing, or to gain an understanding of systems or human actions?]	Yes/No If yes, go to Q16
16	Are simulation faculties certified? *[The Society for Simulation in Healthcare (SSH) provides the Certified Healthcare Simulation Educator (CHSE) certification.]*	Yes/No
17	Is the simulation laboratory accredited by the Society for Simulation in Healthcare (SSH)?	Yes/No
18	How many hours do students spend in simulation? *["A technique that creates a situation or environment to allow persons to experience a representation of a real event for the purpose of practice, learning, evaluation, testing, or to gain an understanding of systems or human actions."]*	_____hours
19	What is the proportion of students spending in the skills laboratory? *(in the classroom for theory and clinical practice for: Fundamental Nursing and Med-surg Nursing) [A skills laboratory is equipped with manikins, task trainers, and hospital equipment where students can apply basic procedural skills such as administering injections.]*	
20	Evaluation system/method for students work/activities	

21	Number of working group/ committees related to the clinical nursing practice between the college and collaborative hospitals	
IV. Faculty Data [Document review]		
1	How many full-time faculties are in the program? *[Full time equivalent (FTE) faculty is expected to work at least 40 hours per week and to teach, participate in curriculum development, hold office hours for student advice, attend faculty meetings, participate in campus-wide events, attend professional development events, take part in scholarly activities, etc.]*	
2	How many part-time faculties are in the program? *[Part-time faculty work less than 40 hours per week and are responsible for assuming teaching responsibilities, usually collaborating with the full-time faculty. They maintain availability to students and communicate effectively with students and colleagues.]*	
3	How many clinical adjunct faculties are in the program? *[Clinical adjunct faculty is typically staff at the clinical facility that hosts students, and they supervise students during clinical rotations.]*	
4a	Highest academic degree of the faculties (Number)	a. Bachelor of Science in nursing ___ b. Other Bachelor degree ___ c. Master of Science in nursing ___ d. Master of Education ___ e. Other Masters degree ___ f. Doctor of nursing practice ___ g. Doctor of philosophy in nursing ___ h. Other doctoral degree ___
4b	How many of the full-time faculty has a graduate-level education? *[MSc in Nursing, MSC other than nursing]*	
5	Please specify the typical number of students to one faculty member for theory courses.	
6	Please specify the number of students to one clinical faculty member. *[All levels of faculty (full time, part time, and clinical adjunct) in all types of clinical experiences.]*	
7	Does the program offer formal orientation for new (fulltime, part time and adjunct) faculty?	Yes/ No

	[Formal orientation for new adjunct clinical faculty includes overview of the program and the particular course they're teaching, policies and procedures, teaching responsibilities, supervision of students, role modeling, planning post conferences, evaluation of students, etc.]	If yes, please specify the contents and duration of clinical orientation.
8	Do you have a faculty development system in your college?	Yes/No If yes, please answer Q9
9	If any, please describe faculty development (FD) system and its content and frequency, and content of a faculty assessment system.	
10	Are the guest/adjunct faculties who are hired experts in their specific field?	Yes/No [>Guest Teachers Hired in the Previous Year >Collect CV & appointment letter of Guest faculty >The review team verifies guest lecturers, and the payment structure, and observes a class taught by a guest lecture]
11	Does the program offer formal mentoring for new full-time faculty? *[Formal mentoring includes assignment of a seasoned (at least 1 year of teaching) faculty member who has taught at the same level for the purpose of providing ongoing support, coaching, guidance, and faculty development for new full-time faculty]*	Yes/No If yes, please specify
12	Are your nursing instructors supported in updating their clinical expertise, nursing knowledge, and competency as educators and in participating in professional development activities?	Yes/No If yes, please specify [>lesson plan, the teaching materials handed out by teachers and observe a class]
13	Are nursing instructors (registered nurses, registered midwives, or registered nurse-midwives), who demonstrate knowledge and competence in the areas that they teach have a minimum of a bachelor's in nursing, public health nursing, or midwifery, or a degree higher than the educational program?	Yes/No [>Instructors – CV or personal data sheets (PDS). > Appendix D form Qualifications of Clinical Supervisor / Instructor.]
14	Do the nursing instructors use well-recognized teaching methods to foster student learning, including, but not limited to, adult education approaches (multimedia, projector, white board, etc.), self-directed learning, e-learning, and clinical simulations?	Yes/No If yes, please specify [>Observe theory and clinical demonstration classes >Observe skill laboratory (lab) practice (simulation)]
15	Do the nursing instructors provide lessons based on the most current reliable evidence?	Yes/No [>Observe some classroom teaching, (eg. Interactive lecture, group discussion, breakout session, poster presentation, case study etc.)

		>Check lesson plan, Interview.]
16	Do other health professionals who are guest lecturers hold graduate degrees and possess clinical and educational expertise in their teaching specialty?	Yes/No [Collect CV – Appendix B Form]
17	Is the appointment of the guest lecturer followed by the government policy?	Yes/No [Collect appointment letter]
18	Does your college maintain the ratio of 1 educator to 40 students or less in classroom courses and 1 instructor to 8 students in clinical placements and in the laboratory?	Yes/No [> Appendix E form Numbers of Students per Course > Appendix F form Numbers of Students per Clinical Group.]
19	Does your college have more than 25% part-time instructors?	Yes/No [Collect list of part time teachers]
20	Does your college collaborate with qualified registered nurses, midwives, and nurse-midwives, as well as other medical providers, in clinical practices who supervise and teach students appropriately?	Yes/No [>Interview >Record of coordination meeting]
21	Are the educators providing clinical teaching and other educational support by rotation to the students on a regular basis in the clinical site?	Yes/No [>Interview >Record of clinical teaching]
22	What is the frequency of field visits by the teacher?	
23	Do you have any mentoring system?	Yes/No, If yes, please specify……
24a	Please provide the current status of subject-based teaching offered at your nursing college, whether they match the faculty member's specialty or interest. *(Short answer)*	
24 b	What is the level of subject-based teaching and content of specialty nursing education in your college? *(For faculty members: One subject experience of the lecturer they have teach and duration of training)*	
24c	What is the outline of subject-based clinical training at your college?	
V. Student Data		
1	Do students have the sufficient educational materials (like books, software, internet access, syllabus, etc.) they need to succeed provided by the college?	Yes/No [Observation]

2a	How many students are enrolled in the nursing program at the beginning of the current academic year?		
2b	Actual number of students		
2c	Number of applicants and competitive ratio		
3	In the most recent graduating cohort, how many students dropped out?	[Collect result of final exam of last batch]	
4	Does your college admit students who are medically and physically fit?	Yes/No [Collect medical certificate]	
5	Do the students admitted into your college demonstrate a willingness to serve in health care and to be independent learners?	Yes/No *(Document review)*	
6	Does your college offer students' opportunities for multidisciplinary learning (general education/physical education/cultural) and inter-professional teamwork collaboration?	Yes/No	
VI. Teaching & Learning Resources (Infrastructure)			
1	Does your college has at least 30,000 square feet (Yes/No) and includes –	a. furnished separate common room for students and teachers	Yes/No
		b. prayer room	Yes/No
		c. conference room	Yes/No
		d. an audiovisual classroom	Yes/No
		e. an individual office for you (head)	Yes/No
		f. a meeting room	Yes/No
		g. a room for nursing instructors	Yes/No
		h. an office room for the accountant and cashier	Yes/No
		i. changing rooms	Yes/No
		j. a general office room	Yes/No
		k. an attached washroom for teachers	Yes/No
2	Does your college provide a good balance of classroom (one classroom for 50 students) and practice learning experiences?	Yes/No [Observe the class room > Appendix H form Hours of Classroom Courses, Clinical Practice Experience and Labs]	

3a	Number of partner hospitals / clinical placement		
3b	Does your college ensure subject based clinical experiences by placing students in other health care facilities? *[if there are no opportunities in their own care facilities for practice in areas such as: ENT, orthopedics and psychiatry for nursing, and midwifery-led care, EmONC, PAC, CMR, and VIA for midwives?]*	Yes/No [Collect document of clinical placement or MOU with other organizations]	
4	Does your college provide hostel accommodation and support to students including	Yes/No If yes, please response Q5	
5	What are the facilities existing in the hostel?	a fully furnished hostel for students	Yes/No
		hostel security for students	Yes/No
		separate washroom for girls & boy's students in the hostel	Yes/No
		students' visiting rooms	Yes/No
		common room	Yes/No
		guard's room	Yes/No
		transportation for students to clinical sites	Yes/No
		other necessary facilities	Yes/No
6	Does your college ensure students and instructors have safe drinking water?	Yes/No [Observation - observes the type of drinking water supply. e.g. tube well/ boiling water/supply water/ purifier]	
7	Does your college have at least 1 bathroom for 20 students?	Yes/No [Observation & verifies the number of bathroom]	
8	Does your college have appropriately equipped lab space for	fundamental nursing	Yes/No
		nutrition	Yes/No
		microbiology	Yes/No
		anatomy	Yes/No
		physiology	Yes/No
		midwifery skills lab	Yes/No
		computer lab	Yes/No

9	Do the students at your college have liberal access to skills laboratory (lab), computer lab, and the internet to support their learning?	Yes/No [Visit skill lab]
10	Does your college have a furnished library for students with up-to-date books (with 1:5 ratio textbooks), journals, and magazines?	Yes/No [Visit library]
Others		
1	Does your college have any facilities for outdoor / indoor sports?	Yes/No [Visit & ensure]
2	Any types of workshops, training, or seminars held in the past 12 months in your college?	Yes/No If yes, please specify (Collect document – notice /picture)
3	What types of training (ex. teaching method - adult education approaches, self-directed learning, e-learning, and clinical simulations) wish to have?	(Short answer)
4	Any request for guest teacher from Japan (eg. Academic subject, technical requirement)	(Short answer)
5	Any request to clinical placement (eg. coaching method to be use while teaching student)	(Short answer)
6	Do you have any establishment of a research committee at university/ ethical review committees in nursing college?	Yes/No If yes, answer Q7
7	please provide information on:	
	a. curriculum framework for nursing research	
	b. current activities of research committees at each university	
	c. status of research activities (status of research seminars transition of number of papers submitted per year)	
	d. needs for support of research activities	
8	Please provide details of the research activities or trainings conducted at NIANER and possible	

	support/ Collaboratory research activities or the invitation of trainers for our project.	
9	Please provide current status of subject-based teaching offered at each nursing college, whether they match the faculty member's specialty or interest.	

5.2 Questionnaire Part B

B. Nursing college student-based questionnaire

(All students of the 2nd and 4th year)

ID:

Date of Data collection:

Gender:

Academic Year:

Marital status:

Please answer your opinion honestly and frankly. This questionnaire sheet will be shredded after the survey and also individuals will not be identified.

Course experience questionnaire (CEQ):					
a	**The Student Support Scale (SSS)**	**Strongly agree**	**agree**	**strongly disagree**	**disagree**
1	The library services were readily accessible.				
2	I was able to access information technology resources when I needed them				
3	I was satisfied with the course and careers advice student learning outcomes				
4	Health, welfare, and counseling services met my requirements				
5	Relevant learning resources were accessible when I needed them				
b	**The Learning Resources Scale (LRS)**				
1	The library resources are appropriate for my needs				
2	Where it was used, the information technology on the appropriateness and in teaching and learning was effective				
3	It was made clear what resources were available to help me learn				
4	The study materials were clear and concise				
5	Course materials were relevant and up to date				

c	**The Course Organization Scale (COS)**				
1	The course was well organized				
2	I was given helpful advice when planning my academic program				
3	The course content was organized in a systematic way				
4	There was sufficient flexibility in my course to suit my needs				
5	I had enough choices of the topics I wanted to study				
d	**The Learning Community Scale (LCS)**				
1	I felt part of a group of students and staff committed to learning				
2	I was able to explore academic interests with staff and students				
3	I learned to explore ideas confidently with other people				
4	Students' ideas and suggestions were used during the course				
5	I felt I belonged to the college community				
e	**The Graduate Qualities Scale (GQS)**				
1	College stimulated my enthusiasm for further learning				
2	The course provided me with a broad overview of my field of knowledge				
3	My college experience encouraged me to value perspectives other than my own				
4	I learned to apply principles from this course to new situations				
5	The course developed my confidence to investigate new ideas				
6	I consider what I learned valuable for my future				
f	**The Intellectual Motivation Scale (IMS)**				
1	I found my studies intellectually stimulating				
2	I found the course motivating				
3	The course has stimulated my interest in the field of study				
4	Overall, my college experience was worthwhile				

5.3 Questionnaire Part C

C. Partner hospitals nursing staff-based questionnaire:

(Target Interviewee: Nursing Staff)

Date of data collection:

Name of the partner hospital:

ID:

1. Gender:
2. Position: Beside nurse/ leader nurse
3. Specialist nurse: Yes (Specialty: ……...)/No
4. First academic degree:
    a. Secondary School certificate
    b. Higher Secondary Certificate
    c. associate degree (Nursing Diploma)
    d. Post basic
    e. Bachelor's degree (BSc Nursing)
    f. Master's degree
5. Contract type: temporary employee/permanent staff
6. Year of nursing experiences:
7. Current Marital status: Single / Married

Please answer your opinion honestly and frankly. This questionnaire sheet will be shredded after the survey and also individuals will not be identified.

Practice Environment Scale of the Nursing Work Index:	
I. Training opportunity for nurses	
1. Systematic training is provided to newly recruited nurses.	Yes / No (if response is No then skip 1a)
1a. Are you satisfied with the training?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied *(if response is neutral/ satisfied/ very satisfied then skip 1b)*
1b. What is the reason that you are (very) dissatisfied?	Reason:
2. Corresponding continuing education is provided to nurses relevant to their job requirements	Yes / No *(if response is No then skip 2a)*
2a. Are you satisfied with the corresponding continuing education?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied *(if response is neutral/ satisfied/ very satisfied then skip 2b)*
2b. What is the reason that you are (very) dissatisfied?	Reason:
II. Career development	

3. There is an established post-exposure occupational management system that can be carried out effectively?	Yes / No (if response is No then skip 3a)
3a. Are you satisfied with the established post-exposure occupational management system?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied *(if response is neutral/ satisfied/ very satisfied then skip 3b)*
3b. What is the reason that you are (very) dissatisfied?	Reason:
4. There is a clear career path or professional promotion system for nurses in the hospital.	Yes / No (if response is No then skip 4a & 4b)
4a. If yes, are you satisfied with the existing career path or professional promotion system for nurses in the hospital?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
4b. If no, what are the possible reasons?	
5. Nurses have the opportunity to attend academic activities domestically and abroad.	Yes / No (if response is No then skip 5a & 5b)
5a. If yes, are you satisfied with the existing opportunity to attend academic activities domestically and abroad?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
5b. If not satisfied, what are the reasons?	
III. Nursing team	
6. There is a well-functioning nursing working system	Yes / No (if response is No then skip 6a& 6b)
6a. Are you satisfied with the existing nursing working system?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
6b. If you are not satisfied with the existing nursing working system what are the possible reasons?	
7. The nursing team often discusses patient care and seeks improvement	Yes / No (if response is No then skip 7a & 7b)
7a. Are you satisfied with the nursing team discussion on patient care and seeking improvement?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
7b. If you are not satisfied with the nursing team discussion on patient care and seek improvement what are the possible reasons?	
8. Nurses in the work team are competent in their jobs very	Yes / No (if response is No then skip 8a)
8a. Are you satisfied to work in a team at your job?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied (if response is neutral/ satisfied/ very satisfied then skip 8b)
8b. What is the reason that you are (very) dissatisfied?	Multiple responses allowed: Bad teamwork / Too few nurses / Too many inpatients / other ( )

IV. System to assure quality nursing care	
9. There are clear guidelines on the roles and responsibilities of nurses?	Yes / No (if response is No then skip 9a& 9b)
9a. Are you satisfied with the existing guidelines on roles and responsibilities of nurses?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
9b. If you are not satisfied what are the possible reasons?	
10. There is a work process with clear guidance that is easy to implement	Yes / No (if response is No then skip 10a)
10a. Are you satisfied with the existing work process?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
11. There is a well-functioning nursing working system	Yes / No (if response is No then skip 11a& 11b)
11a. Are you satisfied with the existing nursing working system?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
11b. If you are not satisfied with the existing nursing working system what are the possible reasons?	
12. Nurses with good job performance are encouraged and recognized in a timely manner.	Yes / No (if response is No then skip 12a)
12a. If yes, are you satisfied with the process of encouragement and recognition process of the nurses for good performance?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
V. Nursing care and its quality	
13. Nurses are able to assess patients and deliver individual nursing care based on the assessment results	Yes / No (if response is No then skip 13a& 13b)
13a. Are you satisfied with the existing assessment process to assess patients and deliver individual nursing care based on the assessment results?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
13b. If you are not satisfied with the existing assessment process to assess patients and deliver individual nursing care based on the assessment results what are the possible reasons?	
14. The clinical work in the hospital reflects and demonstrates the characteristics of professional nursing care	Yes / No (if response is No then skip 14a)
14a. If yes, are you satisfied with the existing clinical work in the hospital?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
15. A feeling of trust and respect from patients can be sensed by nurses at work	Yes / No (if response is No then skip a)15a

15a. If yes, are you satisfied with the trust and respect from patients?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
16. Hospital is well equipped to improve the efficiency of nursing work.	Yes / No (if response is No then skip 16a & 16b)
16a. If yes, are you satisfied with the existing hospital facilities?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
16b. If not satisfied, what are the possible reasons?	
17. Your overall assessment of the nurse practitioner's practice environment in your hospital.	Poor / Average / Good / Excellent (If Average / Good / Excellent→ go to 17a If Poor go to 17b)
17a. If your answer is average and above, are you satisfied with the existing practice environment?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
17b. If poor and average, what are the possible reasons?	
VI. Relationship with co-worker	
18. There is a harmonious relationship between doctors and nurses in the department	Yes / No (if response is No then skip 18a)
18a. if yes, are satisfied with the existing harmonious relationship between doctors and nurses in the department	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
19. Medical staff including doctors and nurses can perform their own job adequately and work together to coordinate their jobs	Yes / No (if response is No then skip 19a)
19a. Are you satisfied with the team worker coordinated work including doctors?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
VII. Treatment for Nurses in the hospital	
20. Usually there are no frequent job changes among nursing backbones	Yes / No (if response is No then skip 20a& 20b)
20a. Are you satisfied with the existing no frequent job changes among the nursing backbones process?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
20b. If yes, why are you satisfied with the no frequent job changes among nursing backbones?	
21. The hospital management department expects each nursing unit to deliver high-quality patient care	Yes / No (if response is No then skip 21a& 21b)
21a. Are you satisfied with the expectation of the hospital management department that each nursing unit delivers high-quality patient care?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
21b. If no, what are the possible reasons?	
22. The nursing administrator often	Yes / No (if response is No then skip 22a& 22b)

discusses daily nursing work with bedside nurses and listens to their opinions	
22a. Are you satisfied with the administrator discussion on daily nursing work with bedside nurses and listening to their opinions?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
22b. If you are not satisfied with the discussion, what are the possible reasons?	
23. The nursing shift scheduling adequately matches nurses with varied competency levels	Yes / No (if response is No then skip 23a& 23b)
23a. If yes, are you satisfied with this nursing shift scheduling?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
23b. If not satisfied, what are the possible reasons?	
24. The nursing administrator agrees with sensible decisions made by bedside nurses	Yes / No (if response is No then skip 24a)
24a. If yes, are you satisfied with the process?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
25. The nursing shift scheduling is conducive to continuing nursing care of patients.	Yes / No (if response is No then skip 25a& 25b)
25a. If yes, are you satisfied with the existing nursing shift scheduling?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
25b. If not satisfied, what are the possible reasons?	
26. Occupational prevention and protection is available at work for nurses	Yes / No (if response is No then skip 26a & 26b)
26a. If yes, are you satisfied with the existing occupational prevention and protection is available at work for nurses	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
26b. If not satisfied, what are the possible reasons?	
27. When nurses make mistakes in their job, the nursing administrator provides them with conductive advice instead of blindly criticizing them.	Yes / No (if response is No then skip 27a & 27b)
27a. If yes, are you satisfied with the conductive advice of the nursing administrator instead of blindly criticizing the nurses?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
27b. If not satisfied, what are the possible reasons?	

28. The hospital administrative department is supportive of clinical nursing work.	Yes / No (if response is No then skip 28a & 28b)
28a. If yes, are you satisfied with the supportive hospital administrative department of clinical nursing work?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
29. The number of nurses in each nursing unit meets the needs of the nursing workload.	Yes / No (if response is No then skip 29a)
29a. If yes, are you satisfied with the number of nurses in each nursing unit meeting the needs of nursing workload?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
30. The current working hours and labor intensity are well matched.	Yes / No (if response is No then skip 30a& 30b)
30a. If yes, are you satisfied with the existing working hours and labor intensity?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
30b. If no, what are the possible reasons?	
31. Nurses can enjoy statutory welfare benefits such as staggered holidays, overtime allowance, insurance, etc.	Yes / No (if response is No then skip 31a)
31a. If yes, are you satisfied to enjoy statutory welfare benefits such as staggered holidays, overtime allowance, insurance, etc.?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
32. The work of nurses is appreciated and recognized by the public.	Yes / No (if response is No then skip 32a)
32a. If yes, are you satisfied with the appreciation and recognition by the public?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
33. Nurses can participate in hospital internal management.	Yes / No (if response is No then skip 33a& 33b)
33a. If yes, are you satisfied with the participation in hospital internal management?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
33b. If no, what are the possible reasons?	
34. Nurses have the opportunity to become members of the hospital management committee.	Yes / No (if response is No then skip 34a& 34b)
34a. If yes, are you satisfied with the opportunity?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
34b. If not satisfied, what are the possible reasons?	
35. The salary of nurses is just as good as that in other professions	Yes / No (if response is No then skip 35a & 35b)
35a. If yes, are you satisfied with the existing salary structure of the nurses?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied

35b. If not satisfied, what are the possible reasons?	
36. The hospital salary system is reasonable.	Yes / No (if response is No then skip 36a & 36b)
36a. If yes, are you satisfied with the hospital salary system?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
36b. If not satisfied, what are the possible reasons?	
37. Nurses can participate in decision-making processes of hospital affairs.	Yes / No (if response is No then skip 37a & 37b)
37a. If yes, are you satisfied with the participation in decision-making processes of hospital affairs?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied
37b. If not satisfied, what are the possible reasons?	

5.4 Questionnaire Part D

D. Partner hospitals nursing staff questionnaire for nurses who look after the students

(Current situation of clinical practices for student nurses**)**

(Target Interviewee: Clinical Supervisor / Instructor)

Date of Data collection:

Name of the partner hospital:

1. Gender:
2. Specialist nurse: Yes (Specialty :…… ……) /No
3. Name of the nursing college / institution you graduated:
4. First academic degree:
    a. Secondary School certificate
    b. Higher Secondary Certificate
    c. associate degree (Nursing Diploma)
    d. Post basic
    e. Bachelor's degree (BSc Nursing)
    f. Master's degree
5. Contact type: temporary employee/permanent staff
6. Have you supervised nursing student? If yes, please answer the following questions

Please answer your opinion honestly and frankly. This questionnaire sheet will be shredded after the survey and also individuals will not be identified.

1. Which department / ward do you work in?	
2. How many year(s) of nursing experience(s) did you have when you started supervising nursing students?	……..year(s)
3. How many student nurses do you supervise usually? (per day / shift)	……..day / …….. shift
4. Have you received any in-service training before becoming a clinical supervisor for the student?	Yes / No
5. (If Yes for No.4) When and Where was the training held?	……year Place……
6. (If Yes for No.4) Please tell us the subjects or topics of the training you have received	…… …… ……
7. Have you received any training specific to become a supervisor for the student? (Training include supervision and monitoring, coaching, guidance of student portfolio, etc)	Yes / No
8. (If Yes for No.7) When and where was the training held?	……year Place……
9. (If Yes for No.7) Please tell us the subjects of the training you have	

received	
10. Are there any regular workshops / meetings with lecturers / teachers from the university where the student comes from?	Yes / No
11. (If Yes for No.10) How often do you have this workshop / meeting with lecture / teachers from the college?	…… ……
12. Are lecturers / teachers from the colleges reachable during the student's practice placement?	
13. What are the most difficult aspects of teaching in-clinical practice (management, teaching method, etc).	
14. If there is a training to support the nurses to supervise nursing students, what subject will be most required / helpful?	

5.5 Questionnaire Part E

E. Question to the Partner Hospital

Name of the Hospital:

Name of the Interviewee:

Date of interview:

1a. Number of beds, departments & number of wards	……..……..beds ……..…..……..dept.(s) …….……..wards
1b. Number of patients in inpatient ward (average)	
1c. Number of patients in outpatients (annual, month day)	…… /year ……./month ……/day
1d. Number of surgery (annual, month, week, day)	……../year ……./month ……/week ……../day
2a. Average admission rate (bed occupancy rate) 2b. number of hospitalization day (on average)	…… …….
3. Number of nursing staffs in each position	Nursing Superintendent……. Deputy Nursing Superintendent…….. Nurse Supervisor……. Clinical supervisors……. Senior Staff Nurse…… Staff Nurse……
4. Number of in-service nurses	Total sanctioned: ….. Filled up posts: ……..
5. Ratio of Nurses between senior & newly qualified	-- : --
6. Background qualification of nurses (number of….)	Master…….. Bachelor…….. Diploma nurses…….
7. Do you have Organogram for nursing staffs (grade system?)	
7a. Number of students you can accept and actually accepting	Capacity to Accept (in number……. Actually accepting (in number) ……

7b. Frequency of clinical practice of nursing students (schedule, calendar)	
7c. Do you have evening clinical practice for nursing student? (Are nursing students doing night shift?)	Yes……. No……
8a. List down the Department or ward where clinical placement for nursing students are accepted (especially some specific field as ENT, operation theater, EM, psychiatry ward)	
8b. Also mention the department where they cannot be accepted due to non-availability of such department	
9a. Do you have any existing manual to mentor nursing students? if yes, then go to the following questions Have anyone had training regarding the student manual to mentor nursing student? Do you organize regular meeting on how to use this manual?	Yes/No Yes/No Yes/No (document if any)
9b. Criteria for nursing supervision of nursing students	Qualification: …… Training: …… Year of experience: …… Specialty: ……
9c. Number of clinical supervisors at each ward and hospital	……. /ward ……./hospital (document if any)
9d. Number of clinical supervisors per nursing student	……../ day ……. /ward ……../hospital
9e. The number of training courses for clinical supervisors to mentor nursing student, focal person of the training, number of times training materials, revision of training materials, and feedback to the nurses at each target hospital.	Number of training courses …… Focal person of the training …… Frequency of revision of (Number of times) training materials …… Feedback to the student nurses ……. Yes/No
9f. Has the hospital ever used someone to mentor nursing student training by an outside organization? (Government, NGO, or other donors) if yes, how frequently?	Yes/No Frequency …….. Contents of training materials :……. (document – organization collaboration MOU or coordination meeting record)
9g. What are the challenges (? nursing skills) and good practice in clinical nursing settings?	
9h. What are the most difficult aspects of teaching in the clinical practice (e.g., management, teaching methods etc.)	

10a. Any existing trainer (TOT) to become Master trainer (in house/Government/donor agency/NGO)	Yes/No If yes, obtain the document if any
10b. Number of Master Trainer	
11a. Number of in-service nurses who have received training out of all in-service nurses	
11b. Number of in-service nurses who have received training out of all in-service nurses who look after the nursing students	
11c. Number of CTN (Clinical supervisor/ Instructor) at each ward (average)	
11d. Number of CNT training held each year and its contents	
11e. Number of CNT (Clinical supervisor/ Instructor) per student	……./hospital ……./ward ……./day
12. Number of working group/committee related to the clinical nursing practice between the college and collaborative hospitals	
13. Availability of a clinical ladder (career development ladder) for nurses	
14. Number of nurses per each Grade scale	Grade 9 …… Grade 10 ……
15a. Focal person for clinical practice for nursing students at	the hospital …….. each ward …….
15b. Focal person at Nursing college	
16a. Supervision plan for nursing students at the ward level (details)	If has, obtain the document
16b. Portfolio/assignment responsibility for nursing supervisors (details)	
17a. In-service training plan for non CNT (Clinical supervisor/instructor) in related subjects	If has, obtain the document
17b. Number of in-service training held each year	
17c. Number of nurses who have received in-service (some kind of post-graduate) training in the past 12 months and its content	
17d. Do you have any training program for newly qualified nurses (by government, local lead hospital)	Yes/No If yes, obtain the document
18. Do you organize any seminars or have any forum for strengthening the capacity of existing post-graduate nurses?	Yes/No If yes, obtain the document

19a. Number of nurses conducted nursing research 19b. Number of their published papers	If has, obtain the document
20. Do you have established Clinical Nurse position or any plan to establish the Clinical Nurse position (Grade 8)	Yes/No
21a. Did you requested / identified the areas of training for nurses in specialized areas like ICU, pediatric nursing, safety management, infection control & prevention, disaster management, trauma and emergency management, discharge planning for nurses, patient education, documentation and recording, behavioral communication change etc.	Yes/No If yes, obtain the document
21b. Did you proposed /identified any area of technical skill development for nurses like Basic clean operation, drug calculation, PPE (personal protective equipment), ALS (advanced life support)	Yes/No If yes, obtain the document

5.6 KII Guideline

DGNM:

1. Do you have any plan to create post for clinical nurse position or Clinical Supervisor / Instructor per hospital?
2. Do you have any plan for the continuous professional development (CPD) for nursing instructors and other faculties? If yes, please describe
3. Do you receive any support from any donor agency regarding upgradation of nursing education? If yes, please specify
4. How frequently DGNM arrange training for the capacity building of in-services nurses? (Contents of existing capacity building training)
5. What are the needs and challenges for capacity building of nurses?
6. Are you satisfied with CBNS Phase 1 training?
7. What are the challenges of trainings provided in CBNS Phase 1?
8. Does DGNM arrange regular seminars and forums for strengthening the capacity of existing post-graduate nurses?
9. What is the background of the post of administrative nurse managers/administrators and their administrative management capacity?
10. Is there any fixed job description of nurses that were under revision within the DGNM at the end of CBNS Phase 1, Is it available to the organizations/institutes?
11. Are there any contents for core competencies of nurses in Bangladesh?
12. Please tell us about the nursing registration system.
13. Usage status of Nursing College Management System (NCMS) (to confirm whether it is used or not, and to check the content of assessment items) and challenges.
14. What is your plan for post graduate career paths for nurses?

BNMC

1. Do you have any accreditation policy for nursing education and clinical practices?
   If yes, (collect the policy document) are there any official documents/guidelines on accreditation?
2. Do you have any authorized body for the accreditation? If yes, name of the accreditation body. (ask about 'Accreditation for Nursing and Midwifery Educational Institutions 2019')
3. What is your plan for the accreditation of all Nursing Colleges?
4. Information regarding accreditation implementation structure and capacity -
   - Staff members
   - Number of people
   - Frequency of accreditation
   - Budget

5. Assessment system and competence of external review team members (with following documents review)
   - Biographies of external review team members
   - assessment items
   - frequency
   - number of members, and
   - quality of assessment
6. What are the challenges for accreditation program ?
   Overview of external review team members
7. Progress of Nursing College Management Information System
   Usage status of Nursing College Management System (NCMS) (to confirm whether it is used or not, and to check the content of assessment items) and challenges.

External Review Team Members

1. Challenges for accreditation program
   Overview of external review team members (including capacity of external review team members to assess, and factors that promote or hinder to meet the requirement of accreditation, and priority items)

GAC/ProNurse/UNFPA

1. Challenges for accreditation program
   challenges perceived by GAC/ProNurse (including implementation capacity of BNMC, capacity of external review team members to assess, and factors that promote or hinder to meet the requirement of accreditation, and priority items)
2. Contents of support/cooperation by GAC/ProNurse and UNFPA
   Contents of intervention, possibility of collaboration, division of work, vision of the direction of accreditation by GAC/ProNurse and UNFPA
3. Administrative management capacity of administrative nurse managers/ administrators
   Background of the post of administrative nurse managers/administrators (Biography, tenure in current post, etc.), contents of existing capacity building training, frequency, satisfaction and challenges of trainings provided in CBNS Phase 1 training, and needs and challenges for capacity building

NIANER (National Institute of Advanced Nursing Education & Research)

1. Details of the research activities or trainings (e.g. IRB trainings) conducted at NIANER
2. Possible support/collaborative research activities or the invitation of trainers for our project.
3. Number of MT training with different organizations

DNC – Principal

1. Current education system status, changes after implementation of Phase 1, good practices, and challenges
2. Resources available for cooperation with CBNS-II (personnel, equipment, etc.)
3. Status and challenges of mentoring systems in place
4. Faculty development - existence of a faculty development (FD) system, if any, its content and frequency, existence and content of a faculty assessment system

DMCH – Director

1. Changes in clinical practice after implementation of Phase 1 (clinical practice system, quality of supervisors), challenges, good practices
2. Resources available for cooperation with CBNS-II (personnel, equipment, etc.)
3. Usage and utilization of clinical practice manual and Clinical Nurse Training Module, and its feedback

5.7 List of KII Participants

Sl. No.	Name	Affiliation
1.	Md. Rashidul Mannaf Kabir	Director (Education & Discipline), DGNM
2.	Rashida Akter	Registrar (In-charge), BNMC
3.	Taslima Begum	Director, NIANER
4.	Dr. Sanzida khatun, PhD	Head of the Department of RCH, NIANER
5.	Farida Begum	Consultant, Midwifery, UNFPA
6.	Brig. Gen. Md. Nazmul Haque	Director, DMCH
7.	Shirina Akhter	Principal, DNC
8.	Salma Afroz Lily	GAC/ProNurse

5.8 Action Plan for CBNS-II Baseline Survey

Sl No	Activities	Jun-22				Jul-22				Aug-22				Sep-22				22-Oct			
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
1	Project Progression report by email																				
2	Preparatory work and negotiation																				
3	Revised budget																				
4	Contact Agreement																				
5	Literature and document review																				
6	Finalize the protocol																				
7	Consultative meeting with the JICA team members for finalization of the questionnaire																				
8	Recruitment of Research Assistant & Field Supervisors																				

Sl No	Activities	Jun-22				Jul-22				Aug-22				Sep-22				22-Oct			
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
9	Inception report																				
10	Arrange all project related tools and equipment																				
11	Collect authorization letter from the JICA and support letter from DGME, DGNM, BNMC																				
12	Drafting of the questionnaire with the help of JICA project personnel																				
13	Application for ethical approval																				
14	Pre-testing & finalization of the questionnaire																				

Sl No	Activities	Jun-22				Jul-22				Aug-22				Sep-22				22-Oct			
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
15	Preparatory visit to the data collection sites & collect the preliminary information																				
16	Collect all the documents from IC-NET																				
17	4-day long training for the data collectors and the data collection supervisor.																				
18	Data collection & checking (quantitative part of the study)																				
19	Data collection (qualitative part of the study)																				
20	Data management																				
21	Data analysis and interpretation																				

Sl No	Activities	Jun-22				Jul-22				Aug-22				Sep-22				22-Oct			
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
22	Drafting the report																				
23	Send draft report to IC-NET and receive feedback																				
24	Finalize the report and send it to IC-NET and Project Office																				
25	Closing the project																				

5.9 Photos of data collection

College of Nursing, Sher-E-Bangla Nagar, Dhaka




Fig: During interview of Principal of CoNSBN




Fig: During student's data collection 2nd year (left) and 4th year (right) of CoNSBN



Fig: During senior staff nurse data collection of ShSMCH

Mymensingh Nursing College and Hospital



Fig: During interview of Principal of MNC



Fig: During student's data collection in MNC



Fig: During senior staff nurse (left) and nursing supervisor (right) data collection of MMCH

Chattogram Nursing College and Hospital



Fig: Picture with Director of CMCH (4th right) and Principal of CNC (2nd right)



Fig: Picture with Nursing Superintendent of CMCH (1st left)



Fig: During data collection of SSN in CMCH

Rajshahi Nursing College



Rajshahi Nursing College



Fig: During interview of principal of RNC



Fig: During student's data collection of RNC





Fig: During nursing supervisor (left) and senior staff nurse data collection of RMCH

Rangpur Nursing College and Hospital



Fig: Picture with the Principal of RpNC





Fig: RpNC





Fig: Director of Hospital (left) and Nursing Superintendent (right) of RpMCH

Barisal Nursing College and Hospital



Fig: During data collection of SSN (left) and Nursing Supervisor (right) of SBMCH



Fig: During student's data collection of BNC

Sylhet Nursing College




Fig: During interview of Principal of SNC




Fig: During data collection of SSN (left) and Nursing Supervisor (right) of SBMCH




Fig: During student's data collection



Fig: During interview of Nursing Superintendent of SOMCH



Fig: During data collection of SSN (left) and Nursing Supervisor (right)

Shaheed Tajuddin Ahmad Nursing College



Fig: Picture with Director of ShTAMCH



Fig: Picture with Principal of ShTANC



Fig: Picture with Nursing Superintendent of ShTAMCH during interview



Fig: Picture during SSN data collection of ShTAMCH





Fig: During student's data collection of ShTANC

Manikganj Nursing College & District General Hospital



Fig: Manikganj Nursing College



Fig: During interview of Principal of Manikganj Nursing College


Fig: During data collection of SSN in DGHM


Fig: Observation of a practical session of nursing students in DGHM

Bandarban Nursing College



Fig: BaNC



Fig: Picture with Principal of BaNC



Fig: During student's data collection of BaNC



Fig: Picture with Deputy Civil Surgeon of Bandarban Sadar Hospital



Fig: During data collection of SSN and Civil Surgeon of Bandarban Sadar Hospital

添付資料　（人間 JR26061 看護人材育成 04）

添付資料８：　エンドライン調査報告書

添付資料９：　日本の看護行政経験共有ワークショップ　アジェンダ、資料

添付資料８：エンドライン調査報告書

The Endline Survey Report of the Project for Capacity Building of Nursing Services Phase 2 (CBNS-II), JICA

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List of Acronyms

GoB	The government of Bangladesh
JICA	Japan International Cooperation Agency
CBNS-II	The Project for Capacity Building of Nursing Services Phase 2
DGNM	Directorate General of Nursing and Midwifery
BNMC	Bangladesh Nursing and Midwifery Council
MEFWD	Medical Education and Family Welfare Division
MOHFW	Ministry of Health & Family Welfare
CNTs	Clinical Nurse Teachers
CPD	Continuous Professional Development
MTs	Master Trainers
FD	Faculty Development
PDM	Project Design Matrix
CONSBN	College of Nursing, Sher-E-Bangla Nagar
MNC	Mymensingh Nursing College
CNC	Chattogram Nursing College
ShTANC	Shaheed Tajuddin Nursing College
BNC	Barisal Nursing College
RNC	Rajshahi Nursing College
SNC	Sylhet Nursing College
RpNC	Rangpur Nursing College
BaNC	Bandarban Nursing College
MaNC	Manikganj Nursing College
DGHM	District General Hospital, Manikganj
MMCH	Mymensingh Medical College Hospital
RMCH	Rajshahi Medical College Hospital
CMCH	Chattogram Medical College Hospital
SHB	Sadar Hospital Banbarban
RpMCH	Rangpur Medical College Hospital
SBMCH	Sher-e-Bangla Medical College Hospital
ShSMCH	Shaheed Suhrawardy Medical College Hospital
ShTAMCH	Shaheed Tajuddin Ahmad Medical College Hospital
SOMCH	Sylhet MAG Osmani Medical College Hospital

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Executive Summary

Despite notable improvements in Bangladesh's nursing education, the sector still faces challenges, including a shortage of qualified nursing professionals and inadequate training systems. The Project for Capacity Building of Nursing Services Project Phase 2 (CBNS-II) aimed to address these issues by strengthening nursing education and clinical practices at public nursing colleges and their affiliated hospitals. To assess the success of these interventions, an endline survey was conducted, comparing results with the baseline data and providing insights for future improvements in the nursing education system.

The project significantly improved institutional capacity and educational quality across the target colleges and hospitals. Key achievements included substantial gains in accreditation standards, with Management & Leadership and Faculty & Learning standards showing remarkable improvements. Specifically, Standard I (Management & Leadership) increased from 71.3% to 93.2%, and Standard III (Faculty & Learning) improved from 56.3% to 82.1%. Accreditation in other standards, such as Student Admission and Curriculum Delivery, achieved near-perfect scores of 100% and 95.6%, respectively. These improvements reflect a strong foundation for ongoing reforms in nursing education.

Student satisfaction also showed positive trends, with the Course Experience Questionnaire (CEQ) satisfaction scores rising from 72.5% to 76.0%. This improvement was particularly evident in the Student Support and Learning Resources categories, which saw increases from 53.6% to 61.9% and from 61.4% to 69.0%, respectively. These results highlight the positive impact of targeted interventions, particularly in colleges such as College of Nursing, Sher-E-Bangla Nagar (CONSBN), Mymensingh Nursing College (MNC), and Rangpur Nursing College (RpNC).

Governance and clinical teaching systems were also strengthened under the project. Master Trainers (MTs) and Clinical Nurse Teachers (CNTs) were trained to improve clinical supervision, with several hospitals—particularly Shaheed Suhrawardy Medical College Hospital (ShSMCH) and Mymensingh Medical College Hospital (MMCH) — demonstrating effective mentoring and supervision, which contributed to better clinical practice and student support. However, challenges, including human resources shortages, weak college-hospital coordination, and limited resources, hindered the overall impact.

The project's purpose, to strengthen the implementation, monitoring, and evaluation system for nursing education, has been largely achieved. However, routine monitoring by Directorate General of Nursing and Midwifery (DGNM) still requires further institutionalization. Although regular monitoring was conducted alongside project activities, a more robust, systematic monitoring system is needed to ensure consistent progress and accountability across all colleges and hospitals.

Despite these successes, some gaps remain, particularly in Standard V (Resources), where infrastructure challenges, including insufficient lab facilities, faculty housing, and student accommodation, constrained improvements. These constraints, which fall outside the project's direct scope, prevented some colleges from meeting all accreditation standards. Faculty workload issues and a lack of consistent clinical placements for students compounded the resource constraints faced by several colleges.

In conclusion, the CBNS-II has laid a strong foundation for quality nursing education in Bangladesh, with significant improvements in accreditation, student satisfaction, and governance systems. However, to sustain and build on these gains, ongoing government-led efforts are essential. These should include continued investments in infrastructure, capacity building for faculty and clinical nurses, including MTs and CNTs, and the institutionalization of quality assurance mechanisms across the national system. Moving forward, a more comprehensive approach to resource mobilization and inter-institutional networking will be key to achieving full accreditation for all nursing colleges and ensuring long-term sustainability in nursing education in Bangladesh.

Chapter One: Introduction and Objectives

1. 1 Introduction

Globally, approximately 29 million nurses and 2.2 million midwives are now providing healthcare worldwide (Boniol et al., 2022). By 2030, there might be a shortage of roughly 4.5 million nurses and 310 thousand midwives due to an ageing population, expanding healthcare needs, and the spread of various non-communicable diseases (Boniol et al., 2022). It is important to have qualified nurses and midwives to meet global nursing needs. Bangladesh indeed has a severe shortage of healthcare human resources, especially in nursing. Realizing this, the Government of Bangladesh (GoB) explicitly emphasized increasing the number of nurses while improving the quality of nursing services through better nursing education systems. Recently, the Chief Advisor of the Interim Government, Professor Dr. Yunus, emphasized in his speech that Bangladesh has the potential to produce globally qualified nurses, yet, despite interest from countries like the UK and Japan, systemic obstacles prevent us from meeting this rising global demand.

With regard to the development of medical human resources, the number of nurses in particular is extremely low, and issues are seen in the quality of medical higher education, including nursing programs. For this reason, Japan International Cooperation Agency (JICA) continue to provide support to help improving the quality of health care services to ensure the quality of nursing human resources through technical assistance for improving the educational quality for bachelor's degree in nursing (capacity building of nursing administration, strengthening of bachelor's education system in the target nursing colleges and in-services training on clinical nursing practice at collaborative hospitals, etc.). This had been supported by the Capacity Building of Nursing Services Projects (CBNS-I Project, 2016-2021, and CBNS-II, 2022-2026), under JICA. The focus of both phases is strengthening nursing administration, education, clinical practices, and nursing in general.

1.2 Background of the Project

During 2016-2021, the first phase of this project was implemented in Dhaka Nursing College (DNC) and Dhaka Medical College Hospital (DMCH) in collaboration with the Directorate General of Nursing and Midwifery (DGNM) and the Ministry of Health & Family Welfare (MOHFW). The project encompassed a range of key activities designed to enhance the quality of teaching and supervision for nursing students, particularly during their clinical practice placements. These activities included strengthening nursing administration capacity, supporting accreditation programs, improving the capacity of nurse teachers and clinical supervisors, and enhancing the quality of nurses' clinical practices at DMCH. The development of Clinical Nurse Teachers (CNTs) for all nursing students, including BSc in nursing students, coming for clinical practices, was one significant component within this broader objective of elevating nursing education standards.

Following the achievement of CBNS-I, the relevant stakeholders launched CBNS-II in March 2022 to broaden the scope of activities. Phase 2 (CBNS-II) was formulated to continue supporting the strengthening of nursing administration's management capacity and to disseminate the results of Phase 1 on the implementation system for nursing education and clinical practices to other

nursing colleges. The Phase 2 extension has expanded the scope to eight nursing colleges located in seven divisions (two in the Dhaka division) of Bangladesh, along with their eight affiliated medical college hospitals. Khulna division was not included due to the lack of a suitable target nursing college during the project planning phase. This is also in line with the provision of technical support to senior staff nurses to promote continuous education and professional development, particularly for faculty roles and Clinical Nurse Teachers (CNTs) career pathways within a long-term capacity building framework.

At the start of CBNS-II from June to October 2022, a baseline survey was conducted. This survey collected essential information for project implementation and established the baseline data for future comparison at the project's endline. Based on these findings, the project has implemented activities that strengthen nursing administration by formulating career paths for nurses and supporting the accreditation process for nursing colleges. The project also developed continuing professional development (CPD) programs in both education and clinical practices, trained 64 Master Trainers (MTs), and supported faculty development (FD) training for lecturers in nursing colleges, along with Clinical Nurse Teachers (CNTs) training and in-service training for nurses working in the respective hospitals.

1.3 Purposes/ Objectives of the endline survey

This endline survey, built on the baseline in 2022 and the Project Design Matrix (PDM), will comprehensively assess the CBNS-II's achievements, glean key insights, and inform the future strategies:

Objectives:

- To compile, analyze, and interpret the project's achievements, focusing on key indicators—not only by comparing them with the baseline survey (BLS) results, but also by generating comprehensive evidence to assess the overall achievements of the CBNS-II through a detailed endline survey.
- To identify and document key lessons learned and good practices from the project's implementation to inform and guide the future policy development and program design in nursing capacity building.
- To identify immediate areas for project improvement in the remaining project period, especially concerning strengthening nursing education and clinical practices.

Chapter Two: Methodology

2.1 Study Design

It was a cross-sectional institutional-based study following both quantitative and qualitative data collection during August-October 2025.

2.2 Study Area

We collected data from eight public nursing colleges and from their partner hospitals listed below (**Table 1**). The project was implemented across these nursing colleges and hospitals to enhance their capacity. In addition, we collected data from two non-intervention nursing colleges (Manikganj Nursing College and Bandarban Nursing College) and their affiliated Hospitals (Manikganj 250 Bed District Hospital, Manikganj; and Bandarban Sadar Hospital, Bandarban). We also conducted Key Informant Interviews (KIIs) of Director General (DG), DGNM, and the Register of Bangladesh Nursing and Midwifery Council (BNMC).

Table 1: List of CBNS-II targeted Nursing Colleges and their partner hospitals

SL No.	Nursing colleges	SL No.	Collaborative hospitals
1A	College of Nursing, Sher-E-Bangla Nagar (CONSBN), Dhaka	1B	Shaheed Suhrawardy Medical College Hospital (ShSMCH), Dhaka
2A	Mymensingh Nursing College (MNC), Mymensingh	2B	Mymensingh Medical College Hospital (MMCH), Mymensingh
3A	Chattogram Nursing College (CNC), Chattogram	3B	Chattogram Medical College Hospital (CMCH), Chattogram
4A	Sylhet Nursing College (SNC), Sylhet	4B	Sylhet MAG Osmani Medical College Hospital (SOMCH), Sylhet
5A	Rajshahi Nursing College (RNC), Rajsahi	5B	Rajshahi Medical College Hospital (RMCH), Rajsahi
6A	Rangpur Nursing College (RpNC), Rangpur	6B	Rangpur Medical College Hospital (RpMCH), Rangpur
7A	Barisal Nursing College (BNC), Barisal	7B	Sher-E-Bangla Medical College Hospital, (SBMCH), Barisal
8A	Shaheed Tajuddin Ahmad Nursing College (ShTANC), Gazipur	8B	Shaheed Tajuddin Ahmad Medical College Hospital (ShTAMCH), Gazipur

Controlled (non-intervention) Sample Institutions (Non-targeted in Project Activities)

These institutions were not direct recipients of project interventions. They are primarily serving as a control group for comparison with project-targeted institutions, particularly regarding Indicator 1 (student satisfaction with the educational environment). To ensure a robust comparison, data collection in the two control nursing colleges will mirror the methodology used for the project-targeted colleges where applicable, focusing on collecting baseline comparative data.

SI	Non-intervention nursing colleges and partner hospitals
9	Manikganj Nursing College (MaNC) and District General Hospital, Manikganj (DGHM)
10	Bandarban Nursing College (BaNC) and Sadar Hospital, Bandarban (SHB)

2.3 Data-collection Instruments and Methodology

- A semi-structured questionnaire
- Key Informant Interviews (KIIs)
- Observation checklist

Development of the questionnaires

Data collection used a multi-part questionnaire after approval from the project experts and stakeholders in nursing education and practice. The questionnaires were developed during two days of sitting-in with CBNS-II experts and the field data collectors (enumerators). Semi-structured questionnaires were used to collect data from different types of participants in this study. The questionnaire included sections A-G. Please see the descriptions below:

Part A: Provider-Based Nursing College Questionnaire

This comprehensive questionnaire was administered by trained enumerators to key informants (e.g., the principal and head of the department) in all eight project-targeted nursing colleges and two control nursing colleges through face-to-face data collection. These control institutions, located in Manikganj and Bandarban, did not receive any direct project interventions to evaluate the effects of CBNS-II activities. To ensure robust comparison, the same questionnaire and procedure were used for project colleges and the control colleges. Part A comprises Program Director/Institute Head Data, Administrative Data, Program Data, Faculty Data, Teaching and Learning Resources (Infrastructure), and others. Administrative Data included Governance structures, strategic plan, and resource allocation. Program Data included trends in student enrollments, graduation rates, and whether programs are offered publicly or privately. Faculty Data included Qualifications (degrees held), proportion of full-time faculty, and faculty development activities. Curriculum and Clinical Experiences: Data included adopted curriculum changes, the quality and accessibility of clinical placement sites, and the student-to-clinical faculty ratio. Teaching and Learning Resources highlighted Infrastructure resources, learning materials, and technologies. This part was administered to the most knowledgeable person at each nursing college (e.g., the principal) to obtain more accurate information.

Part B: Nursing College Student-Based Questionnaire

This self-administered questionnaire distributed to the students of 2nd year and 4th year of all 10 colleges. Part B collected information to assess students' satisfaction with their educational experience and evaluate specific exposures aligned with CBNS-II activities. This Course Experience Questionnaire (CEQ) includes Subscales; the Student Support Scale (SSS; Q5), the Learning Resources Scale (LRS; Q5), the Course Organization Scale (COS; Q3), the Learning

Community Scale (LCS; Q5), the Graduate Qualities Scale (GQS; Q5), and the Intellectual Motivation Scale (IMS; Q4). This CEQ scale comprises a total of 27 questions and the responses were measured in a 4-point Likert scale strongly disagree = - 2, disagree = -1, agree = 1, strongly agree = 2) with higher scores indicating more satisfaction. In our study, we also collected information on students' perception of clinical and academic experiences to know their career goals and future plans and compare perceived academic environment and outcomes with project institutions. The trained enumerators collected information sitting in a classroom at the college premises, ensuring student anonymity and confidentiality.

Part B also includes questions about lectures and lab quality and preparation received for clinical practice. In addition, new questions were added to understand about the exposure to research seminars or workshops, opportunities to participate in research-related assignments or discussions and interaction with the faculty around research. Open-ended questions were asked about future goals after graduation. Besides, socio-demographic characteristics include age, gender, academic year, college, and admission type.

Part C: Partner Hospitals Nursing Staff-Based Questionnaire

Data collection was conducted using a self-administered questionnaire among nursing staff at all endline survey hospitals. Part C included the Practice Environment Scale of the Nursing Work Index (PES-NWI), which measures nurses' satisfaction with their practice environment regarding opportunities for induction and career development. While the original English PES-NWI has been widely validated in a variety of international contexts, formally validated Bangla versions were not accessible at the time of the study. Accordingly, the scale was translated into Bangla using the forward–backward translation methodology, followed by an expert content equivalence review and a small, administered trial with nurses to verify clarity and cultural applicability. Acceptable internal consistency was found in the pre-test, after which it was used for the baseline and endline surveys.

Part D: Partner Hospitals Questionnaire for Clinical Supervisors (MTs and CNTs)

This self-administered questionnaire was used to collect data from Master Trainers (MTs) and Clinical Nurse Teachers (CNTs) who supervise nursing students during clinical placements in partner hospitals. This instrument captured key information on their professional background, experience in supervising students**,** and training received **(**e.g., MT or CNT training, in-service training). It also explores their interactions with academic institutions (e.g., frequency of communication with faculty/lecturers) and identifies challenges in clinical instruction and priority areas for future capacity building**.** This section is crucial for assessing the impact of CBNS-II activities**,** particularly the deployment and effectiveness of MTs and CNTs, the project's direct outputs. The data supported indicator measurements related to quality of clinical education, supervisory systems, and linkages between hospital and academic institutions. The questionnaire includes the duration of experience of the clinical supervisor/instructor, the number of students supervised per instructor, any training they received either in-service or pre-service, etc.

Part E: Interview to the Hospital

This section involved a KII with the Director of Nursing or Nursing Superintendent at the partner hospitals. This interview aimed to collect vital institutional data, including the number of beds,

departments, wards, average admission rates, and staffing numbers for various nursing positions. It also covers aspects such as the hospital's capacity for clinical student placements, the types of departments that accept students, details on mentor and CNT training, the availability of clinical practice manuals, career development ladders, and the status of research activities within the hospital. This part also helped to assess the current situation of clinical practices for student nurses. The Director or Nursing Superintendent of each of the eight affiliated medical college hospitals was interviewed.

Part F: College Faculty Questionnaire

This section collected data from MT of nursing colleges who the project experts trained. We collected data on different types of committees and on his/her involvement in each. We also collected information on teaching, including lab lessons, research activities, teaching clinical practices, coordinating clinical practices, and committee activities run by the nursing colleges and partner hospitals—the information related to the development of systems to improve clinical practice.

Part G: Question to the Nursing College Principal

This KII collected information from the college principal on the various committees within the institution, including the Faculty Development Committee and the Quality Improvement Committee. Data was also gathered on MT training and other training programs, including those aimed at strengthening the clinical practice system. Additionally, the interview explored aspects of nursing education, research activities, faculty attitudes, and the quality of clinical practices following the implementation of CBNS-II activities in their respective colleges.

Part H: Directorate General of Nursing and Midwifery (DGNM)

Part H was conducted under KII with the DG of DGNM. It aimed to gather insights into the current project and the Government regulatory authority's proposed future initiatives regarding nursing education in Bangladesh. KII added qualitative information on policy direction, administrative perspectives, and strategic planning for the development of nursing education.

Part I: Register of Bangladesh Nursing and Midwifery Council (BNMC)

Part I was also conducted as a KII with the Registrar of BNMC. The purpose of the interview was to gather information on accreditation procedures, the number of accredited colleges, the perceived benefits of CBNS-II's activities, and future initiatives to strengthen nursing education in Bangladesh. The information gathered from this KII guided recommendations and informed them of the design of subsequent project activities.

Observation Checklist

Our trained enumerators checked the organogram, prospectus, notice board, year planning, admin policy, attendants' sheets, results, and welfare policy of the respective colleges. Most of the cases they took pictures as a record.

2.4 Sampling Methodology

The sampling method for the endline survey is purposely designed to be able to capture a representative sample enabling robust data collection for both quantitative and qualitative analyses.

Nursing Colleges (Provider survey): The project identified all eight nursing colleges where the intervention was implemented, along with two control nursing colleges, for a total of 10 nursing colleges. This ensured comprehensive institutional coverage within the scope of the study.

Hospital Nursing Staff: For the nursing staff, a stratified random sampling technique was adopted to obtain an overall sample size of 400 nurses across eight affiliated hospitals. The stratification was based on possible variables such as department or level of experience to ensure appropriate representation within the nursing workforce. The sample size was calculated using a 95% confidence level, 50% prevalence (maximum variability), and +/-5% precision, using the formula $n = z^2pq/d^2 = (1.96)^2 \times .50 \times .50 / (0.05)^2 = 384$. To increase the power of the sample, the sample size was further increased to 400.

Nursing Students: Simple random sampling was conducted, whereby 50 nursing students were sampled from each of the eight chosen nursing colleges, totaling 400 selected students. Equal representation of students from various years ensured diverse student perspectives. The sample size was calculated using a 95% confidence level, 50% prevalence (maximum variability), and +/-5% precision, using the formula $n = z^2pq/d^2 = (1.96)^2 \times .50 \times .50 / (0.05)^2 = 384$. To increase the power of the sample, the sample size was further increased to 400. However, we collected data from all 2nd and 4th year students from all 10 nursing colleges.

Key Informant Interviews (Qualitative Data): A purposive sampling guide was applied. This strategically selected key personnel from targeted colleges, hospitals, national institutes, those with clear knowledge and experiences in project implementations and outcomes. This ensured that the qualitative concept was rich, insightful, and comprehensive.

2.5 Measures

The endline survey accounted for assessment of progress in key institutional, educational, and clinical outcomes in line with the baseline survey and objectives of the CBNS-II. These measures were quantitative and qualitative to allow for comparison and interpretations of changes in nursing education, managerial capacity, and service delivery.

Institutional and accreditation measures

- Accreditation Scores: Each item was scored 0 (Not fulfilled), 1 (Partially fulfilled), 2 (Fully fulfilled). Actual standards were as follows. Standard I = 48, II = 6, III = 28, IV = 18, V = 66. Scores were then converted to percentages, with ≥80% considered accredited and 70–79% conditionally accredited.
- Program Status: Public, Private, Non-Profit, or Private for-Profit.
- Committee Activities: These were considered as the percentage of planned meetings held by four main committees: Faculty Development, Quality Improvement, Research, and Coordination.

- Faculty and Training Development: Number and type of Master Trainers (MTs) and Clinical Nurse Teachers (CNTs) trained and conducted in-service sessions.

Faculty and human resource measures

- Faculty Qualifications: Distribution of faculty members by highest educational level (Associate, BSc, MSc, DNP/PhD).
- Full-time Faculty Ratio: Proportion of full-time to total faculty members (0–1 scale or percentage).
- Student-to-Faculty Ratio: Continuous indicator describing the average number of students supervised per faculty member.
- Leadership and Supervisory Structure: Existence of Nursing Superintendents, Deputies, and Supervisors in each institution.
- Trained Nursing Staff: Number of nursing staff trained within the past 12 months, and the types of training received (MT, FD, CNT, or subject-based).

Educational environment and student's course experience measures

- Course Experience Questionnaire (CEQ): Scales were analyzed by Student Support, Learning Resources, Course Organization, Learning Community, and Intellectual Motivation.
- Career Aspirations: Categorized from students' open-ended responses into themes such as postgraduate study, overseas education, or clinical specialization.

Hospital and clinical practices measures

- CNT Support Rate: Percentage of students who reported receiving direct support from Clinical Nurse Teachers (% support = [students supported ÷ total respondents] × 100). Performance was compared against the ≥ 50% target.
- Hospital Committee Functionality: Frequency and regularity of Clinical Practice Committee (CPC) and Quality Improvement Committee (QIC) meetings, classified as Regular (≥ bi-monthly) or Irregular (< quarterly).
- PES-NWI Score: Continuous variable measuring the practice environment, including subscales on leadership, participation, and staffing adequacy.
- In-service Training Opportunities: Number of training courses held for nurses and clinical staff during the previous 12 months.
- Hospital Situation Indicators: Binary or percentage measures of systems such as post-exposure management, career-promotion opportunities, and academic activities within hospitals.

Derived comparative and qualitative measures

- **Baseline-endline changes**: Baseline–endline differences (percentage-point changes) were calculated by comparing accreditation scores, CEQ ratings, committee activities, and CNT support rates between 2022 and 2025.
- **Qualitative Themes**: Key Informant Interviews and open-ended survey responses were coded and analyzed under three main domains—Professional Development, Clinical Practice, and Institutional Governance. These themes illustrate institutional changes and best practices emerging from the CBNS-II.

-Socio-demographic and institutional characteristics were stratified for analysis to identify plausible variables influencing differences in performance across nursing colleges and hospitals.

2.6 Pre-testing

The questionnaires were finalized through a consultation meeting with the CBNS-II members. Then the provider, institutional and collaborative hospitals' administrators, nursing staff and students' interview questionnaires were translated into the local language (Bangla) and finalized it. Then pre-testing was done to assess the validity of the questionnaire. The survey was performed after resolving any ambiguities in the questionnaires. Administer a thorough pre-test of all final survey instruments in a non-project site within Dhaka for clarity, flow, completeness, and cultural appropriateness. Evaluate reliability and internal consistency of multi-item scales such as Course Experience Questionnaire (CEQ).

Recruitment and training of the field team members: Selected and thoroughly trained 10 enumerators, divided into five teams, covering survey methodology, ethical considerations, paper-based questionnaire administration, interviewing techniques, and data quality checks. Assigned experienced enumerators who have more than 10 years of experience for collecting information from the Institutes and other organizations.

Table 2: Sampling technique, sample size, target interview and methods of interview

Questionnaire	Target Interview	Number of participants	Sampling technique	Methods of Interview
Part A	Principal, and/or Head of the institute	10	Purposive	Face-to-face interview
Part B	Nursing Students	As actual	All students of 2nd and 4th year are available during the survey	Self-administrative
Part C	Nursing Staff	479	About 50 nursing staff in each college	Self-administrative
Part D	Hospital MTs/ CNTs	MT-50 CNT-50	Pre-fixed MTs and CNTs	Self-administrative
Part E	Director/Nursing Superintendent of the partner Hospital	10	Purposive	KIIs
Part F	College Faculty-MT/Nursing instructor	30	Pre-fixed list	KIIs
Part G	Principal of the Nursing College	10	Purposive	KIIs
Part H	DG, DGNM	01	Purposive	KII
Part I	Register, BNMC	01	Purposive	KII

2.7 Data Collection

Conducted field data collection, which included quantitative surveys of nursing colleges, hospitals, and students, as well as qualitative key informant interviews across project-targeted, control institutions, and relevant national organizations.

Trained enumerators visited all eight project-targeted and two control nursing colleges. They attended a 2-day training session and understood the entire questionnaire. All enumerators have more than 10 years of experience in the field and institutional data collection. Institutional-level data on governance, faculty composition, teaching and learning modalities, accreditation readiness, and MT/CNT structures were also collected. Enumerators explicitly checked the availability of CNTs in each department and verified the presence or absence of MTs in hospitals, as these are key project components and indicators.

The hospital-specific questionnaire assessed the practice environment and institutional context in which nurses operate. It also gathered data on several key areas, including in-service training, nurses' socio-demographic data, and the institutional profile. For training in-service, the questionnaire collected information on the number and types of training provided in the past 12 months, including those related to project activities. It also collected socio-demographic data on nurses, such as age, gender, education, experience, and designation. Lastly, the questionnaire gathered details on the institutional profile, including the hospital's size, the number of nurses, and the wards or departments that accept students. Importantly, although MTs were not surveyed as direct instructors, their availability in hospitals was checked and documented to assess the project's intended structure of capacity transfer from MTs to CNTs.

Observation

To assess the education standard, we also filled up a checklist (using √) through observation, like the presence of well-equipped classrooms and labs, notice board, prospectus, favorable learning environment, infrastructure and condition of the nursing hostel, availability of safe drinking water source, presence of separate washroom for faculties and students, presence of common room, prayer room, guard room etc. We also observed a theoretical and a clinical class (student-teacher interaction).

Qualitative

For the qualitative component, key informant interviews (KIIs) were conducted. Guidelines for KIIs were developed in consultation with JICA Project team members and the consultant was involved here directly. A total of two KIIs were conducted for health care administrators (DG of DGNM and Registrar of BNMC).

2.8 Ethical Clearance

Ethical approval for this endline survey was obtained from the Ethical Review Committee of the Institute of Biological Sciences, University of Rajshahi in Bangladesh. (**252/320 (42)/IAMEBBC/IBSc**., 8 October 2025). Participants were informed regarding the study aims, methods and their roles, and their written or oral consent were obtained. Notably, participation in

the survey entirely voluntary with each respondent being duly informed of his or her right to withdraw from the study at any time without recourse to any punitive measures. In addition, all data collected and handled under strict confidentiality, locked in a security area, and used exclusively for the purposes of this study guaranteeing privacy and data integrity.

Quality Control and Supervision: Rigorous quality control was maintained throughout data collection by daily field supervision by research coordinators, and consultants. Data monitoring was accomplished through corrective actions initiated for any inconsistencies.

- Field Supervision**:** Experienced field supervisors conducted daily checks, observed interviews, and checked submitted data for completeness, accuracy, and adherence to protocols.
- Regular Team Debriefs**:** Daily or weekly debriefing sessions with field teams tackled emergent challenges and ambiguities while reinforcing quality standards.

Validity and Reliability of Qualitative Data

For qualitative data collected through KIIs, a robust framework was applied to ensure trustworthiness:

- Qualified Interviewers**:** Qualitative interviews were conducted by trained researchers with experience in semi-structured interviews to ensure quality and neutrality in findings.
- Comprehensive Interview Guides**:** Semi-structured KII guides were pre-designed for topics common among interviews yet have probing and follow-up questions. (**Appendix 6.10**)
- Coding Reliability**:** A structured coding framework was developed, and multiple coders were initially coding a sub-set of transcripts independently to establish inter-coder reliability. Discrepancies were discussed and resolved to refine the coding scheme.
- Triangulation**:** Qualitative findings were further strengthened with corroborating quantitative data collected and information from various stakeholder groups.
- Member Checking (when possible)**:** Key insights or summaries from interviews were shared with selected participants to check for misrepresentation and accuracy.
- Audit Trail**:** There was a clear and detailed audit trail of data collection, transcription, coding decisions, and analytic processes to ensure transparency and accountability.

By taking such elaborate measures for quality control and assurance, the survey seeks to produce highly valid, reliable, and trustworthy data for the evaluation of the

2.9 Statistical Analysis

All data had been securely transferred, backed up, and verified before these analyses. Quantitative analyses were done in IBM SPSS Statistics (Version 26.0 Windows), where descriptive and comparative (baseline-endline) summaries were presented. The tables and figures present results as frequencies, percentages, and cross-tabulations by the college and hospital, with the respective institution side-by-side for comparability.

Part A — Accreditation (Colleges). Each college's accreditation scoring was determined using the 0/1/2 system against the five BNMC standards (0 = Not fulfilled, 1 = Partially fulfilled, 2 =

Fully fulfilled). The full-score denominators used in the results were Standard I= 48; II= 6; III= 28; IV= 18; V= 66. The scores were converted to percentages that were compared against the BNMC thresholds (≥80% = 5 yrs; 70–<80% = 4 yrs with recommendations; etc.) for classification of achievement and comparison between baseline (2022) versus endline performance.

Part B — Course Experience Questionnaire (Students). CEQ responses were collapsed to Positive vs Negative across the six scales. For each college, frequency and percentage distributions were computed at baseline and endline to quantify change in students' satisfaction.

Part C — Faculty Development & Institutional Systems (Colleges). The existence and activities of committees (Faculty Development, Quality Improvement, Research, and Coordination) were summarized at endline using counts and percentages and qualitatively compared with baseline. Where relevant, we highlighted active structures (e.g., RpNC with 12 active committees; RNC and BaNC with 10 each) to describe governance intensity rather than infer effects.

Part D —Partner/Collaborative Hospitals. Hospital indicators were tabulated as percentages by site and aggregated totals for intervention colleges, with controls excluded from 'Total" where specified in results. For example, the CNT support indicator was computed as:

[% CNT support = (No. of students receiving CNT support ÷ total respondents in that college) × 100]. Achievement was evaluated against the threshold of 50%.

Part E — Hospital Situation (Structures, Systems, Opportunities). We summarized the hospital-level structures (e.g., post-exposure occupational management systems, systems for career promotion, and opportunities for academic activity) as percentages by hospital, providing totals for intervention hospitals where applicable. These summaries were used descriptively to contrast readiness versus career/safety systems across sites.

Comparative framing - In all scenarios where measures were made at baseline (2022), we reported absolute percentage-point changes with respect to endline vs baseline (no inferential tests were applied in the results chapter). Descriptive comparisons were woven into structured narrative conclusions (better committee activity in selected colleges; differences in governance/resources; improving documentation and supervision in hospitals).

Qualitative analysis - Open-ended responses, KII inputs, and reflections on lessons learned were coded and thematically analyzed to surface professional development, clinical practice, and institutional governance themes, which contextualize the quantitative patterns and post-project institutionalization of CBNS-II practices.

Table 3: List of participants interviewed from nursing colleges

SL No.	Name of the Nursing College	Principal	Stud. of 2nd Year	Stud. Of 4th Year	College MT/Nursing Instructor
1	College of Nursing, Sher-E-Bangla Nagar (CONSBN), Dhaka	01	84	80	03
2	Shaheed Tajuddin Ahmad Nursing College (ShTANC), Gazipur	01	80	54	03
3	Sylhet Nursing College (SNC), Sylhet	01	71	69	03
4	Barisal Nursing College (BNC), Barisal	01	90	80	05
5	Rangpur Nursing College (RpNC), Rangpur	01	90	90	03
6	Mymensingh Nursing College (MNC), Mymensingh	01	91	94	03
7	Chattogram Nursing College (CNC), Chattogram	01	88	78	03
8	Rajshahi Nursing College (RNC), Rajshahi	01	71	90	03
9	Bandarban Nursing College (BaNC), Bandarban	01	37	41	03 (Nursing Instructor)
10	Manikganj Nursing College (MaNC), Manikganj	01	93	75	03 (Nursing Instructor)
	Total	**10**	**795**	**751**	**32**

Table 4: List of participants interviewed from all partner hospitals

SL No	Name of the Hospital	Nursing Staffs	Hospital's MTs	Hospital's CNTs	Nursing Superintendent	Remarks
1	Shaheed Suhrawardy Medical College Hospital (ShSMCH), Dhaka	50	05	06	01	
2	Shaheed Tajuddin Ahmad Medical College Hospital (ShTAMCH), Gazipur	50	04	05	01	One MT was not interviewed due to unrest situation by students.
3	Sylhet MAG Osmani Medical College Hospital (SOMCH), Sylhet	50	04	06	01	One MT was suspended, and we were not able to interview him/her. Hence one extra CNT was added in the list.
4	Sher-E-Bangla Medical College Hospital, (SBMCH), Barisal	51	03	05	01	Two MTs transfer to the Nursing College
5	Rangpur Medical College Hospital (RpMCH), Rangpur	51	05	05	01	
6	Mymensingh Medical College Hospital (MMCH), Mymensingh	53	05	05	01	
7	Chattogram Medical College Hospital (CMCH), Chattogram	50	05	03	01	
8	Rajshahi Medical College Hospital (RMCH), Rajsahi	49	05	05	01	
9	Sadar Hospital, Bandarban (SHB)	24	05	05	01	
10	District General Hospital, Manikganj (DGHM)	51	05	05	01	
	Total	**479**	**46**	**50**	**10**	

2.10 Key Informant Interviews

These semi-structured interviews were conducted on the following aspects:

- Perceived changes in nursing education and practice as a result of the CBNS-II.
- Facilitators and challenges to the fulfillment of project objectives.
- Experience with the implemented interventions (e.g., CPD programs, accreditation support, etc.).
- Lessons learned and best practices identified.
- Immediate recommendations for improvement.

In addition, we ensured that the KII guideline reflects the purpose of the project and activities in line with the PDM and relevant documents, making explicit the intention of each question.

Chapter Three: Results of the Endline Survey

3.1 Situation survey of the target nursing colleges

We collected data from 10 Nursing College Principals, 10 Nursing Superintendents of partner hospitals, second- and fourth-year nursing students at the colleges, nursing staff, hospital MTs, CNTs, college faculties, and stakeholders. There were 1,546 nursing students in the 2nd and fourth years and 479 nurses in the data analysis. In addition, we analyzed all questionnaire sections and collected data from nurses, MTs, CNTs, and two KIIs from the DGNM and the Registrar of BNMC.

3.1.1 Reflection of the nursing colleges' situation since the baseline survey in 2022

Table 5 provides an overview of nursing colleges, detailing their facilities, faculties and the total number of graduates over the past 5 years. CONSBN stands out with 5 partner hospitals, 15 classrooms, and 8 lab facilities. Over this period, 392 students graduated, supported by 52 full-time faculty members, and 10 guest faculty members. Additionally, 52 of its faculty members hold an MSc. ShTANC with 1 partner hospital, 7 classrooms, and 8 lab facilities, and 282 students graduated in the last five years. It employs 20 full-time faculty members, with no part-time faculty and 6 guest faculty members. Only 4 of its faculties have an MSc degree.

SNC has 4 partner hospitals, 9 classrooms, and 7 lab facilities. In the last five years, it graduated 400 students, with 31 full-time faculty members, 8 part-time faculty members, and no guest faculty. The college has 31 faculty members holding an MSc degree.

BNC has 1 partner hospital, 13 classrooms, and 8 lab facilities, graduating 450 students over the past five years. It employs 30 full-time faculty members, no part-time faculty, and 10 guest faculty members.

RpNC, with 3 partner hospitals, 13 classrooms, and 10 lab facilities, graduated 465 students in the last five years. The college has 24 full-time faculty members, 29 part-time faculty members, and 10 guest faculty members. 12 of its faculty hold an MSc degree.

MNC, with 1 partner hospital, 12 classrooms, and 10 lab facilities, 462 students graduated over five years. It employs 31 full-time faculty members, 11 part-time faculty members, and no guest faculty. All 31 of its faculty members hold an MSc degree.

CNC has 1 partner hospital, 7 classrooms, and 7 lab facilities, graduating 430 students over the past five years. It has 38 full-time faculty members, 20 part-time faculty members, and no guest faculty. All 38 of its faculty members hold an MSc degree.

Lastly, RNC, with 1 partner hospital, 16 classrooms, and 10 lab facilities, 460 students graduated in the past five years. This college employs 48 full-time faculty members, no part-time faculty, and 6 guest faculty members. All 48 of its faculty members possess an MSc degree.

Table 5: List of facilities and faculties during the endline survey in nursing colleges

SL No.	Name of the College	No. of partners Hospital	No. of classrooms	No. of lab Facilities	No. of total graduates in last 5 years	No. of full-time faculties	No. of part time faculties	No. of Guest faculties	No. of graduates' faculties (MSc)
1	CONSBN, Dhaka	5	15	8	392	52	0	10	52
2	ShTANC, Gazipur	1	7	8	282	20	0	6	4
3	SNC, Sylhet	4	9	7	400	31	8	0	31
4	BNC, Barisal	1	13	8	450	30	0	10	29
5	RpNC, Rangpur	3	13	10	465	24	29	10	12
6	MNC, Mymensingh	1	12	10	462	31	11	0	31
7	CNC, Chattogram	1	7	7	430	38	20	0	38
8	RNC, Rajshahi	1	16	10	460	48	0	6	48
9	BaNC, Bandarban	2	12	7	64	13	3	6	12
10	MaNC, Manikgani	2	7	6	460	18	0	5	18

Table 6 presents the total number of students enrolled in the various nursing programs across different colleges. CONSBN has a total of 465 which offers BSc, post-basic BSc programs, Diploma in midwifery and MSc course. CONSBN has only the MSc program which started in 2025. ShTANC offers only the BSc program, with total 352 students enrolled. SNC has 588 students across BSc, post-basic BSc, and Diploma in midwifery with the highest number in the BSc program. BNC has a total of 624 students, with a similar distribution across the programs. RpNC has 625 students, primarily in the BSc, post-basic BSc, Diploma in midwifery programs 192. MNC also has 638 students, mostly BSc and Diploma in midwifery. CNC has 568 students, with the majority in the BSc programs. Finally, RNC leads with 638 students, with the highest numbers of BSc and post-basic BSc programs.

Table 6: The total number of students following courses in the colleges during the endline survey

SL No.	Name of the College	Program Offered	No. of total BSc	No. of post-basic BSc	No. of Diploma Nursing	No. of Diploma Midwifery	No. of MSc	Total Students
1	CONSBN, Dhaka	Diploma, BSc, post-basic BSc, MSc	376	0	0	72	17	465
2	ShTANC, Gazipur	BSc	352	0	0	0	0	352
3	SNC, Sylhet	Diploma, BSc, post-basic BSc	363	31	0	194	0	588
4	BNC, Barisal	Diploma, BSc, post-basic BSc	388	40	0	196	0	624
5	RpNC, Rangpur	Midwifery, BSc, post-basic BSc	373	60	0	192	0	625
6	MNC, Mymensingh	Diploma, BSc, post-basic BSc	380	60	0	198	0	638
7	CNC, Chattogram	Midwifery, BSc	368	0	0	200	0	568
8	RNC, Rajshahi	Midwifery, BSc, post-basic BSc	382	61	0	195	0	638
9	BaNC, Bandarban	Diploma, BSc	153	0	193	87	0	433
10	MaNC, Manikgani	Diploma, BSc	398	0	0	75	0	473

Note: The numbers presented represent the total number of students currently enrolled across the different courses in each college, not the number of students per year.
The total student count includes all enrolled students in the respective programs, such as Diploma, BSc, Post-basic BSc, and MSc, at the time of the data collection.

3.1.2 Overview of accreditation; 5 standards, procedure, and the score system

Accreditation is the evaluative process initiated by the Bangladesh Nursing and Midwifery Council (BNMC), which involves both the college's self-assessment and a site visit by a review team. The process is designed to assess nursing institutions' compliance with established standards. The colleges must submit self-assessment reports, which are then reviewed by a team dispatched by the BNMC. This team conducts a site visit to assess the actual situation of the institution. After this visit, a decision-making committee reviews the findings and makes the final accreditation decision.

Overview of accreditation:

- **Standard I** (Administration and Leadership): Governance and leadership assuring good quality nursing education.
- **Standard II** (Student Type and Intake): Admission of students possessing academic background and ability to meet requirements of the program.
- **Standard III** (Teaching Staff and Learning): Teaching in the classrooms and clinical placements by duly qualified teachers.
- **Standard IV** (Curriculum Delivery): Application of the national curriculum geared towards conducive student outcomes.
- **Standard V** (Resources): Infrastructure and learning resources to facilitate the process of education.

Accreditation Process

The process of accreditation includes self-assessment by each institution, followed by formal review by BNMC. Self-evaluation is conducted with a standardized self-questionnaire on all five standards. Each statement will then be rated on a score scale: 0 = not fulfilled, 1 = partially fulfilled, and 2 = fully fulfilled. In the system, the college will add their scores as per standard and compare them with the highest obtainable score. Based on self-assessment and the site visit by the external review team BNMC gives a ruling regarding the duration and conditions of the accreditation for the institution.

1. 80% and above each standard: 5 years' accreditation.
2. 70% to less than 80% in each standard: 4 years accreditation with recommendations.
3. 60% to less than 70% in 1-3 standards or greater than 70% in 4-5 standards: 3 years accreditation under conditions.
4. 50% to less than 60% in 4-5 standards: 2 years accreditation with conditions.
5. Less than 50% in one or more standards: No accreditation until improvement.

Scoring System

It means that each standard received full score according to the number of variables (criteria) considered in the dataset multiplied by maximum score `2'. These analyses were full score for real representation calculated from actual dataset because in unlike baseline survey, this normalized Standards III and IV to smaller denominators.

The accreditation threshold values for each score used by the endline survey (ELS) are provided in **Table 7**. A full or maximum score for each standard in this study can be derived by multiplying the number of variables included in the questionnaires by 2—the full maximum score for each item. For example, in Standard I, which includes 24 items, the full score is 48, whereas Standard V, with 33 items, has a full score of 66. Scoring on each criterion under these standards was carried out as follows: 2 points were awarded if the criterion was fully met, 1 point for partial fulfillment, and 0 points if the requirement was not met. The total output score for a college under each standard was then compared to that full score and converted into a percentage.

All set criteria for granting accreditation were uniformly applied: This scoring framework is the basis against which the results of the individual college being presented in **Tables 9 and 10** were assessed.

Table 7: Each standard and the full score of accreditations

Standard	Full Score	>=80%	70–<80%	60–<70%	50–<60%	<50%
Standard I	48	>= 38.4	33.6 –<38.4	28.8 –<33.6	24.0 –<28.8	<24.0
Standard II	6	>= 4.8	4.2 –<4.8	3.6 –<4.2	3.0 –<3.6	<3.0
Standard III	28	>= 22.4	19.6 –<22.4	16.8 –<19.6	14.0 –<16.8	<14.0
Standard IV	18	>= 14.4	12.6 –<14.4	10.8 –<12.6	9.0 –<10.8	<9.0
Standard V	66	>= 52.8	46.2 –<52.8	39.6 –<46.2	33.0 –<39.6	<33.0
Total	**166**	**>= 132.8**	**116.2 –<132.8**	**99.6 –<116.2**	**83.0 –<99.6**	**<83.0**

Accreditation and site visits

This section summarizes the accreditation process of the target nursing colleges, focusing on whether they have submitted applications for accreditation, undergone site visits, and whether any colleges have received feedback or achieved full accreditation.

As shown in **Table 8** above, CONSBN and MNC are on track to achieve full accreditation shortly. For STANC, SNC, BNC, and RNC, the colleges have not yet submitted their accreditation applications to BNMC. They are still in the process of preparing documents for their accreditation applications. CNC and RpNC have both conducted self-assessments and are working on finalizing their reports. These colleges are actively working towards completing the accreditation process, with their self-assessments completed, but the self-assessment reports are still being finalized at the time of the site visits.

Table 8: Accreditation status of the target nursing colleges

Name of the College	Date for Information Collection	Accreditation Status
CONSBN	27 August 2025	Achieving full accreditation shortly
ShTANC	6 September 2025	Preparing documents for application
SNC	27 August 2025	Preparing documents for application
BNC	21 August 2025	Preparing documents for application

RpNC	18 August 2025	Self-assessment conducted, finalizing report
MNC	2 September 2025	Achieving full accreditation shortly
CNC	24 August 2025	Self-assessment conducted, finalizing report
RNC	18 August 2025	Preparing documents for application
BaNC	30 August 2025	Preparing documents for application of accreditation
MaNC	31 August 2025	Preparing documents for application of accreditation

3.1.3 Survey result of the nursing colleges' situation based on accreditation standards

The endline survey assessed the record of ten nursing colleges based on five accreditation standards. The results presented in **Table 9** display the numerical performance of each institution for every standard, along with the calculated overall mean score for the intervention colleges.

Table 9: Individual college accreditation score per standard in the endline survey

Standard	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	Overall score[1]	BaNC	MaNC
Standard I (48)	47	44	43	40	47	47	44	37	43.6	43	46
Standard II (6)	6	6	6	6	6	6	6	6	6.0	6	6
Standard III (28)	28	24	22	26	22	24	20	18	23.0	22	24
Standard IV (18)	18	14	18	14	18	17	18	12	16.1	16	18
Standard V (66)	62	25	50	51	62	64	40	56	51.2	37	60

Note: [1] *Overall score was calculated only for the intervention of nursing colleges.*

Standard I (Administration and Leadership): The scores for this standard were between 37 and 47, with an average of 43.6 out of 48. A maximum score of 47 was obtained by CONSBN, RpNC, and MNC, while a minimum of 37 was obtained by RNC. Other institutions with scores in the range of 40 to 44 are ShTANC, SNC, BNC, and CNC, revealing moderate variation among colleges in this category.

Standard II (Student Type and Intake): All colleges scored the full 6 out of 6, resulting in an overall mean of 6.0. Hence, this means that all institutions fully complied with the criteria assessed under this standard with no difference in scoring among colleges.

Standard III (Teaching Staff and Learning): Scores with respect to this standard ranged from 18 to 28, with an overall average score of 23.0 out of 28. CONSBN scored highest with 28, followed by BNC with 26. ShTANC and MNC each scored 24, RpNC and SNC scored 22 each, CMC scored 20, and RNC scored lowest in the category at 18.

Standard IV (Curriculum Delivery): The scores of deliveries on curriculum were anywhere between 12 and 18, though the overall mean was 16.1 out of 18. The maximum score of 18 was credited to CONSBN, SNC, RpNC, and CNC. ShTANC and BNC scored 14 and RNC the lowest at 12.

Standard V (Resources): Wide variations in the marks were obtained under this standard ranging from 25 to 64, with overall mean scores of 51.2 out of 66. The highest marks of 64 were obtained by MNC closely followed by RpNC and CONSBN with 62 each. Other marks were obtained by BNC (51), SNC (50), RNC (56), CNC (40), and ShTANC recording the least at 25.

In **Table 10,** Standard II (student type and intake) demonstrated consistently high performance across all colleges, with each institution achieving full scores. In contrast, Standards III (Teaching Staff and Learning) and Standard V (Resources) showed the greatest variation in results. Among the colleges, CONSBN, MNC, and RpNC appeared as the most balanced institutions, maintaining high percentages across nearly all standards. Conversely, RNC, CNC, BNC, and ShTANC recorded comparatively lower scores, particularly in teaching and resource-related areas, indicating a higher likelihood of conditional accreditation status.

Table 10: Percent score per standard of individual college for accreditation

Standard	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	Overall score[1]	BaNC	MaNC
Standard I	97.9	91.7	89.6	93.8	97.9	97.9	91.7	85.4	93.3	83.3	95.8
Standard II	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Standard III	100.0	92.9	78.6	78.6	78.6	85.7	71.4	71.4	82.1	92.9	85.7
Standard IV	100.0	88.9	100.0	88.9	100.0	100.0	100.0	88.9	95.6	77.8	100.0
Standard V	93.9	48.5	87.9	57.6	97.0	100.0	60.6	84.8	78.8	80.3	90.9

Note: *[1] Overall score was calculated only for the intervention of nursing colleges*

Standard I: Administration and leadership

Table 11 indicates Standard I (administrative and leadership) assessment scores found for the eight intervention nursing colleges. The assessment scores were based on 24 indicators regarding management structure, administrative organization, documentation systems, and staff development. The total score reached among intervention colleges varied between 41 and 47, which corresponded to a percentage value of 85.4% and 97.9%. The highest total scores (47) were obtained by CONSBN, RpNC, and MNC, followed by BNC (45), and ShTANC and CNC (44). SNC obtained a score of 43, while RNC scored 41. This overall scoring indicates a uniform performance of institutions on this standard.

Table 11: Assessment score of Standard I for all nursing colleges

Variables	CON SBN	ShT ANC	SN C	BN C	Rp NC	MN C	CNC	RNC	Ba NC	Ma NC
Principal's qualification	2	2	2	2	2	2	2	2	2	2
Principal's autonomy in decision-making	2	2	2	2	2	2	2	2	2	2
Supporting staff for the principal	2	2	2	2	2	2	2	2	2	2
Organized administrative system	2	2	2	2	2	2	2	2	2	2
Updated student records	2	2	2	2	2	2	0	2	2	2
Support for instructor development	2	2	1	1	2	2	1	0	2	2
Guest teachers are experts	2	2	2	2	2	2	2	2	2	2
Partnerships with practice organizations	2	2	2	2	2	2	2	0	0	2
Prospectus/master plan/resource plan	2	2	2	2	2	2	2	2	2	2
Publicized organogram	1	0	2	2	1	1	1	1	1	1
Qualified administrative staff	2	2	2	2	2	2	2	2	2	2
Records of administrative files	2	2	2	2	2	2	2	2	2	2
Regular meetings conducted	2	2	2	2	2	2	2	2	2	2
Internal audit maintained	2	2	2	2	2	2	2	2	2	2
Annual reports prepared	2	2	2	2	2	2	2	2	2	2
Budget management system	2	2	2	2	2	2	2	2	2	2
Attendance record system	2	2	2	2	2	2	2	2	2	2
Student file system maintained	2	2	2	2	2	2	2	2	2	2
Collaboration with external stakeholders	2	2	2	2	2	2	2	1	0	2
Resource plan updated	2	2	0	2	2	2	2	2	0	2
Teacher professional development	2	2	2	0	2	2	2	2	1	2
Teacher competency update	2	0	2	2	2	2	2	1	2	1
Partnerships for practice learning	2	2	0	2	2	2	2	2	2	2
Prospectus/masterplan displayed	2	2	2	2	2	2	2	2	2	2
Total	47	44	43	45	47	47	44	41	40	46
%	**97.9**	**91.7**	**89.6**	**93.8**	**97.9**	**97.9**	**91.7**	**85.4**	**83.3**	**95.8**

***Note*:** Scores represent the level of compliance with the assessed criteria: 0 = No compliance or absence of the required attribute, 1 = Partial compliance with the required attribute. 2 = Full compliance with the required attribute.

Figure 1 illustrates the distribution of percentage scores for the intervention nursing colleges under Standard I (administration and leadership). The scores ranged from 85.4% to 97.9%, resulting in a range of 12.5 percentage points. The mean score for the eight intervention colleges was 93.2%. The standard deviation of the scores was approximately 4.2, indicating a slight variability around the mean. Notably, over 75% of the colleges scored above 90%.

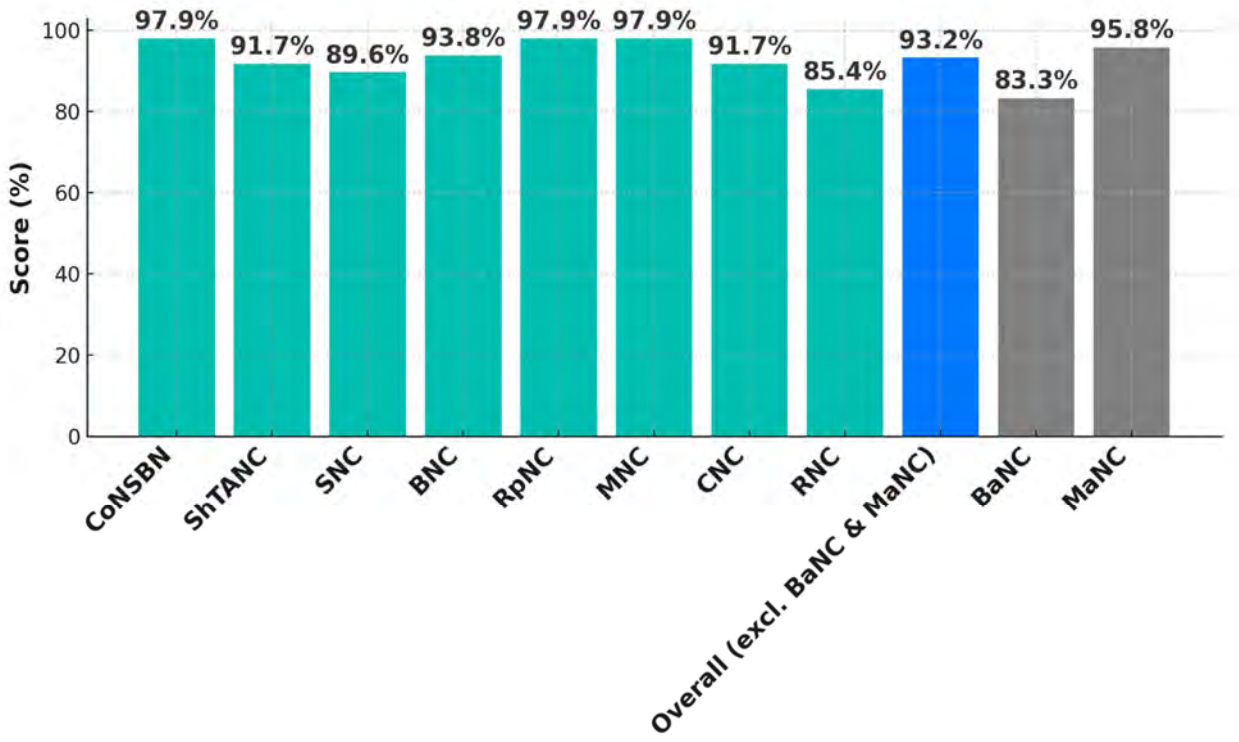


Figure 1: Average percentage scores of colleges for Standard I

Standard II: Student type and Intake

Table 12 presents the assessment results for Standard II (Student Type and Intake) across the eight intervention nursing colleges. All colleges scored a perfect 6 out of 6 (100.0%) on the indicators, which include adherence to the national admission policy, verification of medical and physical fitness, and confirmation of students' willingness to join the nursing program.

Table 12: Assessment score of Standard II for all nursing colleges

Variables	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	BaNC	MaNC
Admission policy followed	2	2	2	2	2	2	2	2	2	2
Student medical/physical fitness verified	2	2	2	2	2	2	2	2	2	2
Willingness to	2	2	2	2	2	2	2	2	2	2

Variables	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	BaNC	MaNC
join nursing confirmed										
Total	6	6	6	6	6	6	6	6	6	6
%	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Note: Scores represent the level of compliance with the assessed criteria: 0 = No compliance or absence of the required attribute; 1 = Partial compliance with the required attribute.;2 = Full compliance with the required attribute.

Standard III: Teaching staff and learning

Table 13 presents the assessment results for Standard III (teaching staff and learning) across the eight intervention nursing colleges. Scores for this standard ranged from 20 to 28, which is 71.4% to 100.0%. The highest total score achieved was 28 by CONSBN, followed by ShTANC (26) and MNC (24). SNC, BNC, and RpNC all scored 22, while CNC and RNC recorded the lowest total scores (20 each).

Table 13: Assessment Score of Standard III for all nursing colleges

Variables	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	BaNC	MaNC
Faculty hold bachelor's in nursing	2	2	2	2	2	2	2	2	2	2
Use of e-learning methods	2	2	2	2	2	2	2	2	2	2
Faculty use current evidence	2	2	2	2	2	2	2	2	2	2
Development of clinical thinking	2	2	2	2	2	2	2	2	2	2
Guest lectures and specialists	2	2	2	2	2	2	2	2	2	2
Faculty–student ratio (classroom)	2	2	0	0	0	2	0	0	2	2
Faculty–student ratio (lab)	2	2	0	0	0	0	0	0	2	0
At least 25 part-time instructors	2	0	0	0	0	0	0	0	0	0
Clinical faculty responsible	2	2	2	2	2	2	0	2	2	2
Faculty cover specialty areas	2	2	2	2	2	2	2	2	2	2
Faculty cover all clinical sites	2	2	2	2	2	2	2	2	2	2
Availability of qualified nurses	2	2	2	2	2	2	2	0	2	2
Rotation system in clinical sites	2	2	2	2	2	2	2	2	2	2
Faculty responsible for placement	2	2	2	2	2	2	2	2	2	2

Variables	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	BaNC	MaNC
Total	28	26	22	22	22	24	20	20	26	24
%	100.0	92.9	78.6	78.6	78.6	85.7	71.4	71.4	92.9	85.7

Note: Scores represent the level of compliance with the assessed criteria: 0 = No compliance or absence of the required attribute, 1 = Partial compliance with the required attribute, 2 = Full compliance with the required attribute.

Figure 2 shows the distribution of percentage scores of the intervention nursing colleges under Standard III (Teaching Staff and Learning). The figure illustrates percentage scores ranging from 71.4% to 100.0%, giving a computed range of 28.6 percentage points. The mean score of the eight intervention colleges was 82.2%, while the standard deviation was approximately 10.3. About 50% of the colleges scored above 85%, whereas the others fell below this threshold.

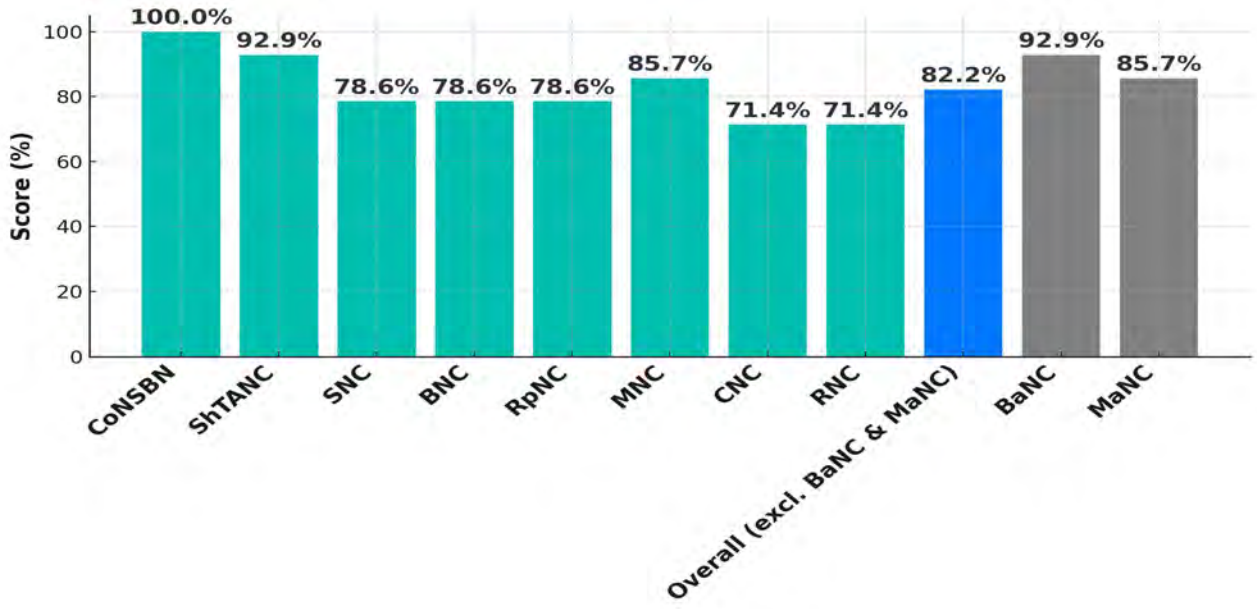


Figure 2: Average percentage scores of colleges for Standard III

Standard IV: Curriculum delivery

Table 14 shows the assessment scores given on standard IV for the eight intervention nursing colleges in Curriculum Delivery. The total scores ranged from 16 to 18, with percentage values corresponding to 88.9% and 100.0%. The highest total scores obtained were by CONSBN, SNC, RpNC, MNC, and CNC, all with 18 (100.0%); on the other hand, ShTANC, BNC, and RNC scored 16 points (88.9%) each**.**

Table 14: Assessment score of Standard IV for all nursing colleges

Variables	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	BaNC	MaNC
ETP competencies achieved	2	2	2	2	2	2	2	2	2	2
Use of multi-learning approaches	2	2	2	2	2	2	2	2	2	2
Facilitation of knowledge	2	2	2	2	2	2	2	2	2	2
Facilitation of skills	2	2	2	2	2	2	2	2	2	2
Facilitation of MCQ preparation	2	2	2	2	2	2	2	2	2	2
Facilitation of student results	2	2	2	2	2	2	2	2	0	2
Adequacy of classroom space	2	2	2	0	2	2	2	0	2	2
Access to hospital/clinical facilities	2	0	2	2	2	2	2	2	0	2
Exposure to different patient cases	2	2	2	2	2	2	2	2	2	2
Total	**18**	**16**	**18**	**16**	**18**	**18**	**18**	**16**	**14**	**18**
%	**100.0**	**88.9**	**100.0**	**88.9**	**100.0**	**100.0**	**100.0**	**88.9**	**77.8**	**100.0**

***Note*:** Scores represent the level of compliance with the assessed criteria: 0 = No compliance or absence of the required attribute, 1 = Partial compliance with the required attribute, 2 = Full compliance with the required attribute.

Figure 3 presents the distribution of percentage scores of the intervention nursing colleges under Standard IV (Curriculum Delivery). The percentage scores varied between 88.9% and 100.0%, giving a computed range of 11.1 percentage points. The mean score of the eight intervention colleges was 95.8%, with a standard deviation of approximately 4.6, signifying minimal dispersion from the mean. A total of 62.5% of the colleges achieved full scores of 100.0%, while the remaining colleges recorded 88.9%.

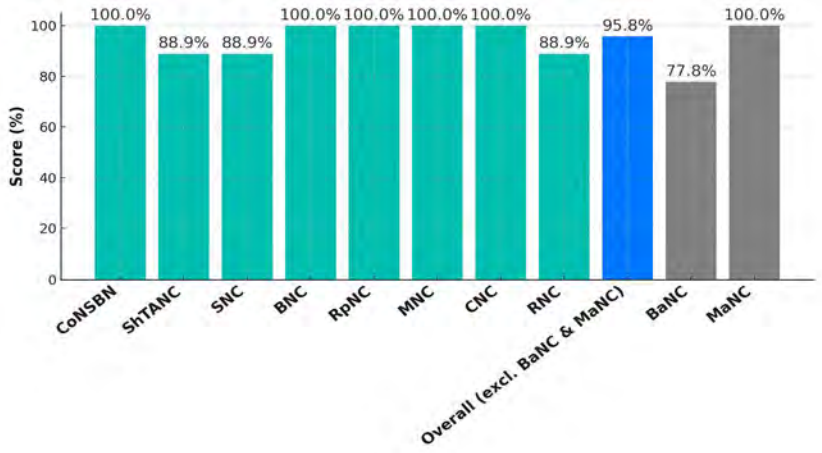


Figure 3: Average percentage scores of colleges for Standard IV

Standard V: Resources

Table 15 contains assessment scores of Standard V (resources) for the eight intervention nursing colleges. The scores ranged between 15 and 20, corresponding to percentage values between 75.0 and 100.0. The total highest score of 20 (100.0%) was achieved by CONSBN, SNC, RpNC, MNC, and RNC, while BNC managed to score 19 points (95.0%), followed by CNC at 18 points (90.0%), and ShTANC scored a total of 15 points (75.0%).

Table 15: Assessment score of standard V for all nursing colleges included in the ELS

Variables	CON SBN	ShT ANC	SNC	BNC	RpN C	MN C	CNC	RNC	Ba NC	MaN C
Library resources available	2	2	2	2	2	2	2	2	2	2
Internet access for students	2	2	2	2	2	2	2	2	2	2
ICT/lab facilities maintained	2	1	2	2	2	2	2	2	2	2
Availability of classrooms	2	1	2	2	2	2	2	2	2	2
Access to teaching aids	2	2	2	2	2	2	2	2	2	2
Sufficient clinical equipment	2	1	2	1	2	2	2	2	1	2
Skills lab with models	2	2	2	2	2	2	2	2	2	2
Accommodation for students	2	0	2	2	2	2	0	2	0	2
Accommodation for teachers	2	2	2	2	2	2	2	2	2	2
Safety and sanitation	2	2	2	2	2	2	2	2	2	2
Total	**20**	**15**	**20**	**19**	**20**	**20**	**18**	**20**	**17**	**20**
%	**100.0**	**75.0**	**100.0**	**95.0**	**100.0**	**100.0**	**90.0**	**100.0**	**85.0**	**100.0**

Figure 4 presents the distribution of the percentage scores of the intervention nursing colleges under Standard V (resources). The figure shows that most of the colleges achieved high percentages with limited variation among institutions. The scores ranged from 75.0% to 100.0%**,** producing a total range of 25.0 percentage points. The mean score of the eight intervention colleges, excluding BaNC and MaNC, was 95.0%, while the standard deviation was approximately 8.1, indicating moderate dispersion from the mean. A total of 75.0% of the colleges achieved full scores of 100%, while the remaining institutions scored below this level.

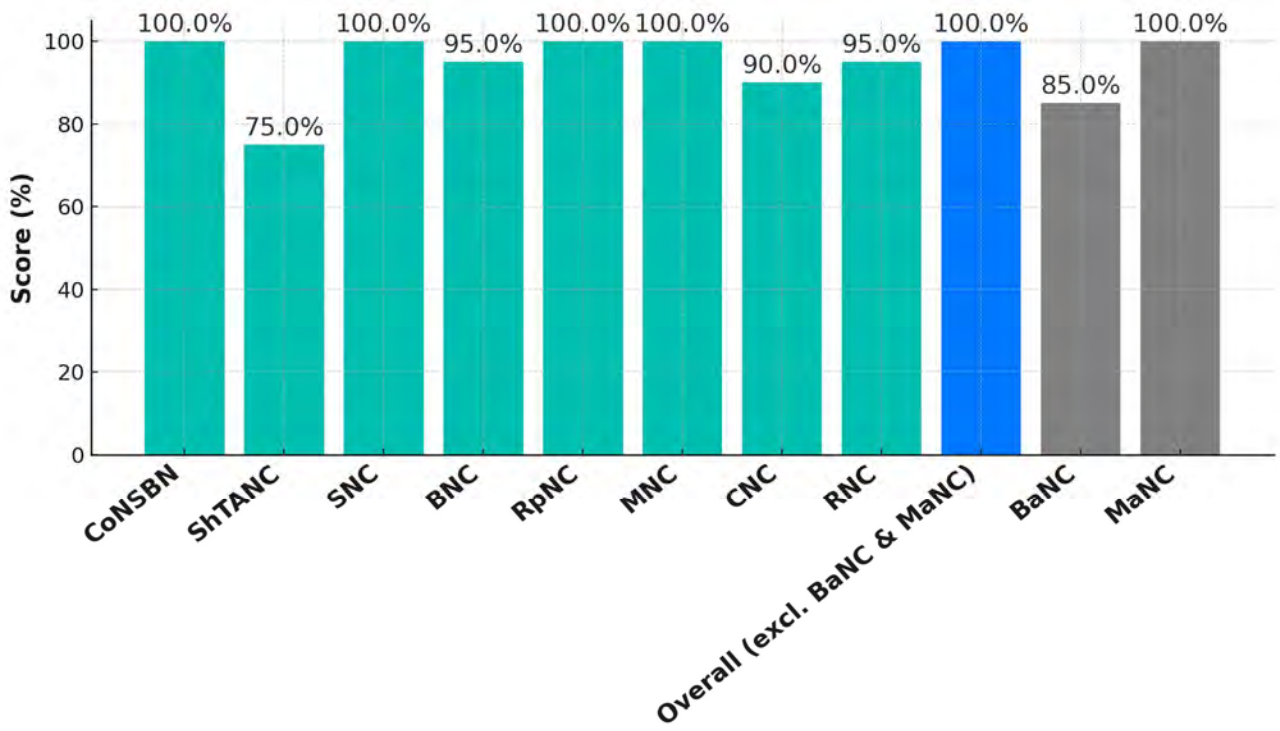


Figure 4: Average percentage scores of colleges for Standard V

3.1.4 Comparing the baseline and the endline accreditation score

Table 16 presents the baseline and endline accreditation scores across the five BNMC standards for the eight intervention nursing colleges. **Table 17** presents the percentage point change between the baseline and endline. The results demonstrate evident progress in most standards, although the improvements are not uniform across colleges.

Table 16: Comparative accreditation scores (baseline & endline)

Standard		CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	Mean	BaNC	MaNC
I	B	60.0	75.0	60.0	80.0	80.0	50.0	65.0	100.0	71.3	40.0	50.0
	E	97.9	91.7	89.6	93.8	97.9	97.9	91.7	85.4	93.2	83.3	95.8
II	B	67.0	100.0	100.0	67.0	100.0	100.0	100.0	100.0	91.8	100.0	100.0
	E	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
III	B	60.0	65.0	65.0	55.0	50.0	45.0	50.0	60.0	56.3	50.0	50.0
	E	100.0	92.9	78.6	78.6	78.6	85.7	71.4	71.4	82.1	92.9	85.7
IV	B	100.0	58.0	83.0	83.0	83.0	83.0	100.0	100.0	86.3	75.0	75.0
	E	100.0	88.9	100.0	88.9	100.0	100.0	100.0	88.9	95.6	77.8	100.0
V	B	89.0	67.0	78.0	61.0	89.0	67.0	72.0	100.0	77.9	72.0	56.0
	E	93.9	48.5	87.9	57.6	97.0	100.0	60.6	84.8	78.8	80.3	90.9

Note: B =Baseline value and E=Endline value

Table 17: Percentage-point change (baseline → endline) of the intervention colleges

Standard	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC
Standard I	+37.9	+16.7	+29.6	+13.8	+17.9	+47.9	+26.7	-14.6
Standard II	+33.0	0.0	0.0	+33.0	0.0	0.0	0.0	0.0
Standard III	+40.0	+27.9	+13.6	+23.6	+28.6	+40.7	+21.4	+11.4
Standard IV	0.0	+30.9	+17.0	+5.9	+17.0	+17.0	0.0	-11.1
Standard V	+4.9	-18.5	+9.9	-3.4	+8.0	+33.0	-11.4	-15.2

For Standard I, the eight intervention colleges showed significant improvement in their accreditation scores, with the average percentage score increasing from 71.3% at baseline to 93.2% at the endline, representing a 21.9 percentage-point improvement. The range of improvements varied across colleges, with a percentage-point change ranging from 13.8 to 47.9 percentage points. Specifically, MNC showed the most significant improvement with an increase of 47.9 percentage points (from 50.0% to 97.9%), while CONSBN increased by 37.9 percentage points (from 60.0% to 97.9%). Other colleges, such as SNC, BNC, and CNC, also showed significant improvements, with increases of 29.6, 13.8, and 26.7 percentage points, respectively. However, RNC was an exception, as it experienced a decline in its score, dropping by 14.6 percentage points (from 100.0% to 85.4%). This variation highlights that while most colleges showed marked improvement, RNC did not follow the overall trend.

For Standard II, the mean score improved from 91.8% at baseline to 100.0% at the endline, indicating total compliance with the admission process across all colleges. **Table 17** reveals that colleges that were initially below 100%, such as CONSBN and BNC, showed the most significant improvement, increasing by 33.0 percentage points each (from 67.0% to 100.0%). This confirms that, by the endline, all colleges had fully complied with the centrally managed admission process, ensuring uniform implementation across the institutions.

For Standard III, the average score changed from 56.3% at baseline to 82.1% at the endline, reflecting a 25.8 percentage-point improvement. All colleges made progress in this standard, with the most notable improvements seen in CONSBN, which increased by 40.0 percentage points (from 60.0% to 100.0%), and ShTANC, which improved by 27.9 percentage points (from 65.0% to 92.9%). However, RNC showed a more modest improvement of 11.4 percentage points (from 60.0% to 71.4%).

The average score for Standard IV increased significantly from 86.3% at baseline to 95.6% at the endline, a 9.3 percentage-point improvement. Most colleges, including CONSBN, SNC, RpNC, MNC, and CNC, achieved near-perfect scores of 100% by the endline. However, RNC decreased from 100% to 88.9%, indicating that although the majority of colleges demonstrated strong performance in curriculum delivery, there was some variation in consistency.

In Standard V, the mean score showed a modest increase from 77.9% at baseline to 78.8% at the endline, reflecting an improvement of only 0.9 percentage points. However, the data reveal variations across institutions, with some colleges showing declines in their scores. Specifically, ShTANC saw a significant drop of -18.5 percentage points (from 67.0% to 48.5%), and RNC also experienced a decline of -15.2 percentage points (from 100% to 84.8%). These declines can be attributed to differences in physical and educational infrastructure across the colleges. ShTANC faced challenges with resource allocation, infrastructure, and other factors that impacted its ability

to maintain its resources. On the other hand, RNC's drop, despite initially achieving 100%, could be linked to internal changes, potential issues with resource management, or shifts in the availability or quality of educational resources, leading to a slight decline in performance. In contrast, MNC showed significant improvement in this area, increasing from 67.0% to 100%, reflecting better management and improved resources available at the college.

In **Figure 5**, the comparative accreditation scores for nursing colleges under Standard I are presented, showcasing improvements from baseline to endline. The baseline scores ranged from 50.0% to 100.0%, while endline scores varied from 85.4% to 97.9%, highlighting an upward shift across all colleges. The average baseline score for the eight intervention colleges was 71.3%, and this increased to 93.2% at the endline, demonstrating a mean improvement of 21.9 percentage points. The standard deviation, reflecting the variability in the results, decreased from 16.6 to 4.2, indicating a reduction in differences between the colleges at the endline.

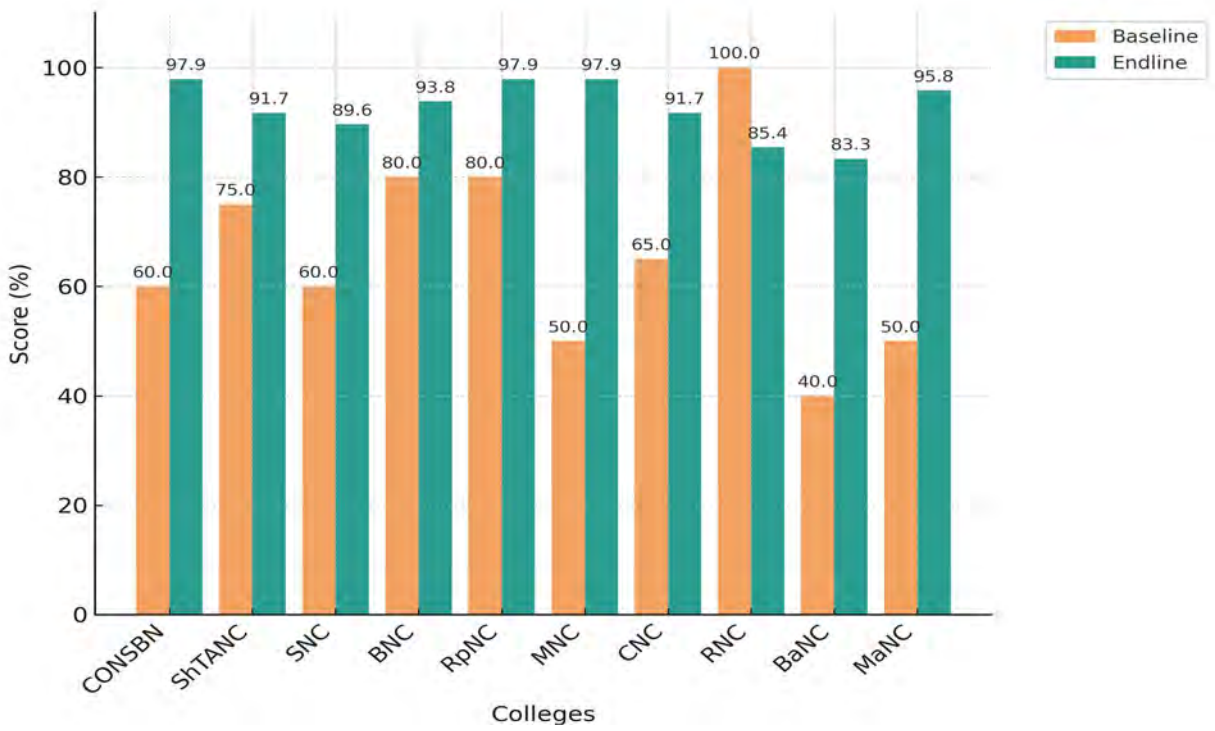


Figure 5: Comparative accreditation scores (baseline vs endline) – Standard I

Figure 6 presents the comparative baseline and endline percentage scores of the intervention nursing colleges under Standard II. At the endline, all institutions achieved full compliance, with scores reaching 100.0%. In contrast, at baseline, scores ranged from 67.0% to 100.0%. The average baseline score for the eight intervention colleges was 91.8%, which increased to 100.0% at the endline, showing a gain of 8.2 percentage points. The standard deviation decreased from 13.1 to 0.0, indicating that differences in performance among the colleges became smaller at endline.

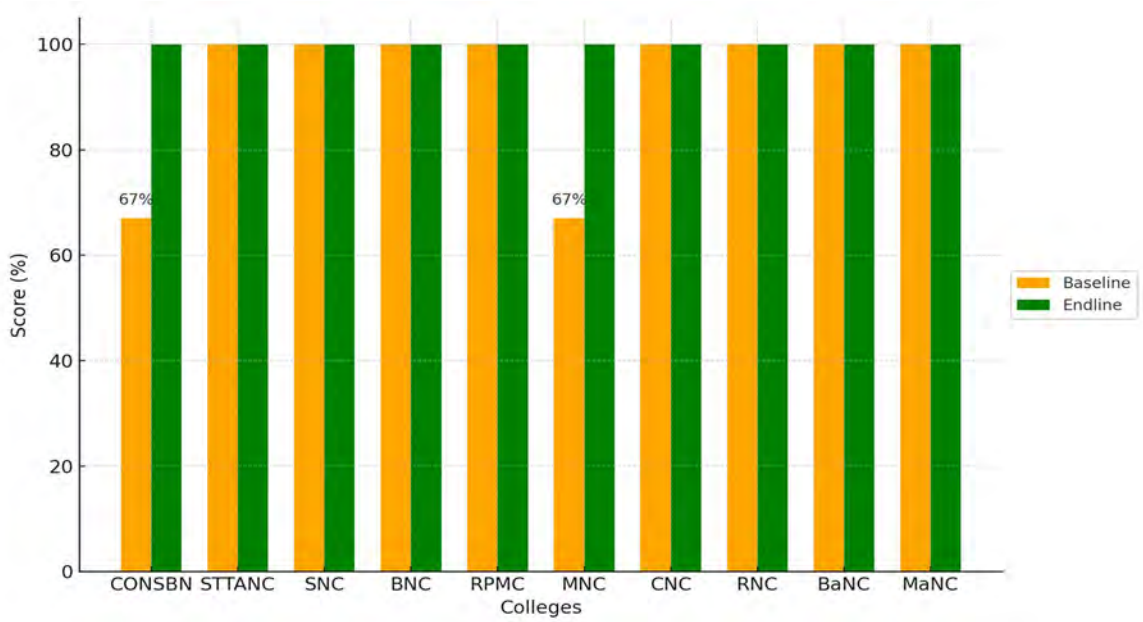


Figure 6: Comparative accreditation scores by colleges (baseline vs endline) – Standard II

Figure 7 illustrates the comparative baseline and endline percentage scores achieved under Standard III across the intervention nursing colleges. The scores show a clear upward progression from baseline to endline. At baseline, the percentages ranged from 45.0% to 65.0%, while at endline, they ranged from 71.4% to 100.0%, indicating consistent improvement across all colleges. The average baseline score for the eight colleges was 56.3%, which increased to 82.1% at endline, reflecting an average improvement of 25.8 percentage points. The standard deviation decreased from 10.3 to 7.8, indicating that differences in performance among the colleges became smaller at endline.

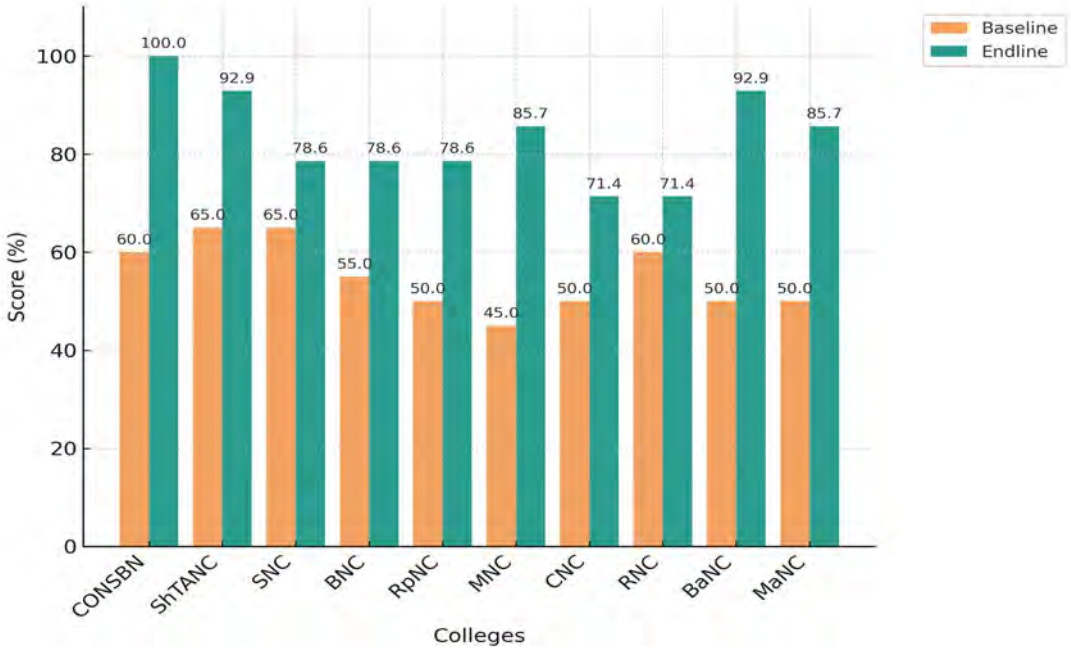


Figure 7: Comparative accreditation scores by colleges (baseline vs endline) – Standard III

Figure 8 presents the comparative baseline and endline percentage scores for the intervention nursing colleges under Standard IV. The data reveals an overall improvement across all institutions, with endline scores showing higher results compared to baseline. At baseline, the percentages ranged from 58.0% to 100.0%, while at endline, they ranged from 88.9% to 100.0%, indicating a consistent upward trend. The average baseline score for the eight colleges was 86.3%, which increased to 95.6% at the endline, reflecting an improvement of 9.3 percentage points. The standard deviation decreased from 12.5 to 4.6, indicating that differences in performance among the colleges became smaller at endline.

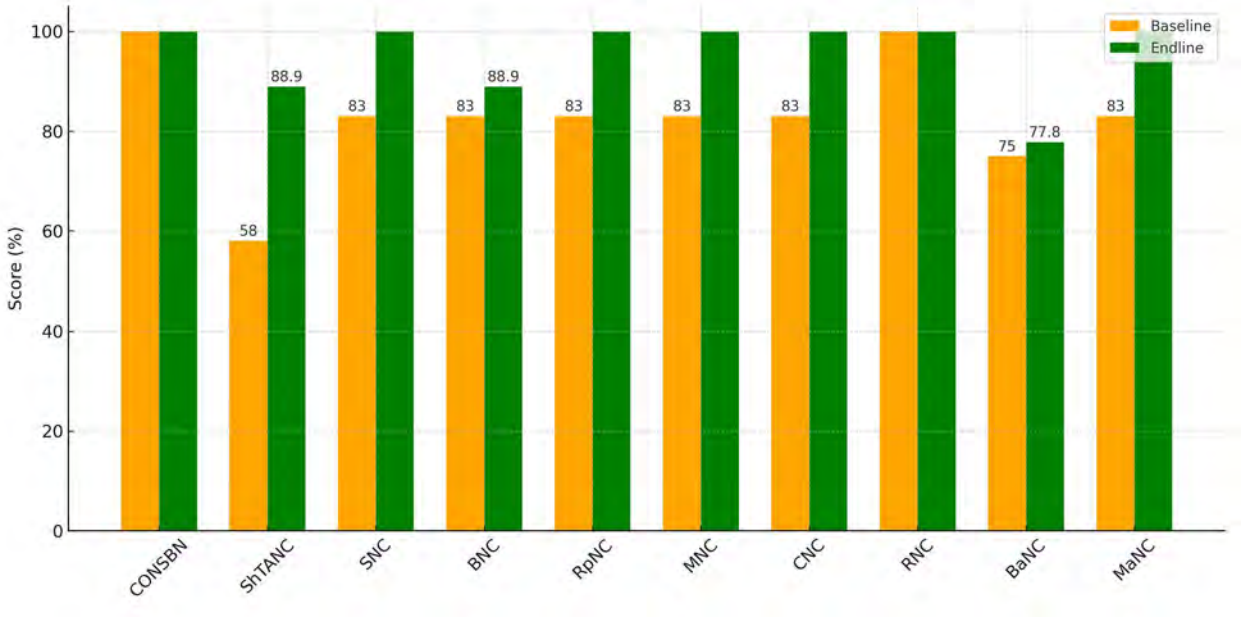


Figure 8: Comparative accreditation scores (baseline vs endline) – Standard IV

Figure 9 provides a summary of the comparative baseline and endline percentage scores for the intervention nursing colleges under Standard V (Resources). The data reveals an overall increase in scores across all colleges, from baseline to endline. Specifically, the baseline scores ranged from 57.6% to 100.0%, while endline scores ranged from 84.8% to 100.0%, indicating clear upward shifts in the performance of the institutions. The mean baseline score for the eight colleges was 77.9%, and by endline, it increased to 78.8%, representing an average improvement of 0.9 percentage points. The standard deviation decreased from 14.8 to 8.1, indicating that differences in performance among the colleges became smaller at endline.

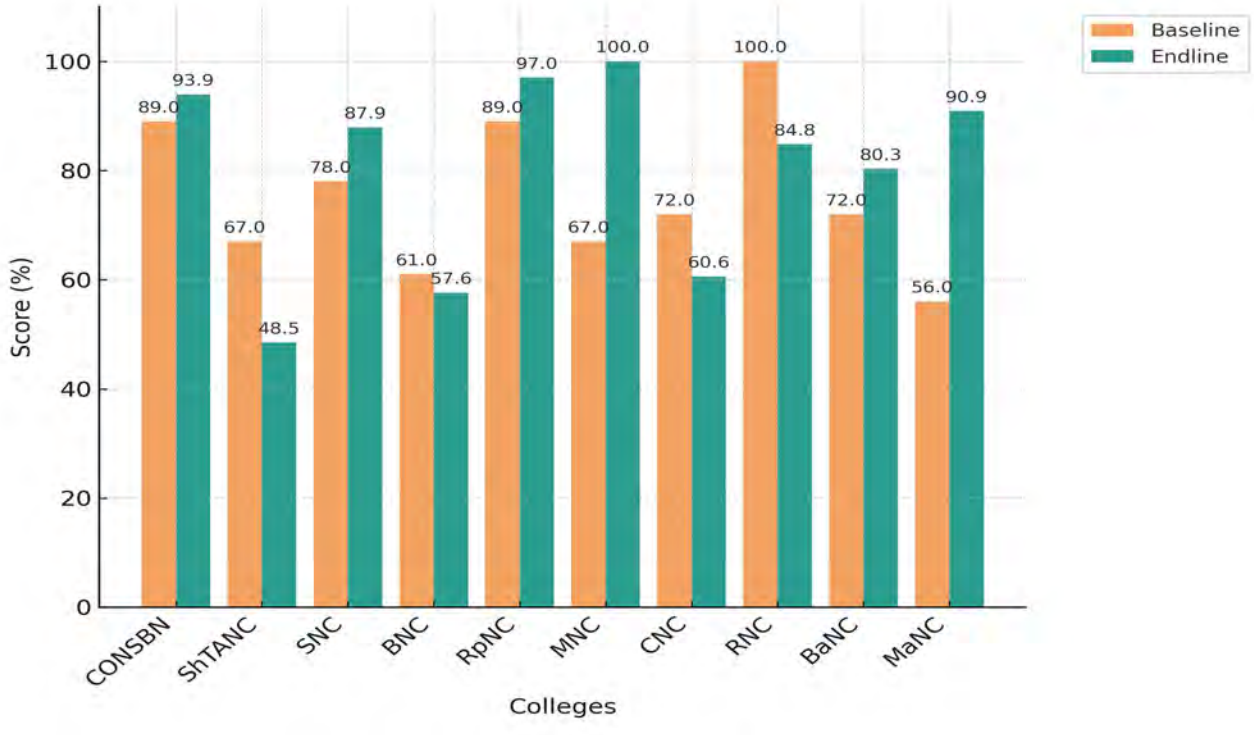


Figure 9: Comparative accreditation scores (baseline vs endline) – Standard V

3.1.5 Effects of the project input and changes since 2022: Committee activities, MT training, FD training, research activities, subject-based nursing

In this section, we review the establishment years of various committees in nursing colleges, focusing on the Faculty Development (FD) Committee, Quality Improvement (QI) Committee, Research Committee (RC), and Coordination Committee (CC). These committees are integral to the academic and administrative frameworks of the colleges, supporting key activities such as faculty development, quality improvement, and research activities. The Coordination Committee (CC), in particular, plays a vital role in improving nursing students' clinical practice, a key activity of CBNS II. This committee ensures that nursing students gain hands-on, practical experience that enhances their clinical training and is critical to their professional development. Each committee was established and provides valuable insight into the pace and progression of institutional development across these colleges.

Variation in establishment years across colleges highlights different stages of institutional growth (**Table 18**). For instance, colleges like Shaheed Tajuddin Ahmad Nursing College, Gazipur, and Sylhet Nursing College, Sylhet, established their committees as early as 2021 and 2022, indicating a relatively early focus on formalizing structures to support faculty development and research. Conversely, some colleges, such as Barisal Nursing College, Barisal, and the College of Nursing, Sher-E-Bangla Nagar, Dhaka, established their committees in 2023, suggesting that committee formation may be a more recent priority for these institutions.

Table 18: List of the committees in the nursing colleges with established year

SL No	Name of the College	Faculty Development committee	Quality Improvement Committee	Research Committee	Coordination Committee
1	College of Nursing, Sher-E-Bangla Nagar, Dhaka	2023	2023	2023	2023
2	Shaheed Tajuddin Ahmad Nursing College, Gazipur	2022	2022	2021	2023
3	Sylhet Nursing College, Sylhet	2022	2022	2022	2022
4	Barisal Nursing College, Barisal	2023	2023	2023	2023
5	Rangpur Nursing College, Rangpur	2023	2023	2023	2022
6	Mymensingh Nursing College, Mymensingh	2022	2022	2022	2022
7	Chattogram Nursing College, Chattogram	2023	2023	2023	2023
8	Rajshahi Nursing College, Rajshahi	2023	2023	2023	2023
9	Bandarban Nursing College, Bandarban	0	0	2022	0
10	Manikganj Nursing College, Manikganj	0	0	2023	0

Table 18 shows the list of the committees in the nursing colleges with the established year. It is important to note that the establishment of committees in the eight targeted nursing colleges (between 2022-2023, except for the Research Committee in Shaheed Tajuddin Ahmad Nursing College established in 2021) was significantly supported by the CBNS-II. The expert members' support, including guidance, training, and workshops, contributed to the early formalization of these committees.

On the other hand, Bandarban Nursing College and Manikganj Nursing College still have some unestablished committees (marked as '0'), indicating that these institutions are in the earlier stages of committee formation. This suggests that a lack of support or resources may be a barrier for these non-targeted colleges. If there were continued backup support from entities like DGNM, such as site visits, continuous monitoring, or targeted interventions, these colleges might be able to

accelerate their committee formation process, thereby improving their capacity for faculty development and research support.

This variation in establishment years suggests differing levels of readiness and prioritization among the colleges in terms of building the necessary support structures for faculty and research development. While targeted colleges have benefited from the project's direct support, non-targeted colleges might benefit from additional strategic interventions to expedite their development in these areas.

Existence of Committees

Table 19 lists the available committees in nursing colleges during the ELS, including the FDC, QIC, RC, and CC, all of which were part of the PDM framework. These four committees were recommended by the project to focus on faculty development, quality assurance, research activities, and clinical placement coordination. In addition to these four core committees, several nursing colleges have established committees aligned with their broader institutional priorities and educational needs. Although these committees fall outside the PDM framework, their activities and focus play a critical role in supporting the overall growth and academic development of the colleges.

Table 19: List of available committees in Nursing Colleges during the ELS

Name of the College	PDM Committees (FDC, QIC, RC, CC)	Additional Committees (Institutional / Local)	Total No. of Committees
CONSBN	All 4 established	–	4
ShTANC	All 4 established	Research ethics	5
SNC	All 4 established	Curriculum development	5
BNC	All 4 established	Student affairs	5
RpNC	All 4 established	Internal committee, student affairs, curriculum, research ethics, staff development, clinical practice, student supports	11
MNC	All 4 established	–	4
CNC	All 4 established	–	4
RNC	All 4 established	Internal committee, alumni, curriculum, student support, staff development, clinical practice,	10
BaNC	Not applicable	alumni, curriculum, student support, staff development,[1] clinical practice[2]	6
MaNC	Not applicable	student affairs, curriculum	2

Note: [1] Faculty Development (FD) refers to activities focused on enhancing the teaching skills and academic knowledge of nursing educators, such as workshops, training sessions, and curriculum development. Staff Development encompasses broader professional growth initiatives for both teaching and non-teaching staff, including clinical staff, and focuses on improving clinical skills, patient care, and overall professional competencies in the institution; [2] Clinical Practice & Improvement refers to the hands-on clinical training students undergo, focusing on developing their practical nursing skills through direct patient care and clinical supervision. The Coordination Committee (CC), on the other hand, is responsible for organizing and managing clinical placements, ensuring that students gain exposure to various clinical environments. While clinical practice involves direct training, the Coordination Committee handles the logistical aspects of placements, rotations, and student tracking.

For instance, colleges have formed committees to address student affairs, curriculum development, and research ethics. These committees ensure that various aspects of nursing education, from student support services to curriculum updates and research ethics, are continuously improving. For example: student affairs committees focus on improving student engagement, well-being, and support services to ensure a holistic learning environment. Curriculum development committees work to refine and update nursing programs, ensuring they remain aligned with industry standards and best practices.

Research ethics committees are responsible for establishing protocols for conducting ethical research, especially in clinical settings, and ensuring that all research conducted in the colleges adheres to ethical guidelines. While the names of these committees may differ across colleges, their core purpose remains the same: to enhance the academic, clinical, and professional development of both faculty and students. The establishment of these committees signifies a growing commitment within the colleges to address various facets of nursing education and professional practice, beyond the core PDM framework**.**

Figure 10 illustrates the number of active committees in the targeted nursing colleges, focusing on the improvement of nursing education governance. Among the eight intervention colleges, the number of active committees ranges from a minimum of 4 to a maximum of 12, with a mean of 6.0, a median of 4.5, and a mode of 4. The lowest observed number of active committees is 4, while the highest is 12, yielding a range of 8. The college with the highest number of active committees is RpNC, with 12 committees, followed by RNC, which has 10 committees. Other colleges such as CONSBN, BNC, MNC, and CNC have 4 committees each, while ShTANC and SNC each have 5 committees.

It is important to note that the four committees mentioned are the recommended committees for enhancing nursing education, and the other committees observed in the colleges beyond the four recommendations represent additional institutional priorities or initiatives that the colleges have established to further support their academic and administrative frameworks. This variation in the number of committees reflects differences in institutional priorities and the extent to which colleges have expanded their governance structures beyond the recommended committees.

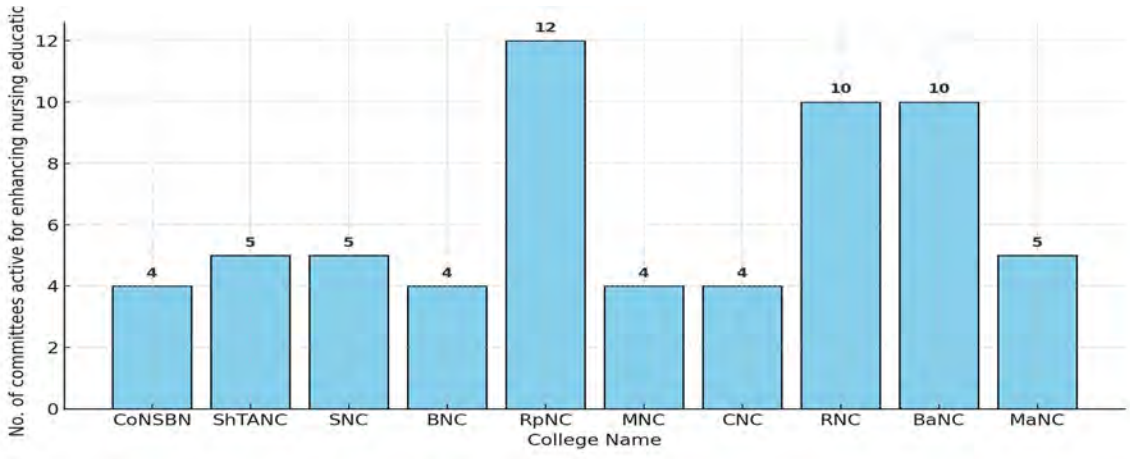


Figure 10: Number of active committees in colleges

3.1.6 Performance of committee meetings across the target colleges in the recent 12 months (August 2024-August 2025)

According to **Table 20**, only three colleges—ShTANC, MNC, and CONSBN—achieved a meeting rate of 80% or higher for the FDC. Among these, ShTANC recorded the highest activity rate (208.3%), which may be due to higher engagement or greater committee activity. Other colleges held fewer meetings than the monthly target, with some having meeting frequencies that were significantly lower.

Table 20: Faculty Development Committee (FDC) meeting performance by colleges

Name of the College	Planned	Held	% of Planned Held on	Achieved (≥80%)
CONSBN	12	12	100.0	Yes
ShTANC	12	25	208.3	Yes
SNC	12	4	33.3	No
BNC	12	8	66.7	No
RpNC	12	1	8.3	No
MNC	12	12	100.0	Yes
CNC	12	5	41.7	No
RNC	12	3	25.0	No

Note: In accordance with the Project Design Matrix, each committee is expected to hold meetings based on the following schedule: monthly (12 times per year) for the Faculty Development Committee (FDC), Quality Improvement Committee (QIC), and Coordination Committee (CC); and bi-monthly (6 times per year) for the Research Committee (RC). Achievement (%) is calculated as (Held ÷ Planned) × 100. A result of 80% or higher is considered Achieved in accordance with the revised PDM criteria.

Variation in the number of FDC meetings across nursing colleges can be partly explained by the ELS findings. Colleges like ShTANC, MNC, and CONSBN reported stronger administrative systems, enough qualified faculty, and greater faculty engagement in Faculty Development (FD) or Master Trainer (MT) training during the CBNS-II. These factors likely contributed to their ability to organize FDC meetings regularly and meet or exceed the expected targets.

However, colleges such as RNC, RpNC, and SNC reported limited administrative planning, fewer trained faculty members, and ongoing accreditation challenges, which were associated with fewer meetings. While these factors are correlated with reduced meeting frequency, it is important to note that these observations do not imply a direct causal relationship. The ELS results suggest that leadership engagement, human resource capacity, and participation in CBNS-II training may influence committee activity and overall institutional performance, but further analysis would be needed to confirm these causal links.

Table 21 shows that only ShTANC and MNC achieved the 80% target for QIC meetings, while others have fallen significantly shortly. The overall QIC meeting frequency across colleges is below expectation.

Table 21: Quality Improvement Committee (QIC) meeting performance by colleges

Name of the College	Planned	Held	% of Planned Held on	Achieved (≥80%)
CONSBN	12	4	33.3	No
ShTANC	12	25	208.3	Yes
SNC	12	4	33.3	No
BNC	12	1	8.3	No
RpNC	12	2	16.7	No
MNC	12	12	100.0	Yes
CNC	12	4	33.3	No
RNC	12	2	16.7	No

Table 22 shows that four colleges, CONSBN, ShTANC, MNC, and to a lesser extent SNC—maintained strong RC activity, with ShTANC achieving the highest rate (416.7%) of RC activities. However, most other colleges conducted fewer than half of the expected bi-monthly meetings.

Table 22: Research Committee (RC) meeting performance by colleges

Name of the College	Planned	Held	% of Planned Held on	Achieved (≥80%)
CONSBN	6	12	200.0	Yes
ShTANC	6	25	416.7	Yes
SNC	6	4	66.7	No
BNC	6	2	33.3	No
RpNC	6	1	16.7	No
MNC	6	12	200.0	Yes
CNC	6	3	50.0	No
RNC	6	1	16.7	No

Table 23 shows that ShTANC, MNC, and CONSBN were the only colleges meeting the monthly standard (≥80.0%) for CC. ShTANC showed exceptional engagement with 250.0% achievement. The remaining colleges exhibited weak committee operations.

Table 23: Coordination Committee (CC) meeting performance by colleges

Name of the College	Planned	Held	% of Planned Held on	Achieved (≥80%)
CONSBN	12	12	100.0	Yes
ShTANC	12	30	250.0	Yes
SNC	12	4	33.3	No
BNC	12	5	41.7	No
RpNC	12	1	8.3	No
MNC	12	12	100.0	Yes
CNC	12	3	25.0	No
RNC	12	1	8.3	No

3.1.7 Dissemination of committee decisions in nursing colleges under the project

Under the CBNS-II, Faculty Development Committees (FDCs) were created within nursing colleges as a means of strengthening the capacity of faculty and the quality of teaching. FDC activities were conducted in conjunction with the MTs and FDCs facilitated under the project (**Table 24**). Trained MTs conducted in-house faculty development sessions aimed at improving faculty members' teaching skills, understanding of the curriculum, and student supervision. The minutes of meetings from the colleges indicate that FDCs discussed matters related to curriculum review, lesson planning, in-house training, and student performance improvement. These activities show how the CBNS-II training outcomes have been integrated into institutional practice and faculty management systems**.**

Table 24: Faculty Development Committee (FDC) activities and their effects in nursing colleges under the CBNS-II

Name of the College	FDC Discussion Points and Activities	Observed Effects and Outcomes
CONSBN	Conducted a needs assessment and reviewed existing curriculum to align with competency-based standards.	Curriculum updated; faculty adapted improved teaching materials and assessment tools.
ShTANC	Focused on developing PowerPoint presentation and teaching delivery skills among faculty.	Enhanced faculty competency in digital and interactive teaching methods.
SNC	Discussed teachers' development and sharing of best instructional practices.	Improved peer collaboration and confidence in classroom teaching.
BNC	Focused on BSc Nursing examination preparation, research guidance and monitoring, and improvement of student lab and clinical practice.	Faculty provided better research supervision, strengthened student clinical mentoring, and improved exam readiness.
RpNC	Reviewed FD training contents and discussed ways to apply lessons learned from MT and FD training.	Increased faculty engagement in in-house training and adaptation of new teaching approaches.
MNC	Organized in-house training sessions and reviewed lesson plans to improve classroom delivery.	Faculty refined lesson plans and integrated updated teaching techniques.
CNC	Conducted in-house FD training and reviewed lesson planning and teaching methods.	Teachers improved lesson structure, timing, and evaluation methods.
RNC	Reviewed curriculum and lesson plans; discussed class absenteeism and poor student academic results.	Implemented remedial teaching strategies and attendance monitoring to improve student academic performance.

Under the CBNS-II, Quality Improvement Committees (QICs) were formed in nursing colleges for systematically monitoring educational and clinical quality (**Table 25**). Activities related to the MT and FD training, such as faculty evaluation, curriculum execution, and student learning management, were implemented by the committees. Actions recorded in QIC meetings included faculty evaluation, lesson evaluation, and application of academic calendars, quality training follow-up, and student monitoring. These committees' functions have helped strengthen the institutional quality assurance systems of the colleges involved.

Table 25: Quality Improvement Committee (QIC) activities and their effects in nursing colleges under the CBNS-II

Name of the College	QIC Discussion Points and Activities	Observed Effects and Outcomes
CONSBN	Conducted subject-based faculty evaluation to review teaching performance.	Faculty evaluation system strengthened; feedback used for teaching improvement.
ShTANC	Checked teachers' handouts and observed classroom teaching through closed-circuit monitoring.	Improved lesson delivery and compliance with academic standards.
SNC	Discussed use of academic calendar and faculty rotation for course management.	Academic scheduling and faculty allocation became more systematic.
BNC	Shared knowledge gained from in-house faculty development and quality improvement training.	Faculty applied training outcomes to strengthen classroom and clinical teaching quality.
RpNC	Discussed student placement processes and monitoring mechanisms.	Improved coordination and documentation of student clinical placement.
MNC	Reviewed QIC reports and attached updates to faculty improvement records.	Institutional documentation and follow-up on quality initiatives strengthened.
CNC	Monitored student clinical practice and encouraged students, teachers, and staff participation in QIC activities.	Enhanced motivation and participation in maintaining academic and clinical quality.
RNC	Discussed student failure cases, entrance criteria, curriculum development, and coordination with private colleges.	Implemented follow-up on student performance, curriculum review, and inter-college coordination.

Research committees (RCs) in nursing colleges under the CBNS-II were intended to promote faculty and student engagement in research (**Table 26**). The committees' activities complemented those of the MT and FD training, focusing on evidence-based education and applied research. RC activities included providing research guidance to students, strengthening the research cell's operations, and facilitating faculty-led and collaborative research. These initiatives ensured the development of institutional capacity to conduct and supervise research within the colleges participating.

Table 26: Research Committee (RC) activities and their effects in nursing colleges under the CBNS-II

Name of the College	Research Committee (RC) Activities	Observed Effects and Outcomes
CONSBN	Guided students in research and encouraged them to participate in study projects.	Student research involvement increased; faculty supervision strengthened.
ShTANC	Encouraged faculty members to conduct collaborative research projects.	Faculty initiated small-scale collaborative studies and shared findings internally.

Name of the College	Research Committee (RC) Activities	Observed Effects and Outcomes
SNC	Worked on improving the function of the research cell and record-keeping.	Institutional mechanism for managing research activities improved.
BNC	Provided research guidance to students and supported faculty in supervision.	Research supervision and documentation practices strengthened.
RpNC	Offered guidance to students in research planning and implementation.	Research awareness and mentorship practices among faculty improved.
MNC	Focused on organizational rules and implementation of BSc-level research.	Research activities aligned with institutional policy and undergraduate curriculum.
CNC	Provided research guidance and follow-up for ongoing student research.	Increased research completion rate and monitoring efficiency.
RNC	Supported students in conducting research and maintaining records.	Research supervision activities continued, and student outputs improved.

In CBNS-II, CCs were established in nursing colleges to strengthen the partnership between academic institutions and clinical hospitals. These committees played a role in improving communication, mentoring arrangements, and supervision, which are essential for creating effective learning environments in line with the project's objectives, such as MT and FD training.

The activities of the committees, including developing clinical practice guidelines, coordinating with hospitals, and providing student support, contributed to improving coordination between academic and clinical partners. While the committees helped to improve communication between these two entities, facilitating smoother implementation of nursing education and clinical practice, it is important to note that these activities are correlated with better coordination rather than implying direct causality.

Table 27: Coordination Committee (CC) activities and their effects in nursing colleges under the CBNS-II activities

Name of the College	Coordination Committee (CC) activities	Observed Effects and Outcomes
CONSBN	Selected clinical areas, modified checklists, and developed clinical practice guidelines. for standardized teaching[1]	Clinical teaching system standardized; coordination with hospital departments improved.
ShTANC	Coordinated clinical practice activities and maintained good relationships with hospitals.	Enhanced collaboration between college and hospital for student clinical placement.
SNC	Facilitated communication and coordination among faculty and hospital supervisors.	Strengthened information flow and problem-solving between academic and clinical teams.
BNC	Conducted meetings on idea sharing, preparation of practical teams, mentor plan	Improved teamwork, mentorship structure, and preparation for research approval processes.

Name of the College	Coordination Committee (CC) activities	Observed Effects and Outcomes
	implementation, group activities, and IRB matters.	
RpNC	Focused on maintaining communication and coordination between faculty and clinical staff.	Coordination for clinical scheduling and supervision became more consistent.
MNC	Reviewed coordination reports and attached updates to meeting records.	Monitoring of coordination activities improved through regular documentation.
CNC	Promoted nursing professionalism to ensure quality patient care and effective coordination.	Professional collaboration enhanced and care quality standards reinforced.
RNC	Discussed accreditation, clinical practice issues, and problem-solving for students with hospitals.	Improved accreditation readiness and stronger linkage between college and hospital management.

Note: [1] The CONSBN Coordination Committee developed clinical practice guidelines between March and June 2024 to standardize clinical teaching. Adapted from CBNS-II checklists and national nursing standards, the guidelines are used by faculty and CNTs for supervision and evaluation during student placements, ensuring consistent instruction and improved coordination with hospital departments.

There was considerable variation in MT involvement and participation in teaching, mentoring, and FD across the eight outreach nursing colleges associated with the CBNS-II (**Table 28**). At CONSBN, MTs conducted quarterly in-house training sessions tailored to develop faculty members' teaching skills and enhance their clinical supervision capacity. In the case of ShTANC, three MTs were prepared and mentored to assume leadership roles in FD and to improve clinical teaching practices. At SNC, MT worked with CNTs to design and implement competency-based clinical training modules that integrated theoretical learning with practical applications.

Table 28: Summary of the Master Trainers' activities under the CBNS-II

Name of the College	Master Trainers (MT)'s activities under the project
CONSBN	Master Trainers (MTs) conduct in-house training session's quarterly[1] to strengthen faculty members' teaching skills and enhance clinical supervision capacity.
ShTANC	Three Master Trainers are being prepared and mentored to assume responsibility for future faculty development and clinical teaching improvement.
SNC	Master Trainers collaborate with Clinical Nurse Teachers (CNTs) to design and implement competency-based clinical training modules.
BNC	Faculty members trained as Master Trainers conduct mentoring sessions for CNTs to improve clinical teaching and supervision practices.
RpNC	Master Trainers focus on continuous improvement of clinical teaching quality through structured supervision and constructive feedback to CNTs and faculty members.
MNC	Master Trainers engage in self-learning and peer-exchange workshops to enhance their own teaching and mentoring competencies.
CNC	Master Trainers and CNTs work collaboratively in joint sessions focused on curriculum development and teaching innovation.
RNC	Master Trainers participate in curriculum review and evaluation to ensure alignment between theoretical instruction and clinical practice.

Note: [1] At CONSBN, Master Trainers conduct quarterly in-house training sessions on lesson planning, student evaluation, clinical supervision, use of simulation laboratories, and research-oriented teaching to enhance faculty teaching and mentoring capacity.

In Barisal, mentoring sessions for CNT training at Barisal Medical College Hospital were facilitated by college MTs. These sessions were designed to enhance the quality of clinical teaching and supervision in collaboration with the Nursing College. At RpNC, MTs highlighted the continuous improvement of clinical teaching through structured supervision and constructive feedback for both faculty at the college and MTs/CNTs at the hospital. MTs at MNC emphasized self-learning and peer-exchange workshops as a means of further developing their teaching and mentoring skills and competencies. In CNC, collaboration between MTs (both at the college and hospital) and CNTs (at the hospital) centered on joint sessions on curriculum development and innovative teaching approaches, whereas RNC involved MTs in curriculum reviews and evaluations to align theoretical lessons with clinical practice.

Table 29 provides a brief overview of the faculty development activities conducted by the eight colleges participating in the CBNS-II. The data indicate that most institutions have initiated organized programs to enhance professional capacity and the effectiveness of their faculty members. CONSBN has focused on in-house training programs to improve faculty members' pedagogical competence, while ShTANC plans to propose its own programs. Teaching and instructional skills development among educators has been the focus of SNC and BNC, while RpNC has offered a more structured approach with formal faculty development training programs. MNC has emphasized the development and enhancement of laboratory and lecture/demonstration skills. Teachers' support in lesson planning and classroom organization has been the focus of CNC, while RNC seems more concerned with training in time management in instruction and administrative matters.

Table 29: Summary of Faculty Development Committee activities under the CBNS-II

Name of the College	Faculty Development Committee activities
CONSBN	Conducts in-house training sessions for faculty members to enhance teaching effectiveness.
ShTANC	Faculty development activities are currently in the proposal stage.
SNC	Focus on developing teaching skills among faculty members.
BNC	Aims to strengthen instructional and professional skills of teachers.
RpNC	Organizes and conducts faculty development training programs.
MNC	1. Develops faculty competence in conducting laboratory lessons. 2. Enhances ability to deliver lectures and demonstrate skills during practical lessons and evaluations.
CNC	Provides guidance on lesson planning and effective classroom organization.
RNC	Conducts training on time management for teaching and administrative tasks.

Table 30 summarizes the research-related activities conducted or promoted by nursing colleges under the CBNS-II. Activities include research supervision, faculty-led studies, and evidence-based practice initiatives. At CONSBN, research activities were promoted by encouraging faculty and student involvement, particularly in small-scale studies and academic projects. ShTANC maintained ongoing institutional research activities and supported faculty participation in research and the development of student-led research projects. At SNC, faculty members guide students in developing research skills and implementing nursing research projects. BNC increased participation in research activities by motivating faculty and encouraging student-led research.

At RpNC, research initiatives were expanded through the increased involvement of faculty and students in research participation and dissemination. MNC focused on faculty capacity building and research monitoring, while CNC demonstrated overall improvement in research engagement and coordination among faculty members. RNC conducted research linked to evidence-based nursing, focusing on improving effective care delivery and cost-effectiveness.

While some colleges, such as MNC and RNC, have developed active research environments with increased faculty and student participation, others are still in the early stages of establishing robust research systems. For example, BaNC and MaNC did not conduct research activities during the assessment period.

Table 30: Summary of the Institutional and Faculty Research activities under CBNS-II

Name of the College	Description of Research Activities
CONSBN	Promoted faculty and student engagement in research by inspiring participation and encouraging topic selection relevant to nursing education and practice.
ShTANC	Maintained ongoing institutional research activities and supported faculty involvement in small-scale studies and academic projects.
SNC	Faculty members actively guided students in developing research skills and implementing nursing research projects.
BNC	Increased participation in research activities through faculty motivation and encouragement of student-led research.
RpNC	Expanded institutional research initiatives by increasing faculty and student research participation and dissemination.
MNC	Focused on faculty capacity building, encouraged individual research initiatives, and strengthened monitoring and supervision of ongoing research activities.
CNC	Demonstrated overall improvement in research engagement through enhanced coordination among faculty members and inclusion of research components in academic programs.
RNC	Conducted research linked to evidence-based nursing, focusing on improving effective care delivery and cost-effectiveness of nursing practices.

3.2 Students' satisfaction on a different scale of 8 targeted nursing colleges

Student satisfaction was evaluated with the Course Experience Questionnaire (CEQ), which has been described under Questionnaire Development. The CEQ has six scales: Student Support Scale (SSS), Learning Resources Scale (LRS), Course Organization Scale (COS), Learning Community Scale (LCS), Graduate Qualities Scale (GQS), and Intellectual Motivation Scale (IMS).

Table 31: Course Experience Questionnaire (CEQ) scale

Abbreviation	Subjects
SSS	Students Support Scale
LRS	Learning Resource Scale
COS	Information related to the Course Organization Scale
LCS	Learning Community Scale
GQS	Graduate Qualities Scale
IMS	Information related to the Intellectual Motivation Scale

3.2.1 Changes in students' satisfaction compared to the baseline survey

Table 32 compares baseline and endline percentages of positive and negative responses across six categories—SSS, LRS, COS, LCS, GQS, and IMS—and their respective overall averages. At baseline, the average positive response rate was 72.5%, while the average negative response rate was 27.5%. Among the individual categories, GQS (88.7%) and IMS (85.7%) had the highest

positive response rates, while SSS (53.6%) and LRS (61.4%) recorded the weakest initial performance or satisfaction in these areas. In contrast, by the endline, most categories showed improvement in positive response rates, with the overall average increasing from 72.5% to 76.0%. However, GQS and IMS showed a decline in positive responses, from 88.7% to 83.2% and from 85.7% to 83.2%, respectively. The categories with notable increases were SSS, which improved from 53.6% to 61.9%, and LRS, which increased from 61.4% to 69.0%. COS climbed to 70.1%, while LCS and GQS had robust positive responses at 88.7%. Despite a decline in IMS from 85.7% to 83.2%, it still maintained one of the strongest endline scores overall.

Negative responses have decreased in line with positive responses, from an average of 27.5% at baseline to 24.0% at endline. As the percentage of positive responses increased, adverse reactions naturally decreased, particularly in categories like **SSS** and **LRS**, where negative responses fell by **8–10 percentage points**. This reduction in negative responses reflects the overall improvement in satisfaction levels. Overall, the data indicates modest improvements in favorable response rates across most categories from baseline to endline, with GQS and IMS consistently showing the highest proportions of positive responses.

Table 32: Student satisfaction through positive and negative response rate (%)

Category	Average	SSS	LRS	COS	LCS	GQS	IMS
Baseline Positive	72.5	53.6	61.4	64.8	83.4	88.7	85.7
Endline Positive	76.0	61.9	69.0	70.1	88.7	83.2	83.2
Baseline Negative	27.5	46.4	38.6	35.2	16.6	11.3	14.3
Endline Negative	24.0	38.1	31.0	29.9	11.3	16.8	16.8

Figure 11 presents a comparison of baseline and endline positive response percentages across six parameters (SSS, LRS, COS, LCS, GQS, and IMS). In most parameters, the endline values (blue bars) are higher than the baseline values (orange bars). At baseline, positive responses for SSS, LRS, and COS ranged from approximately 50% to 65%. At endline, these percentages increased, with SSS rising from about 54% to 62%, LRS from 61% to 69%, and COS from 65% to 70%. For LCS, the percentage increased from approximately 83% at baseline to about 89% at endline. GQS and IMS, which had relatively high baseline values (around 89% and 86%), show only minor changes between the two times. Overall, the figure shows percentage differences between baseline and endline across the six parameters, with larger increases observed in SSS, LRS, and COS, and smaller changes in LCS, GQS, and IMS.



Figure 11: Total score of each scale (baseline vs endline)

3.2.2 Student Support Scale status of Nursing colleges

Table 33 and **Table 34** provided baseline, endline results, and comparisons for five SSS indicators in the intervention colleges. Access to the library was recorded at 55.3% in baseline and 71.9% in endline, while IT resources were rated at 32.4% in baseline and 55.8% in endline. Satisfaction with the learning process remained relatively constant, showing only slight improvement, going from 71.3% to 72.9%. On the contrary, the indicator met requirements dropped slightly from 68.2% to 54.2%. In contrast, access to relevant resources was rated better in endline, going from 35.9% to 55.0%.

Table 33: The detailed description of Student Support Scale (SSS)

SSS Item	Statement
SSS 1	The library services were readily accessible.
SSS 2	I was able to access information technology resources when I needed them.
SSS 3	I was satisfied with the course and careers advice student learning outcomes.
SSS 4a	Health services met my requirements.
SSS 4b	Welfare services met my requirements.
SSS 4c	Counseling services met my requirements.
SSS 5	Relevant learning resources were accessible when I needed them.

Table 34: Positive and Negative Percentages of SSS (baseline vs endline) in the targeted colleges (%)

Item	Baseline Positive	Endline Positive	Baseline Negative	Endline Negative
SSS 1: Library access	55.3	71.9	44.7	28.1
SSS 2: IT resources	32.4	55.8	67.6	44.2
SSS 3: Satisfied with learning	71.3	72.9	28.7	27.1
SSS 4: Met requirements	68.2	54.2	31.8	45.8
SSS 5: Relevant resources accessible	35.9	55.0	64.1	45.0

The results show that "Library access" recorded baseline and endline values of 55.3% and 71.7%. "IT resources" showed 32.4% at baseline and 55.8% at endline. "Satisfied with learning" presented 71.0% at baseline and 72.8% at endline. "Met requirements" showed 68.3% at baseline and 54.3% at endline. "Relevant resources accessible" recorded 35.6% at baseline and 55.2% at the endline (**Figure 12**).

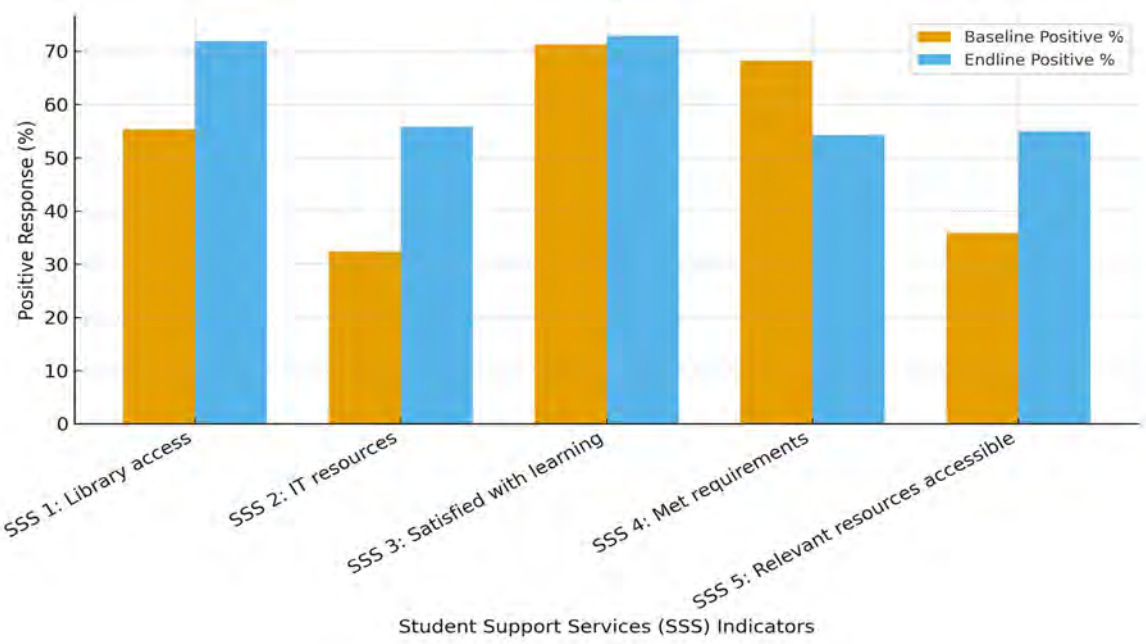


Figure 12: Comparison of baseline and endline positive response under SSS indicators

Figure 13 shows the endline SSS percentages for each college. MNC reported the highest positive response rate (92.6%), followed by RpNC (86.2%) and CNC (75.2%). CONSBN (59.5%), RNC (58.9%), and BNC (56.5%) recorded mid-range values. Lower percentages were observed for SNC (29.1%) and ShTANC (12.1%), which had the lowest positive response levels among the colleges.

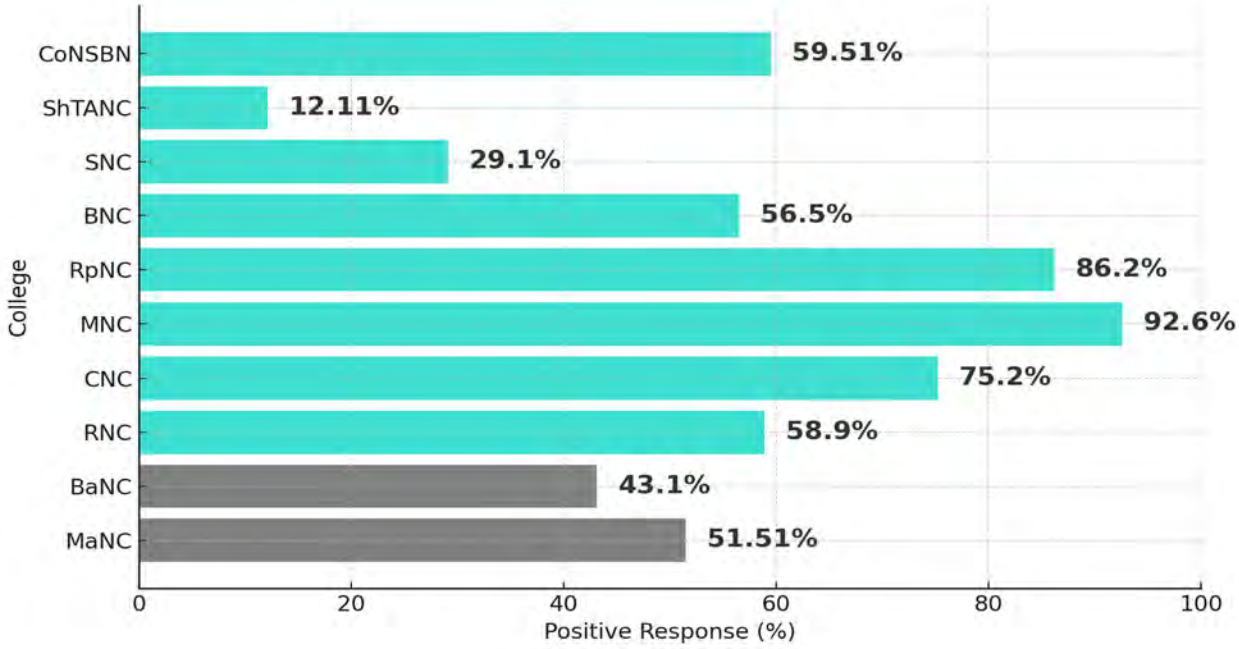


Figure 13: Overall SSS Score per college (endline)

3.2.3 Learning Resource Scale status of the nursing colleges

Table 36 presents the percentages of responses at baseline and endline for five LRS items across eight colleges. Library Appropriateness increased from 35.4% to 54.1%, an indication of the level of satisfaction from the increased use of library resources. Teaching & Learning Effectiveness increased from 47.5% to 62.1%. Availability of Resources likewise showed this trend from 62.5% to 66.8%. Clarity and Conciseness of Materials experienced a marginal improvement from 79.2% to 81.9%. Meanwhile, Relevance and Up-to-Date Resources remained high with only a small change from 82.7% to 80.3%, demonstrating sustained satisfaction.

Table 35: Description of Learning Resources Scale (LRS)

LRS Item	Statement
LRS 1	Are the library resources appropriate for my needs?
LRS 2	Where it was used, the information technology on the appropriateness and in teaching and learning was effective?
LRS 3	It was made clear what resources were available to help me learn?
LRS 4	The study materials were clear and concise.
LRS 5	Course materials were relevant and up to date.

Table 36: Positive and Negative Percentages of LRS (baseline vs endline)

Item	Baseline Positive %	Baseline Negative %	Endline Positive %	Endline Negative %
LRS 1: Library Appropriateness	35.4	64.6	54.1	45.9
LRS 2: Teaching & Learning Effectiveness	47.5	52.5	62.1	37.9
LRS 3: Availability of Resources	62.5	37.5	66.8	33.2
LRS 4: Clear & Concise Materials	79.2	20.8	81.9	18.1
LRS 5: Relevant & Up-to-date Resources	82.7	17.3	80.3	19.7

The results show that (**Figure 14**) the library appropriateness increased from approximately 35% at baseline to 54% at endline. Teaching and Learning Effectiveness rose from about 47% to 62%. Availability of Resources increased from around 62% to 66%. Clear and concise materials moved from roughly 63% to 66%. Relevant and up-to-date resources showed a slight change from approximately 82% at baseline to 80% at endline.

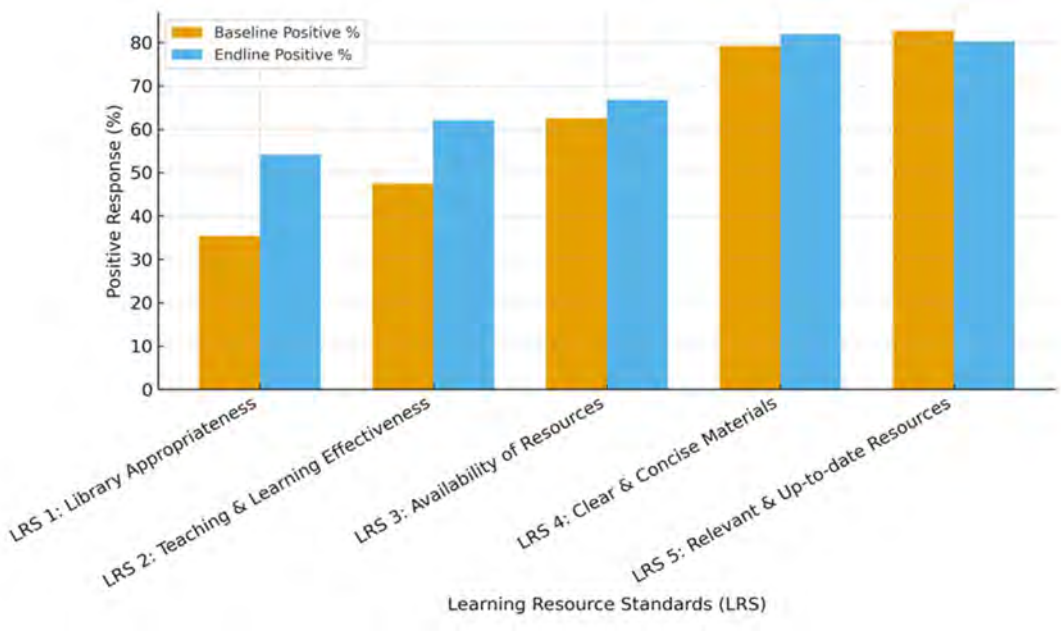


Figure 14: Comparison of the baseline and the endline positive response under LRS indicators

The results show that CONSBN recorded a positive response of 68.6%, while ShTANC reported 26.4%. SNC showed a value of 49.1%, and BNC reached 59.1%. RpNC demonstrated a high positive response of 89.7%, followed by MNC with the highest value of 96.2%. CNC recorded 78.6%, and RNC showed 63.7%. BaNC reported 63.4%, and MaNC showed a positive response of 56.5% (**Figure 15**).

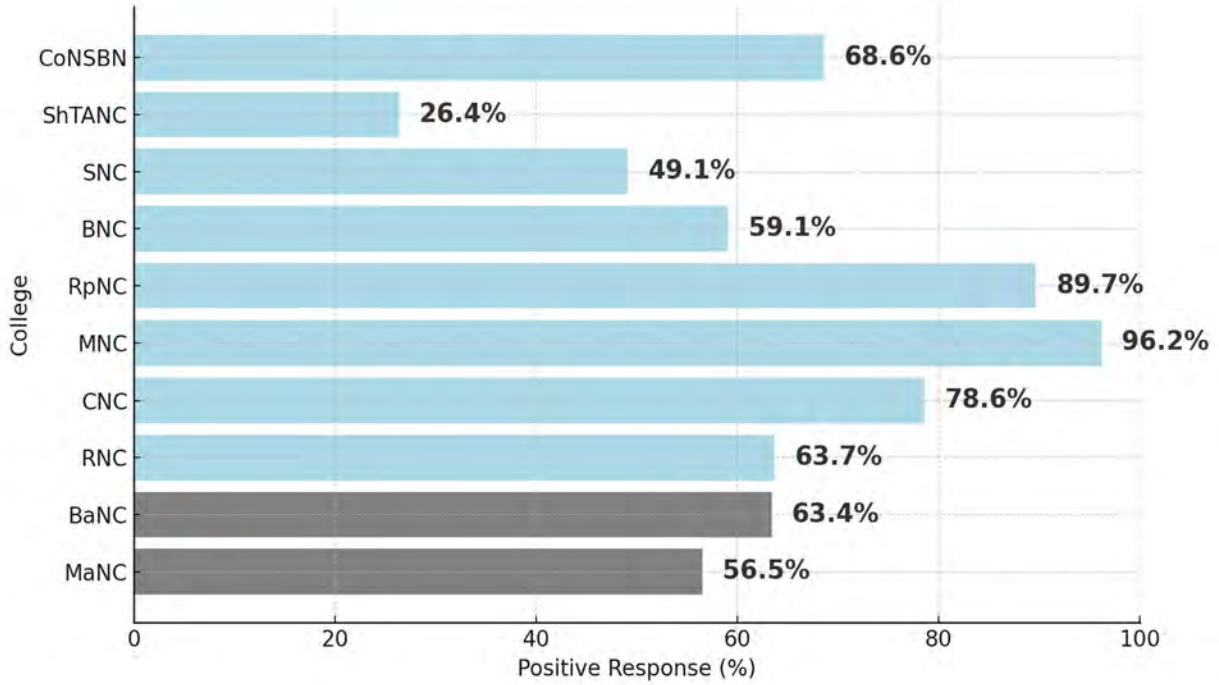


Figure 15: Overall LRS Score per College in the endline survey

3.2.4 Information related to the Course Organization Scale status of nursing colleges

Table 38 presents the baseline and endline percentages for three items under Course Organization and Structure (COS). For course organization, the baseline positive response was 72.6% and the negative response was 27.4%, while the endline positive response was 71.9% and the negative response was 28.1%. For systematic course content, the baseline registered 80.6% positive and 19.4% negative, compared with 72.3% positive and 27.7% negative at endline. For course flexibility, the baseline showed 66.6% positive and 33.4% negative, while the endline results were 66.1% positive and 33.9% negative.

Table 37: Description of Course Organization Scale (COS)

COS Item	Subject Description
COS 1	The course was well organized
COS 2	I was given helpful advice when planning my academic program
COS 3	The course content was organized in a systematic way

Table 38: Positive and Negative Percentages of COS (baseline vs endline) (%)

Item	Baseline Positive	Baseline Negative	Endline Positive	Endline Negative
COS 1: The course was well organized	72.6	27.4	71.9	28.1
COS 2: The course content was organized in a systematic way	80.6	19.4	72.3	27.7
COS 3: There was sufficient flexibility in my course to suit my needs.	66.6	33.4	66.1	33.9

The results from **Figure 16** show that COS 1 recorded a positive response of approximately 72.6% in baseline and a positive response of about 71.9% in endline. COS 2 showed a baseline value of roughly 80.6% and an endline value of about 72.3%. COS 3 presented a baseline positive response of around 66.6% and an endline response of approximately 66.1%.

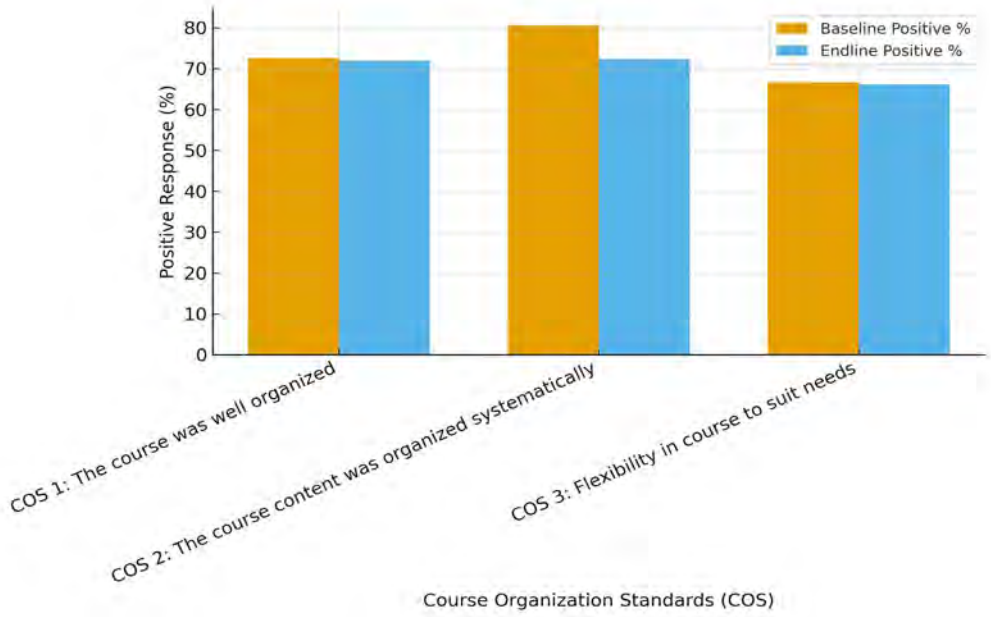


Figure 16: Comparison of baseline and endline positive response under COS indicators

The results show that (**Figure 17**) CONSBN recorded a positive response of 70.1%. ShTANC showed 20.2%, while SNC reported 63.8%. BNC presented a value of 56.7%. RpNC recorded 89.6%, and MNC reached 96.0%. CNC showed a positive response of 78.0%, and RNC reported 65.3%. BaNC registered 78.4%, while MaNC showed 77.0%.

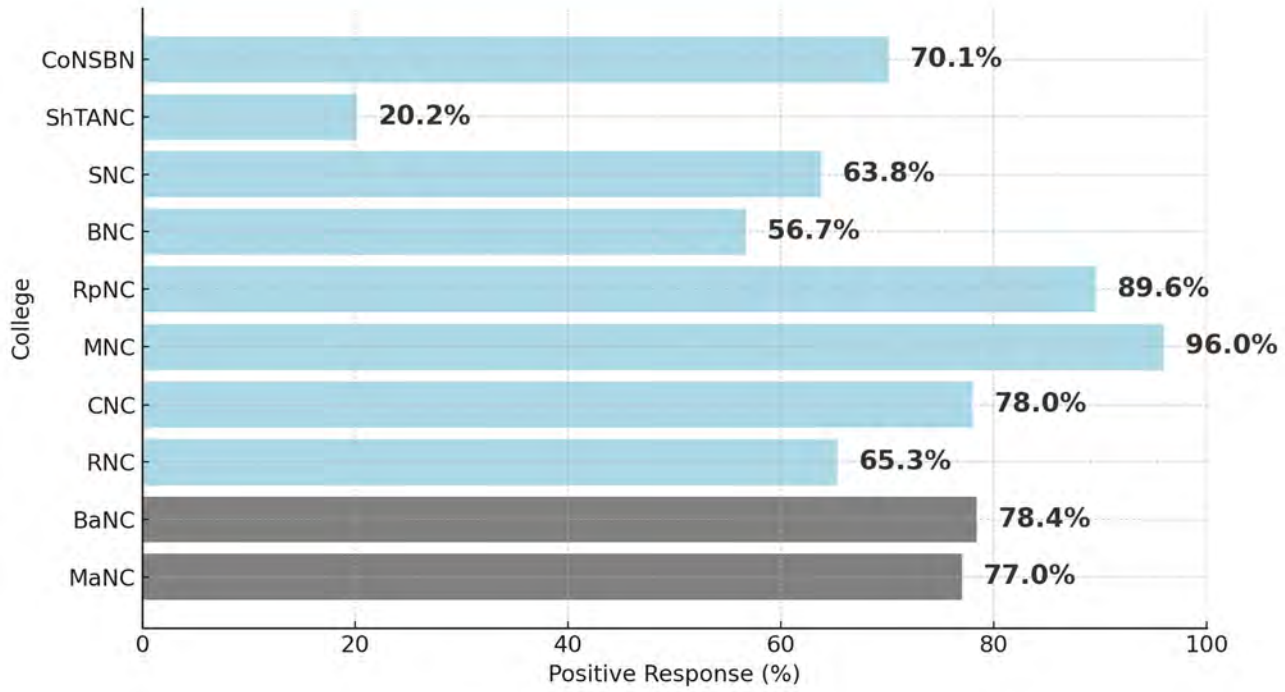


Figure 17: Overall COS score per college (endline survey)

3.2.5 Learning Community Scale (LCS) status of nursing colleges

Table 40 presents' baseline and endline percentages for five items under Learning Community and Support (LCS). For LCS 1, the baseline positive response was 95.3% and the negative response was 4.7%, while the endline positive response was 99.0% and the negative response was 1.0%. For LCS 2, the baseline showed 73.8% positive and 26.2% negative, compared with 84.5% positive and 15.5% negative at endline. LCS 3 recorded 77.2% positive and 22.8% negative at baseline, and 85.0% positive with 15.0% negative at endline. LCS 4 showed 49.5% positive and 50.5% negative at baseline, increasing to 77.1% positive and 22.9% negative at endline. LCS 5 had 96.6% positive and 3.4% negative at baseline, with endline values of 97.7% positive and 2.3% negative.

Table 39: Descriptions of Learning Community Scale (LCS)

LCS	Description
LCS 1	I felt part of a group of students and staff committed to learning
LCS 2	I was able to explore academic interests with staff and students
LCS 3	I learned to explore ideas confidently with other people
LCS 4	Students' ideas and suggestions were used during the course
LCS 5	I felt like I belonged to the college community

Table 40: Positive and Negative Percentages of LCS (baseline vs endline) (%)

Item	Baseline Positive	Baseline Negative	Endline Positive	Endline Negative
LCS 1: I felt part of a group of students and staff committed to learning	95.3	4.7	99.0	1.0
LCS 2: I was able to explore academic interests with staff and students	73.8	26.2	84.5	15.5
LCS 3: I learned to explore ideas confidently with other people	77.2	22.8	85.0	15.0
LCS 4: Students' ideas and suggestions were used during the course	49.5	50.5	77.1	22.9
LCS 5: I felt I belonged to the college community	96.6	3.4	97.7	2.3

The results from **Figure 18** show that LCS 1 recorded a baseline positive response of 95.3% and an endline response of 99.0%. LCS 2 showed the baseline and endline values of 73.8% and 84.5%. LCS 3 presented 77.2% at baseline and 85.0% at endline. LCS 4 recorded 49.5% at baseline and 77.1% at endline. LCS 5 showed baseline and endline positive responses of 96.6% and 97.7%.

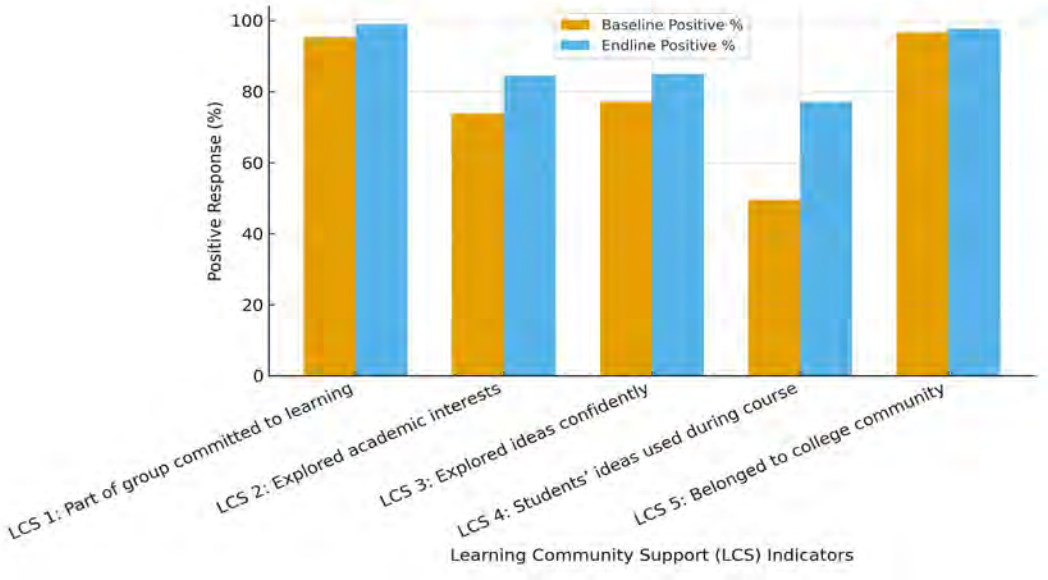


Figure 18: Comparison of the baseline and endline positive response under LCS indicators

The results from **Figure 19** show that CONSBN recorded an overall LCS score of 83.4%. ShTANC reported 86.1%, while SNC showed 84.2%. BNC presented a score of 85.4%. RpNC recorded 78.3%, and MNC showed 80.0%. CNC reported an overall score of 82.5%, and RNC showed 79.9%. BaNC registered 75.2%, while MaNC recorded 82.0%

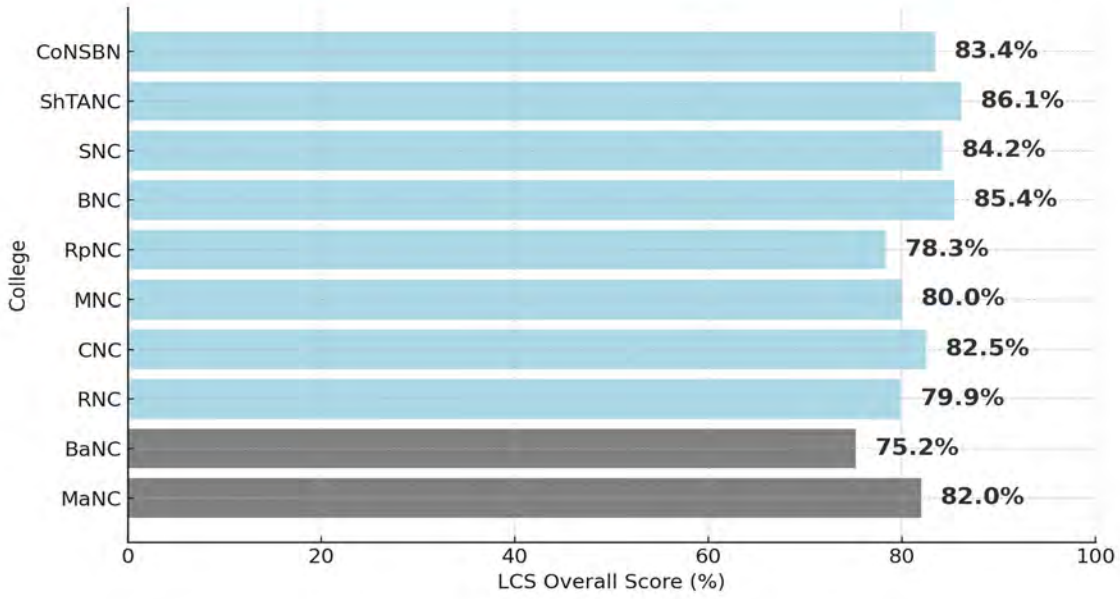


Figure 19: Overall LCS score in each college (endline survey)

3.2.6 Graduate Qualities Scale (GQS) status of nursing colleges

Table 42 compares the baseline and endline results on the different items under General Quality of Study. Excitement for further learning improved from 72.5% to 76.1%, showing that students are more motivated to continue learning. There was also a relative improvement in encouraging different perspectives from 77.8% to 85.2%, reinforcing an open and relatively inclusive learning environment. The ability to relate concepts to new situations remained strong and increased slightly, from 88.9% to 89.5%. Impact knowledge declined from 87.4 to 81.0%; confidence in pursuing new ideas dropped from 86.9 to 84.0%.

Table 41: Detailed descriptions of Graduate Qualities Scale (GQS)

GQS	Description
GQS 1	College stimulated my enthusiasm for further learning
GQS 2	The course provided me with a broad overview of my field of knowledge
GQS 3	My college experience encouraged me to value perspectives other than my own
GQS 4	I learned to apply principles from this course to new situations
GQS 5	The course developed my confidence to investigate new ideas

Table 42: Positive and Negative Percentages GQS (baseline vs endline) (%)

Item	Baseline Positive	Baseline Negative	Endline Positive	Endline Negative
GQS E_1_STIMU_ENTHUSIASM: College stimulated my enthusiasm for further learning	72.5	27.5	76.1	23.9
GQS E_2_FIELD_KNOWLEDGE: The course provided me with a broad overview of my field of knowledge	87.4	12.6	81.0	19.0
GQS E_3_COLLEGE_EXP: My college experience encouraged me to value perspectives other than my own	77.8	22.2	85.2	14.8
GQS E_4_NEW_SITUATION: I learned to apply principles from this course to new situations	88.9	11.1	89.5	10.5
GQS E_5_NEW_IDEA: The course developed my confidence to investigate new ideas	86.9	13.1	84.0	16.0

The results from of **Figure 20** shows that "Enthusiasm for further learning" recorded the baseline and endline values of 72.5% and 76.1%. "Broad overview of field" showed 87.4% at baseline and 81.0% at endline. "Value other perspectives" presented 77.8% at baseline and 85.2% at endline. "Apply principles to new situations" recorded 88.9% at baseline and 89.5% at the endline. "Confidence to investigate new ideas" showed 86.9% at baseline and 84.0% at endline.

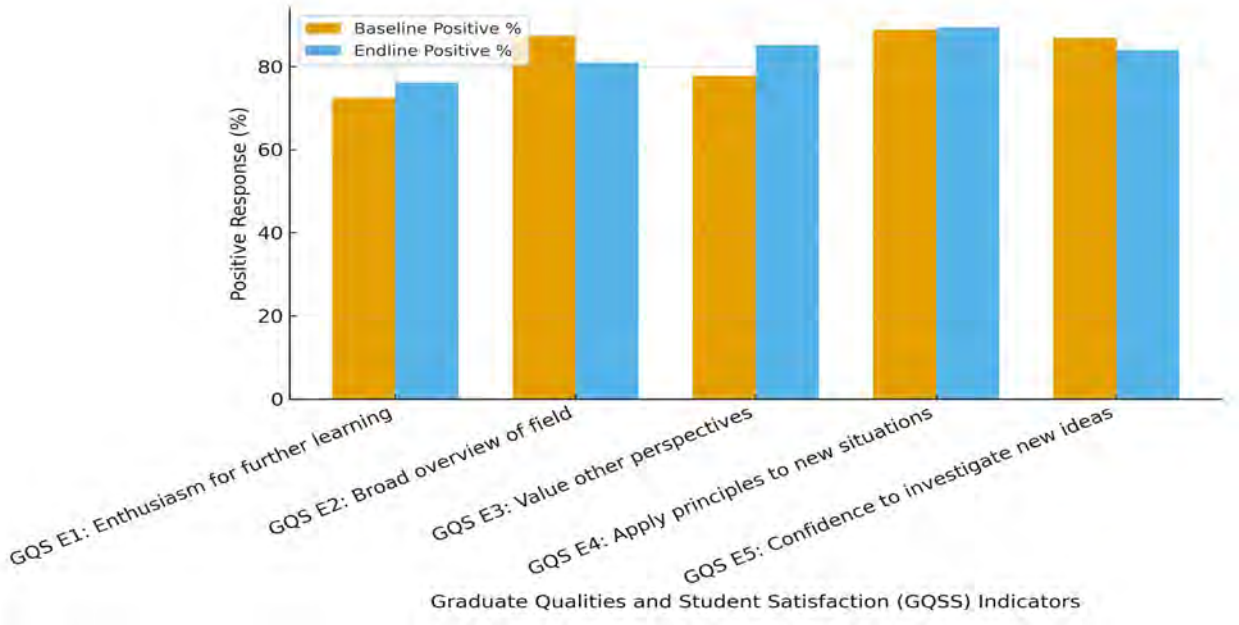


Figure 20: Comparison of baseline and endline positive response under GQS indicators

Figure 21 illustrates diversity in overall GQS scores by college, with the highest GQS score recorded for CONSBN with 97.8%. With 85.0%, BNC follows closely to CONSBN with quite a high score. The colleges noted above, like ShTANC (84.5%), RNC (82.9 %), SNC (82.1%), MNC (81.3%), CNC (80.8%), show slightly lower GQS scores.

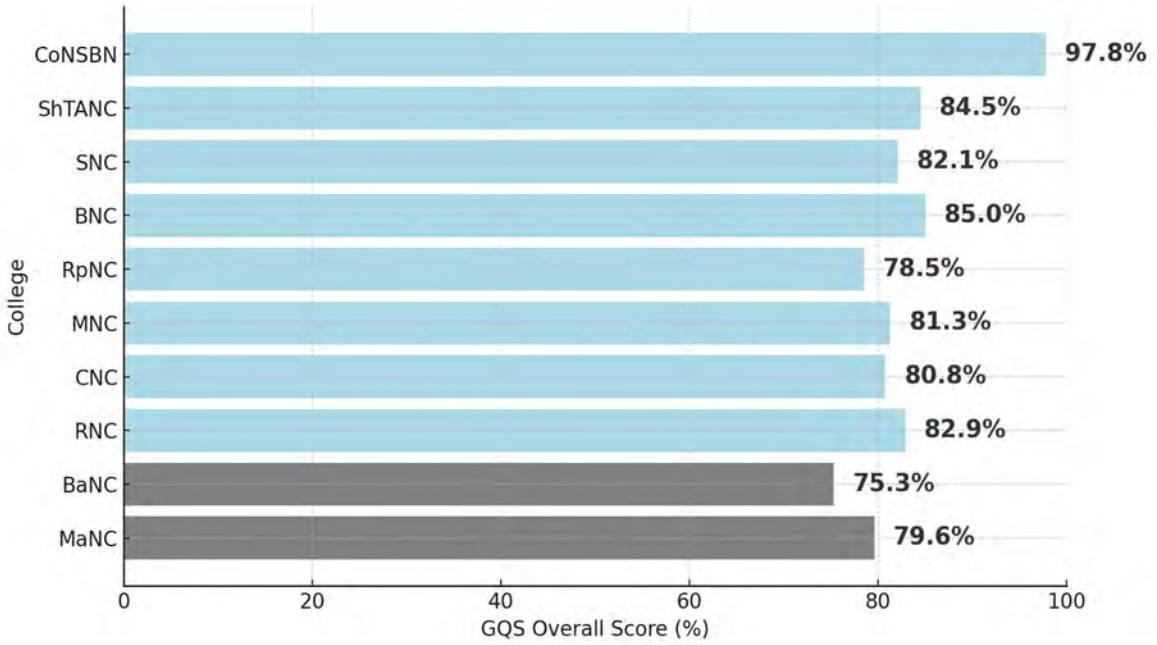


Figure 21: Overall GQS Score per College (endline survey)

3.2.7 Information related to the Intellectual Motivation Scale (IMS) status of nursing colleges

Table 44 shows that IMS 1 recorded a baseline positive response of 89.7% and a negative response of 10.3%, while the endline values were 90.0% positive and 10.0% negative. IMS 2 showed 86.1% positive and 13.9% negative at baseline, compared with 87.7% positive and 12.3% negative at endline. IMS 3 presented baseline values of 77.8% positive and 22.2% negative, and endline values of 82.5% positive and 17.5% negative. IMS 4 recorded 72.5% positive and 27.5% negative at baseline, and 72.8% positive with 27.2% negative at endline.

Table 43: Description of Intellectual Motivation Scale (IMS)

IMS Code	Description
IMS 1	I found my studies intellectually stimulating
IMS 2	I found the course motivating
IMS 3	The course has stimulated my interest in the field of my study
IMS 4	Overall, my college experience was worthwhile

Table 44: Positive and Negative Percentages of IMS (baseline vs endline)

Items	Baseline Positive %	Baseline Negative %	Endline Positive %	Endline Negative %
IMS 1: I found my studies intellectually stimulating	89.7	10.3	90.0	10.0
IMS 2: I found the course motivating	86.1	13.9	87.7	12.3
IMS 3: The course has stimulated my interest in the field of study	77.8	22.2	82.5	17.5
IMS 4: Overall, my college experience was worthwhile	72.5	27.5	72.8	27.2

The baseline positive response for "Studies intellectually stimulating" was 89.7%, and the endline value was 90.0%. For "Course motivating," the baseline and endline values were 86.1% and 87.7%. For "Interest in field of study," the baseline value was 77.8% and the endline value was 82.5%. For "College experiences worthwhile," the baseline positive response was 72.5% and the endline response was 72.8% (**Figure 22**).

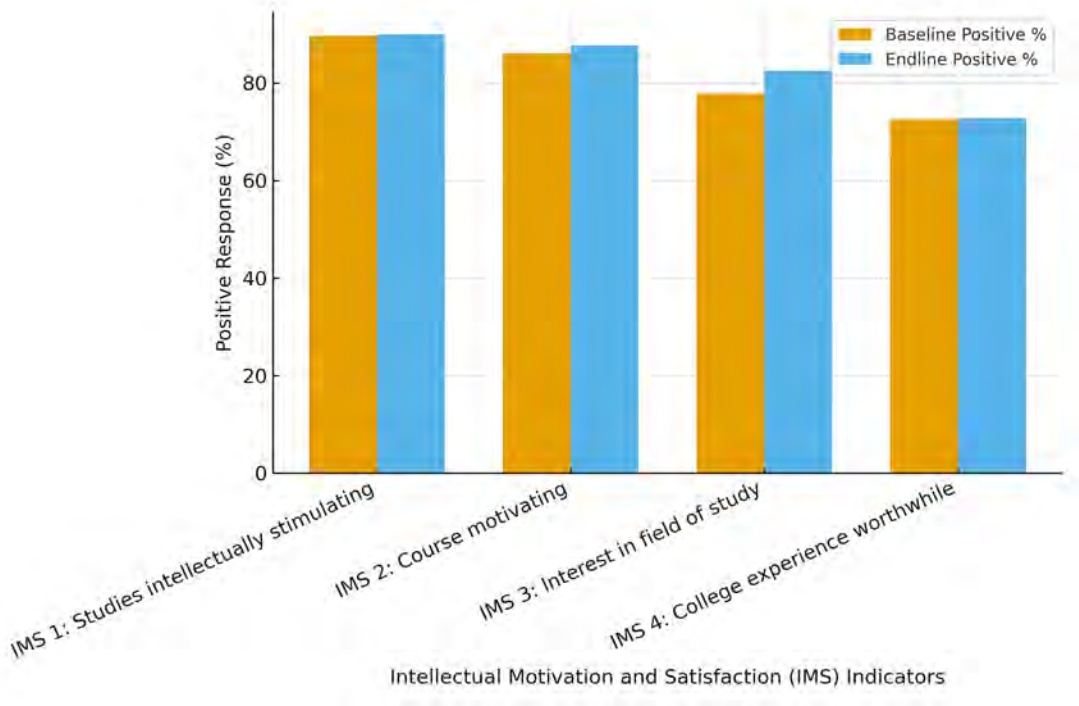


Figure 22: comparison of baseline and endline positive response under IMS indicators

The results from **Figure 23** show that CONSBN recorded an IMS overall score of 86.5%. ShTANC reported 84.6%, while SNC showed 83.2%. BNC presented a score of 83.9%. RpNC recorded 78.3%, and MNC showed 84.5%. CNC reported 82.8%, and RNC showed 80.3%. BaNC recorded 75.8%, while MaNC recorded 83.0%.

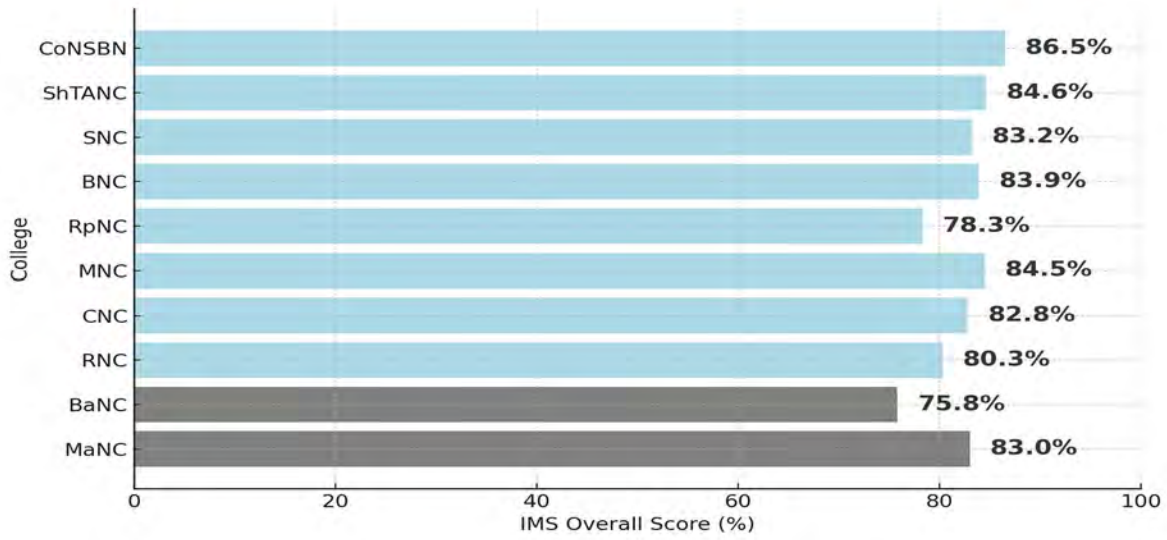


Figure 23: Overall, IMS Score per College (endline survey)

3.3 Situation survey from each Nursing College by Students

A total of 1,546 nursing students were interviewed in the endline survey. Out of these, 1,397 students came from the eight specified colleges, while other students are from control colleges. Both second year and fourth year students were included in the survey.

Below, we present the typical characteristics of the surveyed students concerning major demographic and academic features such as age, gender, marital status and year of study.

Table 45 depicts respondent demographic characteristics in distinct categories: gender, academic year, marital status, and age. Broadly, female participants are in the majority, approximately 90% across all categories, whereas male participants contribute about 10%. The highest proportion of female participants is in the SNC category (93.6%); the lowest is in RpNC (88.3%). In contrast, male participation is maximum in RpNC (11.7%) and minimum in SNC (6.4%).

As for students' year of study, second-year students slightly outnumber fourth-year students, on average, by 51.7% as against 48.3%. The ShTANC category has the highest proportion of second-year students (59.3%), while RNC shows the highest number of fourth-year students (55.9%).

Marital status shows that most respondents are single, accounting for about 90% in each category, while married respondents constitute about 9.5%. The RNC option should stand out with a remarkably high number of married people (47.2%), in clear contrast to all other categories, where numbers are below 8%. Less than 1% fall under the "Other" category.

Age-wise, most respondents fall in the 21-22-year-old bracket, accounting for about 48.5%. The next-largest group is those aged 23 and above (35.2%), while the youngest group is aged 18-20 (16.3%). The RNC category again diverges from the overall trend, with 60.9% of respondents aged 23 or older, a demographic older than the others. In contrast, ShTANC (30.4%) and BNC (28.7%) have a greater share of younger students.

Table 45 Overall Characteristics of the Students by College during the endline survey (%)

Variable	Category	CONSBN	ShTANC	SNC	BNC	RpNC	MNC	CNC	RNC	Overall	BaNC	MaNC
Gender	Female	89.2	89.6	93.6	88.9	88.3	89.7	89.8	90.1	89.9	90.9	92.2
	Male	10.8	10.4	6.4	11.1	11.7	10.3	10.2	9.3	10.0	9.1	7.8
Academic Year	2nd Year	51.8	59.3	52.1	53.8	51.1	48.9	52.7	44.1	51.7	45.5	55.1
	4th Year	48.2	40.7	47.9	46.2	48.9	51.1	47.3	55.9	48.3	54.5	44.9
Marital Status	Single	97.0	97.8	93.6	96.5	92.2	95.7	97.0	52.8	90.3	98.7	98.2
	Married	2.4	2.2	5.7	3.5	7.8	4.3	3.0	47.2	9.5	1.3	1.8
	Other	0.6	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Age Group	18–20	21.7	30.4	4.3	28.7	1.7	20.7	20.4	3.1	16.3	15.6	29.3
	21–22	51.2	46.7	50.0	50.9	51.1	51.6	50.3	36.0	48.5	54.5	49.1
	23+	27.1	23.0	45.7	20.5	47.2	27.7	29.3	60.9	35.2	29.9	21.6

3.4 Good Practices and Lessons Learned in Nursing Colleges (Post-Project Reflections)

Based on triangulated evidence from the endline survey, key-informant interviews with faculty members, and qualitative reflections from Master Trainers (MTs), three core areas emerged as the most prominent lessons learned and good practices in the post-project period: Professional Development, Clinical Practice, and Other Institutional Outcomes. These domains capture distinct yet interconnected dimensions of institutional functioning following the completion of the CBNS-II.

Professional Development reflects the continued application of faculty-training outputs, including the use of subject-based teaching methods, participation in refresher workshops, mentoring activities, and efforts to strengthen teaching expertise across disciplines. Clinical Practice refers to the ongoing use of supervised, competency-based clinical learning approaches, where collaboration and mentorship between nursing colleges and clinical facilities were sustained beyond project support. Other Institutional Outcomes encompass administrative and quality-assurance mechanisms reported during the endline assessment, including accreditation processes, documentation and reporting systems, and management procedures that illustrate broader institutional strengthening.

Taken together, these areas summarize the practices that colleges maintained or further advanced during the post-project phase, based on the available data sources.

Table 46 shows that the level and type of professional development activities varied across nursing colleges. CONSBN and MNC strengthened subject-based specialization and improved teaching competence through organized in-house training and workshops. Colleges such as BNC, CNC, and RNC demonstrated active engagement—focusing on awareness sessions, teaching improvements, and linking faculty development to better student outcomes. RpNC showed growth in professional activities compared to previous years, suggesting stronger institutional support for faculty learning. Meanwhile, ShTANC, BaNC, and MaNC reported no professional development efforts during the review period, indicating uneven participation among colleges.

Table 46: Faculty Professional Development activities in Nursing Colleges

Name of the College	Promotion of Professional Development
CONSBN	Teachers were divided by subject areas to strengthen expertise and teaching focus.
ShTANC	No professional development activities were reported during this period.
SNC	Professional development activities continued regularly, including refresher workshops and mentoring.
BNC	Faculty members participated in awareness sessions and subject-focused teaching improvement.
RpNC	The college increased the number of professional development sessions for teachers compared to the previous year.
MNC	Training focused on improving competency in core subject areas through structured workshops.
CNC	Faculty members showed overall improvement in teaching methods following internal development programs.
RNC	Professional development improved teacher knowledge and contributed to better student outcomes.
BaNC	No professional development activities took place in this reporting period.
MaNC	No professional development activities took place in this reporting period.

Table 47 shows that most nursing colleges continue to implement structured clinical learning systems developed under CBNS-II. Mentoring remains an established practice in which Master Trainers (MTs), Clinical Nurse Teachers (CNTs), and instructors jointly supervise students in hospital and clinical settings. Importantly, CNTs are not college faculty posted to hospitals**;** rather**,** staff nurses working in the hospitals were trained through the project to serve as CNT**s**, enabling them to support nursing students by helping them connect classroom learning with real clinical situations.

CONSBN and BNC provide hospital-based placements, meaning students are assigned to partner hospitals for defined periods to gain practical experience in real patient-care settings under direct supervision. These placements follow structured schedules, defined objectives, and agreed-upon supervision plans to ensure that students apply theoretical learning in authentic clinical contexts. Other colleges, such as CNC, SNC, and ShTANC, apply variations of this model. CNC strengthens clinical education through collaboration with its affiliated medical college, ensuring integrated delivery of theory and practice. SNC and ShTANC emphasize the involvement of trained CNTs, who demonstrate procedures and guide students in the wards. In line with reviewer clarification, all college MTs also participated in CNT training sessions led by hospital-based MTs, similar to guest-lecture formats that reinforce consistency in clinical teaching approaches.

RpNC enhanced its clinical practice environment by preparing hospitals with designated wards, trained supervisors, and necessary teaching materials to support safe and effective student learning. Although BaNC and MaNC reported no current structured clinical practice activities, the broader picture shows that competency-based clinical education and supervision mechanisms introduced through CBNS-II continue to function across most institutions, sustaining the quality of hands-on nursing education.

Table 47: Clinical practice models and supervision for nursing students across college

Name of the College	Clinical Practices
CONSBN	Students receive continuous guidance during hospital-based learning, where they practice real patient care under supervision. "Hospital-based placement" means students are assigned to partner hospitals for structured, hands-on clinical experience with direct mentoring.
ShTANC	Clinical Nurse Teachers (CNTs) were trained and formally assigned to supervise students in hospitals, helping them connect classroom learning with actual clinical situations.
SNC	CNTs regularly demonstrate nursing procedures to students and oversee their practice to reinforce competence and confidence.
BNC	Clinical placements are well-organized and match course objectives; each student is supervised by qualified instructors during practice in partner hospitals.
RpNC	Hospitals were prepared and equipped for student learning — with designated wards, trained supervisors, and teaching materials — to create safe and effective practice environments.
MNC	Students learn through structured clinical supervision by Master Trainers (MTs), CNTs, and instructors, receiving direct observation and feedback on nursing skills.
CNC	The nursing college collaborates with its affiliated medical college so that theory and clinical practice are taught in an integrated way.
RNC	Students apply theoretical knowledge in patient-care settings under faculty and CNT supervision, strengthening both understanding and practical ability.
BaNC	No structured clinical-practice activities were reported.
MaNC	No structured clinical-practice activities were reported.

Beyond faculty and clinical practice, some colleges expanded the project's impact into management domains (**Table 48**). MNC enhanced accreditation, administration, and record systems, while RNC improved accountability and motivation.

At **MNC**, accountability improved because the principal introduced structured administrative systems following project participation. According to the Endline Survey (ELS), MNC developed clear organograms, organized filing systems, introduced written job descriptions, and began maintaining documented student and faculty records aligned with accreditation standards. The principal and faculty also reported that the CBNS-II committee model adopted regular internal meetings and quality-review discussions. These initiatives increased transparency and made staff roles and decisions traceable—key indicators of strengthened accountability.

In **RNC**, faculty and management described a shift in attitude and motivation rather than major procedural reform. Participation in Faculty Development and Master Trainer activities raised awareness of professional responsibility, with staff expressing renewed enthusiasm for adhering to schedules, improving class preparation, and collaborating with clinical counterparts. The ELS findings show that this motivation was driven by increased recognition of the nursing educator's role and the visibility that CBNS-II created for good teaching and supervision practices.

Overall, these qualitative findings suggest that **accountability improved through clearer administrative systems and record-keeping**, while **motivation increased through professional recognition and participation in structured training under CBNS-II**. Even though such progress was limited to select institutions, it indicates a growing foundation for stronger governance and professional culture in nursing colleges.

Table 48: Other Institutional Impacts on nursing colleges

Name of the College	Other Impacts
CONSBN	No activity
ShTANC	No activity
SNC	No activity
BNC	No activity
RpNC	No activity
MNC	Improve accreditation activities, clinical practice, administrative activities, organize filing system, accountability
CNC	No activity
RNC	Accountability, inspiration
BaNC	No activity
MaNC	No activity

3.4.1 Thematic Analysis of Good Effects for clinical practices and nursing education

The data presented in this section are derived from open-ended responses provided by Master Trainers (MTs) and Clinical Nurse Teachers (CNTs) through Part D of the Partner Hospitals Nursing Staff Questionnaire administered during the CBNS-II Endline Survey. Although the questionnaire is hospital-based, MTs and CNTs supervise students from specific nursing colleges during clinical placements, and their activities directly support those colleges. For this reason, the responses were organized by the nursing colleges whose students these hospital-based educators supervise, allowing the findings to reflect how each academic institution benefits from clinical teaching in the hospital environment.

A thematic analysis was conducted following Braun and Clarke's (2006) framework. First, all qualitative responses were reviewed to ensure familiarity with the data. Key expressions describing positive results of CBNS-II activities were then identified and coded. Similar codes were grouped into sub-categories, which were subsequently combined into broader themes that captured the main patterns emerging from the responses. Coding was conducted manually and reviewed by two researchers to maintain consistency and credibility. The complete set of codes and sub-categories is provided in **Appendix 6.13** for transparency.

Table 49 summarizes these themes by nursing college, based on the qualitative descriptions provided by MTs and CNTs. As clarified by the project design, CNTs are hospital staff nurses trained through CBNS-II to serve as clinical educators, not faculty posted from the colleges. In addition, all college Master Trainers participated in CNT-related training sessions delivered by hospital-based MTs, ensuring alignment between academic and clinical teaching practices.

The theme Professional and Academic Development emerged from comments highlighting

research involvement, strengthened teaching skills, and enhanced knowledge sharing, especially among colleges such as CONSBN. The theme Quality Improvement in Teaching and Patient Care reflected reports of improved instructional quality, use of checklists, and strengthened evaluation tools, as described by ShTANC respondents.

The theme Clinical Teaching Excellence, noted in SNC and others, was based on descriptions of CNTs demonstrating procedures, guiding students in practice, and supporting evidence-based application of skills. Institutional Support and Supervision, illustrated in BNC, arose from references to lesson-plan reform, monitoring mechanisms, and increased motivation for both teachers and students.

Organizational Strengthening and Research Capacity, seen in RpNC, reflected development of clinical environments, research cells, and structured lesson-planning practices. MNC respondents described features grouped under Accountability and Continuous Improvement, including monitoring systems, supervised learning, and increased faculty responsibility.

For CNC, the theme Innovation and Motivation in Clinical Education reflected reports of new teaching methodologies, motivation for faculty and students, and collaborative research efforts. Finally, feedback from RNC aligned with Improved Clinical Outcomes and Professionalism, highlighting better patient-care practices and professional growth.

These themes summarize how MTs and CNTs perceived the effects of CBNS-II on clinical teaching and educational processes within the colleges they support. Importantly, this analysis does not draw conclusions beyond the qualitative evidence provided; each theme reflects only what was explicitly stated in the coded data, which are fully documented in **Appendix 6.13.**

Table 49: Thematic summary of good effects of clinical practices and nursing education grouped by affiliated college

Name of the College	Sample Codes	Sub-Categories	Themes
CONSBN	Conduct research; Hands-on training; Improved teaching skill; Knowledge sharing	Faculty engagement; Research culture; Skills enhancement	Professional and Academic Development
ShTANC	Improved teaching quality; Use of checklist; Quality of patient care	Teaching quality improvement; Clinical evaluation tools	Quality Improvement in Teaching and Patient Care
SNC	CNT demonstrating students in practice; Develop CNT; Student interest in practice; Evidence-based learning	Student engagement; Practice-based teaching; Mentorship	Clinical Teaching Excellence
BNC	Conduct research; Improve lab lesson plan; Increase monitoring; Motivate teachers and students	Lesson plan reform; Teacher motivation; Supervision	Institutional Support and Supervision
RpNC	Develop clinical environment; Create lesson plan; Establish research cell; Self-development	Organizational development; Research promotion	Organizational Strengthening and Research Capacity

Name of the College	Sample Codes	Sub-Categories	Themes
MNC	Students learn from MT and CNT; Improve competency; Increase accountability; Monitor research activities	Faculty accountability; Continuous monitoring; Supervised learning	Accountability and Continuous Improvement
CNC	CNT development; Introduce new methodology; Motivate teachers and students; Research activities	Innovative teaching; Motivation; Research collaboration	Innovation and Motivation in Clinical Education
RNC	Better patient outcomes; Motivation; Skill improvement; Self-development	Quality patient care; Professional growth	Improved Clinical Outcomes and Professionalism

3.5 Institutional and Skill Improvements through CBNS-II Activities

Table 50 summarizes the perceived improvement in key professional skills among faculty members and Master Trainers (MTs) across the participating nursing colleges. The data are based on the Endline survey for MTs and faculty, in which each respondent was asked whether their skills had improved in seven specific domains as a result of CBNS-II activities: teaching lecture sessions, teaching laboratory lessons, participation in research activities, teaching in clinical practice, coordinating clinical practice, conducting committee activities, and other professional or administrative skills. For each domain, respondents answered in a dichotomous format ("improved" vs. "not improved"). Responses indicating improvement were coded as 1, and those indicating no improvement (including blanks, "nil", or "no") were coded as 0.

Table 50: Perceived improvement of skills through CBNS-II activities among faculty and Master Trainers in each college

Colleges	Teaching lecture session	Teaching lab lessons	Research activities	Teaching in clinical practice	Coordinating clinical practice	Conducting committee activities	Other skills	Overall Score
CONSBN	33.3	66.7	66.7	100.0	100.0	33.3	0.0	57.1
ShTANC	0.0	66.7	33.3	33.3	33.3	33.3	0.0	28.6
SNC	100.0	100.0	100.0	100.0	100.0	100.0	50.0	92.9
BNC	100.0	66.7	66.7	33.3	66.7	33.3	0.0	52.4
RpNC	100.0	100.0	100.0	100.0	100.0	100.0	66.7	95.2
MNC	100.0	100.0	100.0	100.0	100.0	100.0	33.3	90.5
CNC	100.0	100.0	100.0	66.7	100.0	100.0	33.3	85.7
RNC	100.0	100.0	100.0	100.0	100.0	100.0	0.0	85.7
Average	**79.2**	**87.5**	**83.3**	**79.2**	**87.5**	**75.0**	**22.9**	

***Note*:** Data source: Endline survey of faculty and Master Trainers (MTs) in eight nursing colleges. For each college, respondents indicated whether their skills had improved ("yes"/"no") in each domain after participating in CBNS-II activities. Values represent the percentage of respondents within each college who reported improvement in that domain. Percentages are based on small numbers of respondents per college (typically 2–3); therefore, values such as 33.3% and 66.7% reflect 1/3 and 2/3, respectively.

For each college, the improvement percentage for a given domain was calculated as:

Improved percentage = (Number of respondents in that college who reported improvement in the domain/ Total number of respondents from that college) x 100

Because the number of survey participants per college was small (typically 2–3 respondents per college), some percentages appear as fractions such as 33.3% (1 out of 3) or 66.7% (2 out of 3). The "Overall score" shown in the final column is the simple arithmetic mean of the seven domain-specific percentages for each college, providing an aggregate indication of the extent of self-reported skill enhancement among respondents in that institution.

It is important to note that these data represent self-reported perceptions of improvement rather than objective competency testing. They therefore reflect how faculty and MTs judged their own development following participation in CBNS-II activities, and should be interpreted as perceived, rather than directly measured, changes in skills.

The seven domains assessed included teaching lecture sessions, teaching laboratory lessons, and participation in research activities, teaching in clinical practice, coordinating clinical practice, conducting committee activities, and other professional or administrative skills.

Colleges such as MNC, RpNC, and SNC demonstrated relative strength, with universally significant improvement across all domains. MNC and RpNC scored 100% across almost all items, with overall scores of 90.5% and 95.2%, respectively, while SNC followed closely at 92.9%. CNC and RNC were also overall strong (85.7%) and demonstrated widespread skill enhancement, although CNC lagged slightly in teaching clinical practice (66.7%) and RNC in "other skills" (0%).

Conversely, colleges such as BNC and CONSBN maintained mixed progress. BNC´s overall score was relatively low, at 52.4%, because of clinical practice far below the average (33.3%) and committee activities (33.3%); while CONSBN had an overall score of 57.1%, having scored low on lecture teaching (33.3%) and committee activities (33.3%). ShTANC has been at the bottom, with no improvement in lectures or other skills and some improvement in different domains, resulting in a very low overall score of 28.6%.

3.5.1 Improvements noticed in the education environment due to CBNS-II activities

The CBNS-II-themed breakdown reveals differences across colleges (**Table 51**). CNC emphasized teaching quality, with three responses clustered in that area, while CONSBN also strongly reflected on teaching improvements (two responses), alongside miscellaneous "other" improvements. RpNC had the widest recognition of CBNS-II benefits across all four themes: accountability, institutional systems, student development, and teaching quality. SNC also struck a balance between institutional systems (two mentions) and teaching quality.

BNC and ShTANC leaned more towards student development improvements, although ShTANC mentioned some "other" changes and a teaching-related response. MNC and RNC mostly referred to "other" improvements (two responses each), adding some pointers on student development (MNC) and teaching quality (RNC). Notably, accountability was mentioned only once (RpNC).

Table 51: Improvement noticed in the education environment due to CBNS-II - Thematic summary by college

College	Accountability	Institutional systems	Others	Student development	Teaching quality
CONSBN	0	0	1	0	2
ShTANC	0	0	2	1	1
SNC	0	2	0	0	1
BNC	0	0	1	2	0
RpNC	1	1	0	1	2
MNC	0	0	2	1	0
CNC	0	0	0	0	3
RNC	0	0	2	0	1

3.5.2 Overall Improvement in Nursing Education and Emerging Demands

Difficulties or challenges in nursing college related to the following the CBNS-II activities

The summary reveals unique challenges posed across the colleges, highlighting a varied array of barriers to faculty development, clinical practice, research, and professional promotion, as shown in **Table 52**. Issues, particularly CONSBN, included resource constraints in management teaching, overburdening faculty development, impediments to research database access, a lack of subject-based teachers, and substandard hospital facilities for clinical practice. MNC issues included a shortage of workforce and limited faculty development support, including scarce support for research skills and professional development due to unqualified teachers. BNC and CNC have both reiterated financing problems, with BNC citing inadequate resources for faculty development and research, while CNC emphasizes budget constraints and stronger collaboration with hospitals in clinical practice. RNC faced sundry challenges, including poor clinical practice facilities, limited statistical skills for research, scarce CNTs for nursing promotion, and difficulties with teaching management across all wards. RpNC spoke about time and financial management for faculty development, the lack of research facilities, workload that hampers professional promotion, and hospital-oriented clinical impediments. SNC mentioned late faculty training, poor placement support during clinical practice, and problems with institutional systems such as rotations and calendar use. Finally, ShTANC pointed out peculiarities in organizing faculty development training, challenges in coordinating clinical practice with hospitals, and limited opportunities for professional development.

Braun and Clarke's (2006) six-step framework was used to conduct thematic analysis. Transcription of qualitative responses from faculty and principal interviews with such high-level sources included line-by-line coding. The initial codes were derived inductively from the participants' original statements and grouped into subcategories based on shared meanings. Thus, broader themes evolved that captured possible challenges at the institutional and individual levels. **Table 52** presents a summary of the core findings that demonstrate the contribution of specific codes and subcategories to each central overarching theme across nursing colleges.

Table 52: Thematic summary of challenges facing each college

College	Codes (Sample Responses)	Subcategories	Main Themes
CONSBN	"Lack of resources for management teaching"; "Too much workload for faculty development"; "Cannot access research database"; "Shortage of subject teachers"; "Hospital facilities are poor."	Resource constraints; Faculty workload; Limited research access; Staff shortage; Weak clinical support.	Institutional resources and capacity limitations.
ShTANC	"Faculty training difficult to organize"; "Hospitals not cooperating for student practice"; "Few nursing promotion activities."	Training coordination issues; Weak college–hospital link; Low promotion activity.	Coordination and professional development barriers.
SNC	"Faculty training not timely"; "Poor clinical placement support"; "Rotation calendar not followed."	Faculty scheduling; Clinical placement support; Administrative system issues.	Operational and scheduling challenges.
BNC	"Insufficient financial resources for faculty development"; "Difficult to manage research"; "Hospitals uncooperative."	Financial limitation; Lack of research motivation; Hospital linkage gap.	Funding and collaboration constraints.
RpNC	"No time for faculty development"; "Research lacks facility"; "Heavy workload hinders promotion."	Time management; Facility shortage; Workload.	Faculty development and workload burden.
MNC	"Shortage of manpower"; "Need more training for management teaching"; "Lack of qualified teachers."	Staffing; Skill gap; Teaching content issues.	Human resources and pedagogical gaps.
CNC	"Budget problem"; "Need hospital collaboration"; "Need more MTs."	Financial barriers: Clinical collaboration needs; Staffing needs.	Financial and collaboration barriers.
RNC	"Management teaching not possible in all wards"; "Lack statistical skills for research"; "Need more CNTs."	Teaching limitations; Skill deficit; Insufficient supervision.	Teaching and research skill limitations.

The thematic analysis (**Table 52**) showed that all nursing colleges involved faced institutional and personal challenges associated with the CBNS-II. The themes were similar: limited human resources and finances, immense workloads, and poor collaboration between colleges and hospitals. The nature of challenges varied as per the institution but held three prominent overall themes: (1) resource and capacity limitations at the institutional level, (2) coordination barriers in professional development, and (3) gaps in teaching and research skills. The analysis emphasizes the need for targeted interventions to build human resources, improve collaboration mechanisms, and enhance faculty capabilities in teaching and research. (See **Appendix 6.13** for full code & category sets).

3.5.3 Challenges of capacity development of master trainers

We describe below the challenges of capacity development of master trainers where intervention and non-interventions are running. We interviewed 46 MTs from 10 colleges. Please see the details in **Table 53**.

Table 53: Challenges facing by Master Trainers in each college

Name of the College	Challenges of capacity development of MTs
CONSBN	Insufficient financial and material resources to support MT training and follow-up activities
ShTANC	Limited time and scheduling flexibility for organizing MT sessions because of faculty and clinical workload
SNC	Irregular coordination and difficulty synchronizing meeting times between college and partner hospital committees
BNC	Shortage of adequately trained Master Trainers to meet institutional demand
RpNC	Competing academic and clinical duties make it hard for MTs to manage both class and training responsibilities.
MNC	MT curriculum content is concise and needs more structured guidance for self-learning and skill reinforcement.
CNC	Growing number of newly assigned MT[1] from the college requires ongoing mentoring and refresher support.
RNC	The respondent appeared to refer to difficulties in deploying Clinical Nurse Teachers (CNTs) rather than MTs. Clinical mentoring could not be implemented in every ward because CNTs were available only in selected areas.
BaNC	Data not available
MaNC	Data not available

Note: [1] "MT" refers to *Master Trainer*. Some colleges (e.g., CNC) reported an increasing number of MTs participating in management teaching, which introduced both opportunities and coordination challenges.

The challenges MTs face, as reported by nursing colleges, are summarized in **Table 53**. CONSBN emphasized limited resources, while MNC noted that the MT curriculum's content direction is concise yet vital for self-development. BNC mentioned a shortage of trained MTs, and CNC reported that the number of MTs is increasing, requiring continued mentoring support. RNC appeared to misunderstand the question and referred to difficulties with Clinical Nurse Teachers (CNTs), noting that clinical mentoring is not possible in every ward due to limited CNT deployment.

RpNC highlighted time-management issues in balancing teaching and training responsibilities, while SNC spoke about delays due to poor scheduling, resulting in difficulties coordinating meetings and joint activities between colleges and partner hospitals because of conflicting academic and clinical schedules. ShTANC again mentioned time constraints for training arrangements.

Table 54 illustrates obstacles to Faculty Development across nursing colleges. According to CONSBN, overloaded work appeared to be the main obstacle, while MNC stated that a limited workforce was another constraint, although it recognized the need to improve the institution. Both BNC and CNC mentioned financial barriers: BNC highlighted limited funding, while CNC cited budgetary issues. RNC stated that arrangements posed a challenge, while RpNC added that balancing time and finance was difficult. Organizing faculty development training courses took longer than expected, according to the SNC, while ShTANC noted that implementing faculty development training is a challenge.

Table 54: Challenges of Faculty Development by each college

Name of the College	Challenges for Faculty Development
CONSBN	Overloaded work
ShTANC	FD training itself is a challenge
SNC	FD training cannot organize in time
BNC	Lack of financial resources
RpNC	Time and financial management
MNC	Though we have less manpower, important to improve institution
CNC	Budget problem
RNC	Difficulty arranging faculty development programs

Research-related activities among intervention colleges were among the CBNS-II's primary targets. Based on the data collected, we describe the details below.

Table 55 below presents specific challenges related to research activities identified by faculty members and administrators across nursing colleges. Thematic categorization was applied to organize challenges into distinct domains such as financial, infrastructure, institutional process, and research capacity development.

Table 55 lists challenges in research activities at the participating nursing colleges. Most institutions view barriers as resource constraints, faculty capacity, and administrative systems. CONSBN mentioned limited access to online research databases; MNC emphasized developing faculty competency for conducting and supervising research. CNC and BNC both cited financial barriers, while BNC also noted low faculty motivation for research engagement. RNC highlighted the lack of research skills and statistical analysis, while RpNC cited inadequate facilities and ineffective financial oversight as constraints. SNC brought up a delay in IRB approval, whereas ShTANC stated there were no significant challenges.

Table 55: Challenges Related to Research Activities across Nursing Colleges

Name of the College	Specific Research-related Challenges	Category
CONSBN	Limited access to online databases and research literature	Infrastructure / Access
ShTANC	No major challenges reported	—
SNC	Difficulty obtaining Institutional Review Board (IRB) approval on time	Institutional Process
BNC	Lack of research funding and limited faculty motivation	Financial / Motivation
RpNC	Inadequate research facilities and weak financial management systems	Infrastructure / Administration
MNC	Need to strengthen faculty skills in conducting and supervising student research under mentor guidance	Capacity / Training
CNC	No available financial support for research activities	Financial
RNC	Limited research skills, inadequate statistical knowledge, and weak teaching–research integration	Skill / Training

In Bangladesh, professional development training is a concern, specifically for nursing education. Thus, the CBNS-II goal was to provide the best training so that nurses could become more skilled. Below, we discussed the challenges of professional development and promotion in nursing colleges.

Table 56 summarizes the challenges related to professional development and promotion identified by nursing colleges. Thematic analysis revealed recurring issues, including shortages of qualified faculty, limited opportunities for continuing professional development (CPD), and excessive workload pressures that hinder faculty advancement. The table categorizes these challenges into human-resource, institutional, and capacity-related domains.

The most frequent challenge identified in **Table 56** by CONSBN, MNC, BNC, and SNC is the shortage of qualified, subject-based teachers, which directly affects teaching quality and thereby impedes faculty advancement. CNC and RNC were particularly focused on the urgent need for Clinical Nurse Tutors (CNTs) and on improving coordination between colleges and hospitals to enhance mentoring and clinical instruction. RpNC claimed that heavy workloads and limited time were significant hindrances to professional growth. ShTANC had no major issues, whereas MaNC and BaNC, the control colleges, did not submit data.

Table 56: Challenges related to professional development and promotion in nursing colleges

Name of the College	Specific Challenges Reported	Category
CONSBN	Shortage of subject-based teachers; limited availability of specialized educators; inadequate opportunities for academic promotion	Faculty Qualification / Institutional Support
ShTANC	No major challenges reported	—

Name of the College	Specific Challenges Reported	Category
SNC	Shortage of qualified subject-based teachers; insufficient in-service training for specialization	Faculty Development / Capacity
BNC	Lack of subject-based teachers; limited institutional incentives for faculty advancement	Human Resources / Institutional Support
RpNC	Excessive workload and limited time for self-development activities	Workload / Time Management
MNC	Shortage of qualified and experienced teachers; limited opportunities for professional training and promotion	Faculty Qualification / Access to CPD
CNC	Need for additional teacher deployment and Clinical Nurse Tutors (CNTs); lack of structured mentorship programs	Staffing / Mentorship
RNC	Insufficient CNTs in hospitals; weak coordination between college and hospital for faculty development	Clinical / Coordination
BaNC	Data not available	—
MaNC	Data not available	—

The analysis demonstrates how poor hospital facilities, a lack of supervision owing to the shortage of CNT and MT, and weak coordination between nursing colleges and hospitals are largely the challenges confronting the profession (**Table 57**). Heavy patient care load and irregular scheduling also limit appropriate supervision and learning opportunities for students.

Table 57: Challenges of clinical practice in each colleges

Name of the College	Specific Clinical Practice Challenges	Category
CONSBN	Inadequate hospital facilities and equipment for clinical training; limited supervision opportunities due to shortage of Clinical Nurse Tutors (CNTs); overcrowded wards restricting student learning activities	Facilities/Infrastructure, Staffing/Supervision
ShTANC	Insufficient coordination mechanisms between college and hospital for scheduling and supervision; need for structured communication system between academic and clinical supervisors	Coordination/Communication, Administration
SNC	Lack of systematic placement support for students; irregular rotation schedules; limited follow-up and evaluation during practice	Administration/Scheduling, Coordination/Communication
BNC	Difficulty collaborating with hospital departments for student placement; unclear supervision responsibilities between faculty and hospital staff; inconsistent clinical teaching sessions	Coordination/Communication, Supervision/Staffing

Name of the College	Specific Clinical Practice Challenges	Category
RpNC	High patient load limits time available for student supervision; lack of clear communication channels between faculty and clinical supervisors; insufficient coordination of clinical activities	Workload/Time, Coordination/Communication
MNC	Shortage of CNTs and MTs to provide adequate supervision; frequent changes in ward assignments causing inconsistency in student learning; need for structured supervision plan	Staffing/Supervision, Administration/Scheduling
CNC	Limited hospital collaboration and weak linkage between academic and clinical instructors; absence of standard guidelines for supervision and evaluation	Coordination/Communication, Supervision/Staffing
RNC	Inadequate hospital facilities for clinical placements; shortage of mentors and CNTs; scheduling conflicts affecting supervision continuity	Facilities/Infrastructure, Staffing/Supervision, Administration/Scheduling
BaNC	Data not available	—
MaNC	Data not available	—

Table 58 shows other problems/challenges encountered by nursing colleges. Most colleges, such as CONSBN, CNC, RpNC, SNC, and ShTANC, reported no challenges in this context. On the other hand, MNC reported overall systemic and institutional limitations that hamper overall functionality and growth. Of importance was RNC, which noted accountability problems and insufficient resources as its main concerns. Overall, the table shows that most colleges reported no further barriers, but MNC and RNC reported deeper structural and resource challenges that might reasonably compromise an institution's performance.

Table 58: Other Challenges faced by targeted nursing colleges

Name of the College	Other Challenges
CONSBN	None
ShTANC	None
SNC	None
BNC	None
RpNC	None
MNC	Broader systemic and institutional limitations
CNC	None
RNC	Accountability and resource shortages

3.6 Situation survey of Partner / Collaborative Hospitals under CBNS-II

Analysis of hospital bed capacity and patient load shows mixed progress across the 10 hospitals assessed between baseline and endline. Bed capacity increased only at a few institutions. However,

most health facilities observed a significant increase in the nursing workforce, demonstrating strong human resource capacity and strong potential for patient care.

3.6.1 The overall situation of the hospital and changes since 2022

Table 59 compares hospital capacity and utilization at baseline and endline using hospital-reported daily values. The most notable infrastructure changes were at ShSMCH, which expanded its bed capacity from 850 to 1,350 (+500 beds), and CMCH, which expanded its bed capacity from 1,313 to 2,200 (+887 beds). Bed counts in the other hospitals were unchanged between the survey rounds.

Table 59: Hospital situation comparison (baseline vs endline)

Variables	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH	SHB	DGHM
Number of Beds (Baseline)	850	1000	1313	900	1200	1000	1000	500	100	250
Number of Beds (Endline)	1350	1000	2200	900	1200	1000	1000	500	100	250
Change in Beds	**500**	**0**	**887**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Avg. IPD Patients per day (Baseline)	1200	2770	2700	2200	2500	2100	1800	2355	70	80
Avg. IPD Patients per day (Endline)	1700	4000	3290	3000	3000	2300	2300	1000	70	350
Change in IPD Patients	**500**	**1230**	**590**	**800**	**500**	**200**	**500**	**-1355**	**0**	**270**
Bed Occupancy Rate (%) (Baseline)	141	277	205	244	208	210	180	471	70	32
Bed Occupancy Rate (%) (Endline)	126	400	150	333	250	230	230	200	70	140
Changes in Bed Occupancy Rate	**-15**	**123**	**-55**	**89**	**42**	**20**	**50**	**-271**	**0**	**108**

Note: Method & caveat. Occupancy (%) = (Avg. daily IPD ÷ Number of beds) × 100. "Number of beds" and "Avg. IPD patients per day" are hospital-reported daily figures from Section E (Partner Hospitals KII). The questionnaire asked for a daily figure but did not require hospitals to specify whether that figure was average daily census (occupied beds) **or** admissions per day (throughput)**,** nor whether bed counts were staffed/operational or licensed/physical. Computed occupancies above 100% are therefore mathematically correct given the inputs but can indicate either sustained overcrowding (more patients than official beds) or inconsistent reporting units/denominators. We have verified all arithmetic and will reconfirm definitions, LOS (where admissions/day were reported), and the original hospital source sheets prior to final interpretation.

Examining in-patient department (IPD) activity at endline, most hospitals reported increases in average IPD/day (MMCH: +1,230; CMCH: +590; SOMCH: +800; RMCH: +500; RpMCH: +200; SBMCH: +500; DGHM: +270). ShTAMCH is a clear exception: its reported IPD fell sharply (2,355 → 1,000, −1,355). SHB reported no change in average IPD/day (70 → 70).

Because occupancy in this table is calculated as (Avg. IPD/day ÷ Number of beds) × 100, the direction of change in occupancy depends on relative changes in numerator and denominator. For example, ShSMCH's occupancy fell from 141% to 126% (−15 percentage points) even though

IPD rose by 500 patients, because bed capacity grew by 58.8% (850 → 1,350) while IPD rose by 41.7% (1,200 → 1,700); the expansion of beds thus outpaced patient growth and reduced the percentage of beds occupied. By contrast, hospitals such as MMCH and SOMCH show large increases in occupancy (MMCH 277% → 400%, +123 pp; SOMCH 244% → 333%, +89 pp) driven by large rises in reported IPD with no bed expansion.

Almost all facilities report computed occupancies well above 100%. Values greater than 100% are mathematically correct given the reported inputs but require careful interpretation: they may reflect sustained overcrowding (use of surge/trolley beds, very rapid patient turnover), or they may reflect inconsistent reporting units or denominators (for example, hospitals reporting admissions per day rather than average daily census, or reporting licensed/physical beds rather than staffed/operational beds). The apparent very large negative change for ShTAMCH (occupancy 471% → 200%, −271 pp) is due to a large fall in reported IPD. However, the bed occupancy rate in ShTAMCH is still over 200%, which means it is still not an ideal rate considering the risks to patient safety.

In summary, the data show that: (1) ShSMCH and CMCH expanded physical capacity substantially; (2) most hospitals reported increases in IPD/day at endline; and (3) changes in occupancy reflect the joint effects of bed expansions and IPD changes. Comparing baseline and endline data, some hospitals showed a decrease in bed occupancy rates. However, all the target hospitals had extremely high bed occupancy rates ranging from 126% to 400%. How this high bed occupancy rate affects the quality of medical care requires careful interpretation.

3.6.2 The overall situation of the nurses in the hospitals and changes since 2022

In making comparisons between the baseline data against endline data, overall, there is an increase in the number of in-service nurses and the nurse-to-patient ratios in nearly all hospitals (**Table 60)**.

Table 60: Baseline and Endline Comparison - Nurse Requirements in each hospital

Variables	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH	SHB	DGHM
In-service Nurses (Baseline)	669	1067	1214	874	1200	955	915	403	36	225
In-service Nurses (Endline)	1272	1227	1420	726	1425	1200	1010	672	51	1054
Changes	**603**	**160**	**306**	**-147**	**225**	**245**	**65**	**269**	**15**	**830**
Nurse: Patient Ratio (Baseline)	1:78	1:11	1:99	1:10	1:91	1:96	1:86	1:14	1:85	1:15
Nurse: Patient Ratio (Endline)	1:12	1:13	1:19	1:22	1:40	1:55	1:60	1:11	1:42	1:11

ShSMCH recorded the most significant increase, adding 603 nurses. Other hospitals with moderate workforce increase include CMCH, RMCH, RpMCH, and ShTAMCH, which may reflect strong recruitment or redeployment. MMCH and SBMCH also saw fewer positive increases, while SOMCH was the only hospital to report a slight decrease in its nursing staff, suggesting possible local issues with retention or staffing management.

Overall, the hospitals have shown measurable changes in nurse-to-patient ratios between the two periods, indicating improved staffing capacity relative to patient load. For instance, ShSMCH showed the most significant improvement, from 1:78 to 1:12, with CMCH, RMCH, and RpMCH also registering notable enhancements. Yet these ratios may reflect improved nursing presence; the data alone cannot prove an improvement in patient care. Possible factors affecting care quality include patient acuity levels, workload distribution, and service demands. Interestingly, the SOMCH nurse-to-patient ratio declined to 1:22, suggesting possible staffing or retention challenges that warrant further exploration.

In summary, results at the endline point to strong growth in most hospitals in the availability and distribution of nursing staff, improving workforce readiness and service potential. There is, however, some caution necessary in interpreting these changes as direct indicators of care quality. The control hospital, DGHM, had a ratio of 1:11, which could represent a relatively favorable staffing level, but national data would be needed to determine whether it meets or exceeds the general nursing standards in Bangladesh. Future assessments should be expanded to include patient outcome indicators and national benchmarks to evaluate whether these ratios improve patient care and service quality.

The evaluation of nursing leadership and supervisory positions across the ten hospitals indicates an overall trend toward stability, with some localized declines in key managerial roles from baseline to endline (**Table 61**). During both baseline and endline periods, all the hospitals had one Nursing Superintendent. This consistency indicates that the top-level nursing management structure remained constant across all institutions.

Table 61: Baseline and endline comparison - Overall situation of the nurses in hospitals

Variables	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH	SHB	DGHM
Nursing Superintendent (Baseline)	1	1	1	1	1	1	1	1	0	0
Nursing Superintendent (Endline)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	N/A	0.0
Nursing Superintendent (Change)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**N/A**	**0.0**
Deputy Nursing Superintendent (Baseline)	1	2	1	1	1	1	0	1	0	0
Deputy Nursing Superintendent (Endline)	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	N/A	0.0
Deputy Nursing Superintendent (Change)	**0.0**	**-1.0**	**-1.0**	**0.0**	**0.0**	**-1.0**	**1.0**	**-1.0**	**N/A**	**0.0**
Nurse Supervisor (Baseline)	14	11	19	20	23	17	22	6	2	4

Variables	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH	SHB	DGHM
Nurse Supervisor (Endline)	14	9	17	24	23	18	11	7	2	3
Nurse Supervisor (Change)	**0**	**-2**	**-2**	**4**	**0**	**1**	**-11**	**1**	**0**	**-1**

There were noticeable fluctuations in deputy positions. MMCH, CMCH, RpMCH, and ShTAMCH each lost one post compared with baseline, indicating a decline in middle-level nursing leadership. Conversely, SBMCH experienced a positive change in its status, with the addition of an additional deputy superintendent post. Other hospitals, such as ShSMCH, SOMCH, and RMCH, kept their previous figures. In summary, this indicates that most institutions have not expanded, while some have experienced reductions or redistributions in the deputy role.

Supervisory positions indicated the most dynamic changes. SOMCH increased four and RpMCH, ShTAMCH 1, no change, while declines were recorded at MMCH (-2), CMCH (-2), and SBMCH (-11). In particular, the sharp reduction at SBMCH (11 supervisors lost) may indicate reorganization or a shortage of supervisory personnel. The exact number of supervisors was retained at RMCH and ShSMCH, indicating stable staffing levels at both hospitals.

The overall trend in nursing management and supervisory capability is mixed: high-level positions (Superintendents) are stable, but reductions in mid-level leadership (Deputies and Supervisors) are being experienced in several institutions. If such declines continue, they may affect the effectiveness of monitoring, mentoring, and clinical supervision, which are core to quality nursing care. Targeted recruitment or role redistribution may also be needed in a few hospitals, such as SBMCH and MMCH, to restore balanced supervisory coverage.

3.6.3 Current Situation of Clinical Practices for Student Nurses (Findings from the Partner Hospitals Nursing Staff Questionnaire – Section D)

Table 62 presents the distribution of MT and CNT respondents across eight partner hospitals involved in the CBNS-II. The data shows that RpMCH had the highest number of respondents (17), with the most significant representation from 14 unique wards. The small number of respondents from RMCH (3 total respondents) is due to a limited number of MTs (2) and CNTs (1) at the hospital. This lower response rate can be attributed to staffing limitations and availability issues at RMCH during the data collection period. Despite the smaller sample size, the data were carefully selected to ensure their validity, and sufficient data were collected for analysis. The hospitals, ShSMCH and CMCH, each reported 11 respondents, demonstrating strong participation across multiple wards. Notably, SOMCH had the highest proportion of male respondents (60%), while ShTAMCH and CMCH reported only female participation. The table further highlights the diverse geographical and clinical representation, varying levels of involvement among male and female respondents, and a broad range of clinical areas covered.

Table 62: Distribution of MT/CNT in each hospital

Variable	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH
Total Respondents (MT)	3	5	4	5	2	5	3	4
Female (MT)	2	3	3	2	1	4	2	3
Male (MT)	1	2	0	3	1	1	1	1
Unique Wards Represented (MT)	5	4	5	5	2	6	4	4
Total Respondents (CNT)	8	4	7	5	1	10	5	5
Female (CNT)	6	3	6	3	2	6	3	6
Male (CNT)	2	1	1	2	0	4	2	0
Unique Wards Represented (CNT)	5	4	7	4	1	8	3	4

Note 1: "Total Respondents (MT/CNT)" indicates the number of MTs and CNTs who were *actively working in clinical teaching roles* and *participated in the survey* at the time of data collection. This may differ from the number originally trained under the project due to staff transfers, promotions, reassignments, or additional MT-equivalent staff later joining.

Note 2: "Unique Wards Represented" refers to the number of *different clinical wards or departments* where the responding MTs and CNTs were assigned. This measure reflects the diversity of clinical areas supporting student learning, not the number of MTs/CNTs.

Table 62 also presents the number of Master Trainers (MTs) and Clinical Nurse Teachers (CNTs) who were actively working in clinical teaching roles and responded to the questionnaire at the time of data collection. Although the CBNS-II project originally planned five MTs in each hospital, the number of active MTs varied due to staffing changes, including transfers to other institutions, promotions to administrative posts, reassignments to units without student placements, or temporary leave. As a result of these staffing dynamics; **RMCH** reported only two active MTs, as several MTs were transferred or reassigned before data collection. The **RpMCH** reported six active MTs, because one additional nurse, who later assumed MT-equivalent responsibilities through internal hospital training, was also performing MT duties at the time of the survey. Thus, the figures shown for "Total Respondents (MT)" represent active MTs participating at the time of the survey, not necessarily the number initially trained under the project.

Table 63 shows that, across hospitals, CNTs typically supervise 2–5 students daily and maintain consistent contact with college lecturers. Support focuses on bedside teaching, clinical demonstration, and mentoring.

Although motivation among CNTs remains high—driven by career advancement, professional interest, and a sense of responsibility—several structural challenges were repeatedly identified through the ELS. These include:

- Insufficient staffing and workload pressure: many CNTs also carry full patient care duties, leaving limited time for supervision and feedback.

- Inadequate staff–student ratios and lack of relief mechanisms: few hospitals have formal rotation plans or designated supervision schedules, forcing CNTs to manage both clinical and teaching tasks simultaneously.
- Space and infrastructure constraints: wards often lack dedicated areas for bedside teaching, skill demonstrations, or private student feedback.
- Weak coordination systems: while contact with colleges exists, some hospitals reported no structured joint planning meetings or shared supervision formats.
- Limited institutional support: absence of written policies, incentives, or clear recognition for the CNT role reduces accountability and sustainability.

These findings indicate that the main constraints were organizational and systemic rather than motivational, suggesting that improvements in staffing policies, scheduling, and coordination mechanisms could significantly enhance the quality and consistency of student supervision.

Table 63 summarizes that most MTs and CNTs recognized substantial improvements in teaching and supervision skills, stronger hospital–college coordination, and better clinical learning environments under the CBNS-II. However, the ELS data show that these perceptions were not uniform across hospitals, and the variation can be traced to differences in staffing patterns, management structures, and institutional readiness.

Table 63: **Overview of clinical supervision for students by nurses in each hospital**

Indicators	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH
Avg. students supervised per CNT per day	3–4	3–4	3–5	4–5	2–3	4–6	3–4	2–4
College lecturers reachable during placements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Common types of support provided	Bedside teaching, feedback	Teaching rounds and guidance	Clinical teaching and evaluation	Guidance and case discussion	Basic guidance	Practical teaching & counselling	Bedside demo & mentoring	Demonstrations and skill check
Major challenges reported	High workload and limited time	Balancing duties with teaching	Lack of formal feedback mechanism	Staffing shortage and coordination gaps	Limited MT/CNT availability	Space constraints and supervision time	Heavy patient load	Need for more incentives & CNT numbers

Indicators	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH
Motivation to be MT/CNT	Career advancement	Knowledge gain	Improve education	Skill development	Leadership experience	Career progression	Service commitment	Professional interest

RMCH did not report improved hospital–college coordination or enhanced committee teamwork because its coordination meetings and joint activities were irregular. Both MTs and supervisors reported limited interaction with college faculty and a lack of formalized internal mechanisms for follow-up on committees. Staff turnover and the shortage of designated MTs also disrupted supervision continuity.

SOMCH and MMCH described their progress in committee and teamwork as *partial*. In both hospitals, committees were formally established but had inconsistent meeting schedules and overlapping responsibilities with other administrative groups. Respondents noted that coordination was improving but still required stronger leadership engagement and a more precise distribution of roles among members.

RMCH's partial improvement in the clinical learning environment mainly reflected structural barriers rather than low motivation. CNTs and hospital supervisors cited high patient load, inadequate teaching space, and limited equipment for skill demonstrations. While staff were motivated to teach, the physical environment and workload limited the depth of supervision possible.

Overall, the ELS findings suggest that hospitals reporting full impact had more substantial administrative commitment, stable staff, and regular joint planning with nursing colleges, whereas partial or weaker ratings were associated with resource limitations, turnover, or absence of consistent committee monitoring.

Table 64 presents the overall perception of hospital representatives regarding the impact of CBNS-II activities on teaching quality, coordination, and clinical learning environments. Most participating hospitals reported clear improvement in teaching and supervision skills, indicating that the MT and CNT programs contributed effectively to strengthening practical instruction and mentoring capacity. Better hospital–college coordination was also widely noted, reflecting the reactivation of coordination and internal committees, as well as more structured collaboration between faculty and hospital nurses. ShSMCH, MMCH, CMCH, SOMCH, RpMCH, SBMCH, and ShTAMCH identified significant gains in communication and joint clinical supervision practices.

Enhancement of committee work and teamwork was observed in most hospitals, though MMCH and SOMCH described the progress as partial, suggesting that inter-departmental cooperation and meeting regularity still vary. The improvement of clinical learning environments was another primary outcome; nearly all hospitals acknowledged more supportive ward settings for student learning, with better supervision plans and increased use of standardized teaching formats introduced under CBNS-II. RMCH, however, marked this indicator as partial, implying that institutionalization of these systems remains incomplete.

Despite these positive developments, hospitals continued to face several persistent operational challenges. ShSMCH reported time and staff shortages, while MMCH cited competing duties that limit educators' availability. CMCH experienced resource constraints, and SOMCH faced coordination difficulties between academic and clinical schedules. RMCH and RpMCH both noted limitations in staff and space, whereas SBMCH mentioned work overload, and ShTAMCH emphasized the absence of adequate incentives for MTs and CNTs. These issues align with findings from the partner-hospital questionnaire, which highlighted difficulties in conducting in-service training and sustaining committee activities due to workforce and resource limitations.

Table 64: Perceived impacts of CBNS-II activities in the hospitals

Indicators	ShSMCH	MMCH	CMCH	SOMCH	RMCH	RpMCH	SBMCH	ShTAMCH
Improved teaching/supervision skills	✓	✓	✓	✓	✓	✓	✓	✓
Better hospital-college coordination	✓	✓	✓	✓	–	✓	✓	✓
Enhanced committee and teamwork	✓	Partial	✓	Partial	–	✓	✓	✓
Improved clinical learning environment	✓	✓	✓	✓	Partial	✓	✓	✓
Remaining challenges	Time & staff shortage	Competing duties	Resource constraints	Coordination issues	Limited staff	Limited space	Overload	Incentives needed

3.6.4 Effects of project input and changes since 2022: Committee activities, Clinical practice environment, MT training, Clinical Nurse Teacher (CNT) training, in-service training

Notable changes in hospitals since the CBNS-II started

Table 65 illustrates the notable changes observed in clinical care, mindset, and quality practices across partner hospitals since the implementation of the CBNS-II. The data shows significant improvements, particularly in clinical teaching, patient care delivery, and staff engagement across various hospitals.

At ShTAMCH, improvements in clinical behavior were explicitly observed in clinical nurses. The change in mindset, including enhanced confidence and skill, was reflected in the nurses' approach to patient care and interactions with students. The hospital's internal committee and Faculty Development initiatives played a critical role in this transformation. Similarly, at SOMCH and SBMCH, substantial progress was made in interdepartmental coordination and in clinical teaching methods. SOMCH highlighted ongoing improvements in patient care delivery, supported by in-house CNT training focusing on teaching and clinical skills, while SBMCH has steadily developed

its patient care delivery and team collaboration.

RpMCH has seen notable improvements in the integration of clinical teaching, with student teaching actively incorporated into daily clinical practice. The hospital's emphasis on enhancing clinical skills through targeted CNT and in-service training contributed to the improvements observed in clinical practice. Similarly, MMCH demonstrated a systematic care process, with clinical staff training contributing to improved patient care and increased students' active learning experiences. CMCH also experienced continuous improvements in clinical practice monitoring, with ongoing in-service training for staff to enhance care quality.

However, RMCH showed more limited improvements, particularly in clinical practice. The changes were described as "little better" in terms of patient care management, with minor but noticeable improvements in staff coordination and clinical efficiency. Despite these improvements, the hospital faced challenges with staff turnover and limited training opportunities, resulting in only modest improvements in staff mindset and clinical practices. The background to these challenges is weak institutional management and leadership continuity. Although the hospital established coordination and internal committees, their activities were irregular, and managerial follow-up was limited. Frequent staff rotation, inconsistent supervision systems, and insufficient institutional support for in-service training, further reduced opportunities for sustained staff development and motivation. The Coordination and Internal Committees, however, facilitated some progress in clinical practices, particularly in the Operating Theatre (OT), through improved coordination, infection control, and surgical procedures.

Table 65: Changes in hospitals since the CBNS-II started in intervention colleges

Name of the hospital	Change in Clinical Care	Change in Mindset	Change in Quality Practice	Committee Activities	MT Training	CNT Training	In-Service Training
ShSMCH	Well organized	Confidence, skill	Better service	Faculty Development, Research Committee, and Coordination Committee	Enhanced confidence in teaching	Clinical practices enrichment	In-service focused on enhancing skills
MMCH	Systematic and ideal care process	Inspire me to learn and work	Students can learn actively and perfectly	Internal Committee: Organizing processes and practices	Systematic care introduced	Ongoing training for clinical staff	Regular updates to clinical standards
CMCH	Ongoing improvements in clinical practice monitoring	Positive shift in staff engagement	Continued quality improvement in patient care	Research Committee, Internal Committee	Focus on ongoing improvement	CNT's training for better practice	In-service trainings are ongoing
SOMCH	Improved coordination between	Improved coordination and	Ongoing improvement in clinical	Quality Improvement	Implemented	In-house CNT's training	Monthly in-service workshops

Name of the hospital	Change in Clinical Care	Change in Mindset	Change in Quality Practice	Committee Activities	MT Training	CNT Training	In-Service Training
	department and more effective clinical teaching methods	communication	practices, particularly in patient care delivery	, Internal Committee	improvements	focused on teaching and clinical skills	
RMCH	Little better: Small but noticeable improvements in patient care management, staff coordination, and clinical efficiency	No Changes: Minimal shift in mindset due to staff turnover and lack of sufficient training	Improved General OT: Improvements in coordination, infection control, and surgical procedures in the Operating Theatre	Coordination Committee, Internal Committee	Minimal improvements	Limited CNT training	Limited in-service training
RpMCH	Improved clinical teaching and integration of student teaching into daily clinical practices	Focus on student teaching	Clinical skills enhancement and integration of teaching practices into clinical settings	CNT, Faculty Development, Coordination Committee	Focus on student teaching	CNT training to enhance clinical skills	In-service training for new techniques
SBMCH	Constant improvement in clinical practices through structured committee activities	Developing clinical behavior, particularly in patient care	Steady improvements in patient care delivery and team collaboration	Quality Improvement Committee, Coordination Committee	Improved care process	Continuous CNT's support	In-service training focused on new methodologies
ShTAMCH	Better service	Change in behavior (clinical nurses)	Giving right direction to students	Internal Committee, Faculty Development, Quality Improvement Committee	Focus on improving student care	CNT support for clinical behavior of nurses	Increased focus on service delivery

3.6.5 Hospital committee's performance and activities in the recent 12 months (August 2024-August 2025) in the hospitals

Under CBNS-II, each of the eight partner hospitals has established two hospital-level committees to strengthen nursing management and coordination systems. These include the Internal Committee **(**IC**)** and the Coordination Committee (CC).

Table 66 presents the activities and meeting frequency of ICs across the participating hospitals. Here, each IC is expected to hold meetings monthly to review progress, address issues, and plan clinical education improvements. However, the table reflects the actual meeting frequency observed in practice. While ShSMCH and SBMCH held regular monthly meetings, several other hospitals (MMCH, CMCH, RpMCH, and ShTAMCH) met bi-monthly, and SOMCH held quarterly meetings due to scheduling conflicts and staff workload. RMCH's meetings were irregular, mainly because of shortages of trained staff and limited managerial follow-up.
The table shows the IC's performance across various hospitals. Most hospitals, including ShSMCH, RpMCH, MMCH, and CMCH, successfully met the target of holding at least 80% of the planned meetings, with ShSMCH achieving a perfect score of 100%. However, SOMCH, SBMCH, and RMCH performed below the required threshold, with meeting percentages ranging from 58.3% to 75%, indicating room for improvement in their committee participation.

Table 66: Internal Committee (IC) performance by hospitals

Hospital	Planned	Held	% of Planned Held on	Achieved (≥80%)
ShSMCH	12	12	100.0	Yes
MMCH	12	12	100.0	Yes
CMCH	12	11	91.7	Yes
SOMCH	12	9	75.0	No
RMCH	12	7	58.3	No
RpMCH	12	12	100.0	Yes
SBMCH	12	8	66.7	No
ShTAMCH	12	10	83.3	Yes

Note: The monthly targets for IC and CC meetings were set at 12, in alignment with the nursing colleges' expectations. The performance is calculated as Achievement (%) = (Held/Planned) ×100 The hospitals that achieved or surpassed the 80% target are marked as "Yes," and those falling short are marked as "No."

Table 67 shows IC activities by each of the targeted hospitals. Despite variations in meeting regularity, most hospitals reported positive outcomes, including better teamwork, improved clinical discussion, and stronger coordination between nursing and education staff. Common challenges were staff shortages, workload pressure, and time constraints, which often made it difficult to sustain the expected monthly meeting rhythm.

Table 67: Internal Committee (IC) – activities by hospitals

Name of the Hospital	Major Achievements / Good Effects	Main Challenges
ShSMCH	Improved teamwork and nursing practice discussions	Staff shortage and workload
MMCH	Team coordination and awareness sessions	Shortage of time and staff
CMCH	Focus on improving teaching and clinical care	Heavy workload
SOMCH	More collaboration and student support	Scheduling and time constraints
RMCH	Some mentoring and internal discussions	Limited activity due to staff shortage
RpMCH	Problem identification and solution planning	Busy schedule and limited participation
SBMCH	Monitoring student learning and staff performance	Workload and time conflict
ShTAMCH	Better problem-solving and cooperation	Time management issues

All partner hospitals have established CCs, which play a key role in strengthening collaboration between hospitals and nursing colleges (**Table 68**). The CC meetings are expected to be held monthly to review supervision activities and promote coordination in student clinical practice. However, the table presents the actual meeting frequency reported by hospitals, which varies depending on workload and staffing conditions.

Most hospitals—including ShSMCH, ShTAMCH, RpMCH, MMCH, and CMCH—held meetings either monthly or bi-monthly, maintaining effective communication channels for joint supervision and planning of clinical practice activities. SBMCH and SOMCH held meetings less frequently, typically quarterly, whereas RMCH reported irregular meetings, mainly due to staff shortages and competing duties.

Table 68: Coordination Committee (CC) Performance by hospital in the recent 12 months

Hospital	Planned	Held	% of Planned Held on	Achieved (≥80%)
ShSMCH	12	12	100.0	Yes
MMCH	12	12	100.0	Yes
CMCH	12	10	83.3	Yes
SOMCH	12	9	75.0	No
RMCH	12	6	50.0	No
RpMCH	12	10	83.3	Yes
SBMCH	12	8	66.7	No
ShTAMCH	12	10	83.3	Yes

Table 69 shows the sound effects of CC meeting activities. Overall, the CCs have contributed to improved teamwork, strengthened hospital-college communication, and better supervision systems. Nevertheless, several challenges remain, particularly time constraints, workload, and

limited follow-up after meetings. In this context, "limited follow-up" refers to the difficulty CC members—such as Nursing Superintendents (as chairs), hospital-based MTs and CNTs, and the college focal faculty—face in implementing and monitoring agreed-upon actions. These difficulties stem from insufficient administrative support, competing clinical responsibilities, and the absence of structured tracking tools to monitor progress between meetings.

Table 69: Coordination Committee (CC) – activities by each hospital with challenges

Name of the Hospital	Major Achievements / Good Effects	Main Challenges
ShSMCH	Better communication with colleges and joint student supervision	Limited follow-up after meetings
MMCH	Improved coordination between teaching and clinical practice	Competing duties and lack of space
CMCH	Better communication and supervision link with colleges	Limited feedback after meetings
SOMCH	Improved teamwork and student understanding	Workload and coordination gaps
RMCH	Some joint meetings with college	Weak follow-up and time shortage
RpMCH	Improved student learning and teamwork	Staff shortage and limited facilities
SBMCH	Better monitoring of students and staff	Difficulty in scheduling meetings
ShTAMCH	Strong cooperation between college and hospital staff	Lack of time for meetings

3.6.7 Skills improved through CBNS-II activities in the hospitals

Figure 24 illustrates the improvement of skills among hospital-based MTs and CNTs as perceived through the CBNS-II activities. The data were derived from the Partner Hospital Nursing Staff Questionnaire (Section D, Questions 17–20), which explored whether participants' skills had improved in several domains, including teaching, research, clinical practice, coordination, committee participation, and other professional areas such as communication and leadership. To quantify these responses, each item was coded numerically: "improved" was assigned a score of 3, "partially improved" a score of 2, and "not improved" a score of 1. For each hospital, the coded responses were averaged across all participants within each domain, and the resulting mean was rounded to the nearest whole number. This produced a domain-specific score ranging from 1 (low improvement) to 3 (significant improvement). The scores were then displayed in a heat map (Figure 24), with darker colors indicating greater improvement. This calculation method is identical to that used for nursing colleges in **Table 46**, except that, in this case, the aggregation was performed at the hospital level rather than at the individual college level.

Overall, the results demonstrate that hospitals such as CMCH, RpMCH, ShSMCH, and SBMCH showed consistently high levels of improvement across most domains, particularly in teaching and clinical practice skills. SOMCH also performed well in coordination, management, and committee participation, indicating strengthened teamwork and communication. Conversely, research-related competencies showed relatively lower levels of improvement across hospitals, suggesting that this domain remains an area for continued institutional focus and support.

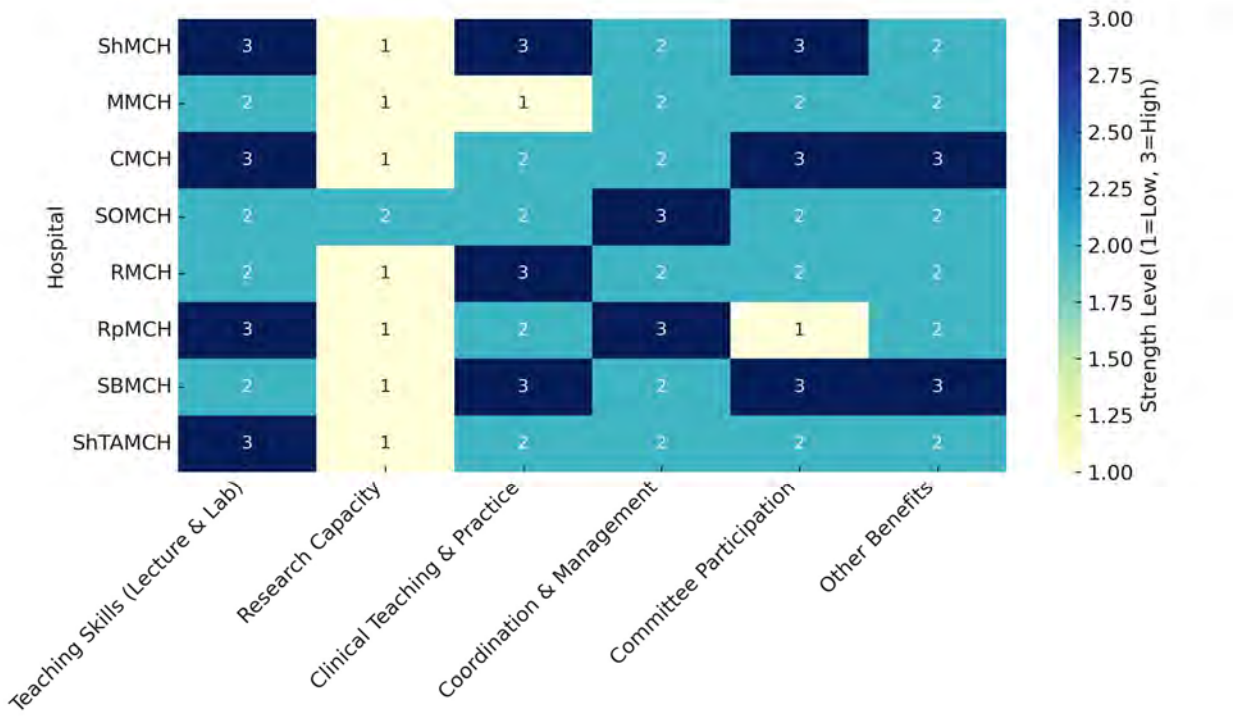


Figure 24: Skills improved through CBNS-II activities

3.6.8 Improvements from CBNS-II activities in education & care

CBNS-II introduced various improvements in teaching, clinical practices, and coordination across almost all collaborating hospitals (**Table 70**). Some salient areas of strength noted at CMCH were better supervision of students, bedside teaching, and team learning, with an enhanced integration of classroom and clinical teaching. At MMCH, the highlighted advances included strengthening teaching quality, improving lab practices, enhancing trainers' confidence, and fostering better collaboration between faculty and the hospital. RMCH focused on improving structured clinical practice and promoting student-centered teaching, with the committee showing moderate gains. In RpMCH, significant improvements were noted in clinical supervision, mentoring, coordination with colleges, and professional confidence. For SBMCH, high-stakes improvements were noted in teaching delivery, clinical guidance, and active participation in committees. SOMCH made strides in integrating teaching and clinical work, teamwork, and committee work. Finally, ShSMCH made substantial advances in bedside teaching, student supervision, participation in committees, and communication with colleges. Lastly, ShTAMCH focused on better coordination, more structured student placements, more vigorous enforcement of good teaching practices, and enhanced professional standing. Thus, generally, CBNS-II enhanced teaching, supervision, teamwork, and coordination, with each hospital having specific areas of progress.

Table 70: Thematic summary of improvement from CBNS-II in education and care by each hospital

Name of the Hospitals	Improvement Themes

ShSMCH	Major improvements in bedside teaching and student supervision; stronger committee participation; improved communication with colleges
MMCH	Strengthened teaching quality and lab practice; increased confidence among trainers; improved faculty-hospital collaboration
CMCH	Improved student supervision and bedside teaching; better integration of classroom and clinical learning; enhanced teamwork with nursing colleges
SOMCH	Enhanced teaching and clinical integration; notable teamwork improvements; reported positive impact of committee activities
RMCH	Better structured clinical practice; emphasis on student-centered teaching; moderate gains in committee functioning
RpMCH	Significant improvements in clinical supervision and mentoring; enhanced professional confidence; stronger coordination with colleges
SBMCH	Clear gains in teaching delivery and clinical practice; improved guidance to students; active participation in committees
ShTAMCH	Focused on better coordination and structured student placements; enhanced teaching practice; increased professional pride

3.6.9 Hospital gains from CBNS-II activities

The heatmap (**Figure 25**) illustrates how hospitals assessed the positive impacts of CBNS-II activities interventions on various aspects of clinical capacity (scale: 1 = low, 3 = high). The variation in ratings across themes reflects how each hospital experienced the practical outcomes of project activities. Hospitals consistently rated **MT Training** and **CNT Training** at the highest level (3), indicating that structured training and supervision systems were among the most visible improvements. MTs and CNTs frequently reported that these training enhanced their knowledge of teaching methods, improved their confidence in supervising students, and standardized clinical procedures, which were repeatedly cited as contributing to the high ratings.

In-service training generally received moderate scores (mostly 2), but hospitals such as SOMCH and ShSMCH rated it higher (3) because frequent internal refreshers strengthened infection-control practices, teamwork, and patient safety. **Research** remained the weakest area (mostly 1). Respondents in both hospital and college settings attributed this to limited time, lack of financial support, and few institutional incentives to conduct or publish studies. Only hospitals with stronger collaboration with nursing colleges—such as RpMCH, SOMCH, and ShTAMCH—reported moderate research engagement (2).

"Other Impacts" refers to broader institutional and behavioral changes that did not fit neatly into a single activity. From open-ended responses in Sections D and E, these included improved communication between colleges and hospitals, more substantial leadership commitment to quality standards, enhanced documentation and supervision systems, and greater motivation among nurses to apply evidence-based care. Hospitals such as ShSMCH, ShTAMCH, SOMCH, and RpMCH highlighted these outcomes as key reasons for assigning the highest score (3). Overall, the qualitative data show that hospitals rated interventions higher when they experienced direct improvements in teaching coordination, staff motivation, and clinical quality, and lower when structural or resource constraints limited follow-up activities.

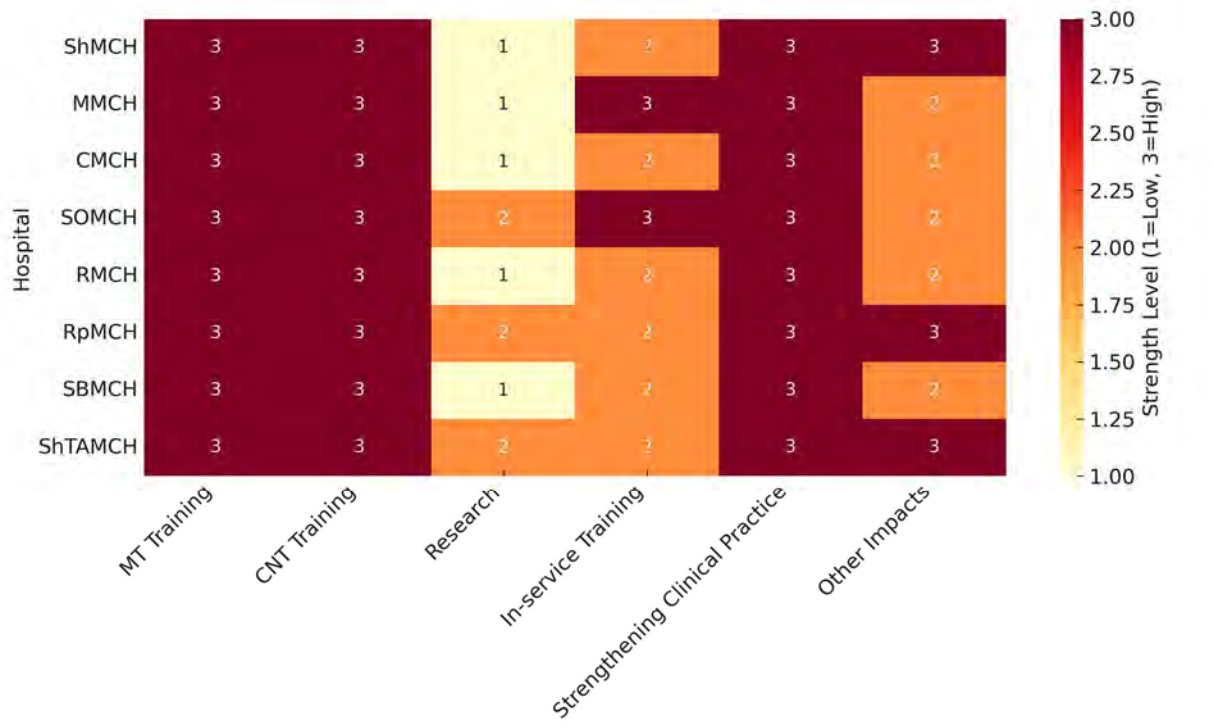


Figure 25: Positive Impacts of CBNS-II activities for hospitals

3.6.10 Perceived effects on MT and CNT skill development due to CBNS-II training activities

Table 71 summarizes the proportion of MTs who *reported that their skills improved* after participating in CBNS-II training and related project activities. Because there were no MTs in the target hospitals before the project, these figures do not represent improvement over a baseline but rather self-perceived development resulting from newly acquired roles, training, and engagement in project activities.

MTs from MMCH, RpMCH, and ShTAMCH most frequently reported perceived skill gains (100 %) across all major domains—including lecture and lab teaching, research, and coordination of clinical practice—suggesting high confidence in the value of CBNS-II training.

All MTs (100%) at ShSMCH reported improvements in skills across all sectors except for Research Activities. Additionally, under other skills, improvements were reported in communication, report writing, and the ability to overcome challenging situations. Similarly, CMCH, SBMCH, and RMCH showed strong perceived growth across multiple skill areas.

Overall, the results indicate that CBNS-II successfully facilitated the development of new competencies among MTs, as reflected in high levels of *self-reported improvement* in the teaching, coordination, and clinical practice domains.

The project has engaged with these MTs from the early stages and has supported them in

conducting CNT training, in-service training, and committee activities, observing clear improvements in their capacities. At the same time, field observations and qualitative feedback emphasize that MTs were highly committed and actively contributed to student mentoring and clinical supervision.

Table 71: Improvement of MT skills by participating in CBNS-II activities for hospitals

Name of the Hospital	Teaching Lecture Sessions (%)	Teaching Lab Lessons (%)	Research Activities (%)	Teaching in Clinical Practice (%)	Coordinating Clinical Practice (%)	Conducting Committee Activities (%)	Other Skills (%)
ShSMCH	100	100	25.0	100	100	100	100
MMCH	100	100	100	100	100	100	33.3
CMCH	100	100	100	100	66.7	100	50.0
SOMCH	100	66.7	66.7	33.3	66.7	33.3	0
RMCH	100	100	100	100	66.7	100	50.0
RpMCH	100	100	100	100	85.7	100	33.3
SBMCH	100	100	100	100	85.7	100	33.3
ShTAMCH	100	100	100	100	66.7	100	50.0

Note: The percentages shown in Tables 55 are based on self-reported responses of the questionnaire, indicating the proportion of MTs and CNTs who answered "Yes" to feeling that their skills had improved through CBNS-II training and related project activities.

3.6.11 Students received support from CNTs on clinical practices

The endline survey assessed student-reported support from Clinical Nurse Teachers (CNTs) during their clinical placements. Responses were categorized into three levels of support to clearly differentiate the guidance students received from CNTs:

Full Support (100%): Students who reported receiving consistent, active, and comprehensive support from CNTs during clinical placements. This includes direct supervision, regular feedback, and continuous mentorship. These students were fully engaged with CNTs who provided constant guidance throughout the placement period.

Partial Support (50%): Students who reported receiving some support, but it was either irregular or inconsistent. For example, students who received occasional feedback, limited guidance, or infrequent supervision by CNTs during their clinical experience. This category reflects students who had some interaction with CNTs, but the support was not sufficient or consistent to be considered complete.

No Support (0%): Students who reported receiving no support from CNTs. This includes students who had no direct interaction with CNTs or did not receive any form of guidance, feedback, or supervision during their clinical placements.

To provide a clearer picture of CNT support, the proportions of students receiving Full Support and Partial Support are presented separately for each hospital, along with the combined total (average) percentage of students receiving CNT support. Among the eight hospitals, ShSMCH, and RpMCH achieved the target of ≥50% CNT support, demonstrating effective mentoring and

clinical supervision. Other hospitals showed limited CNT engagement, suggesting the need for enhanced supervision by hospital-based CNTs, in collaboration with college faculty and coordination committees. Strengthening this joint supervision mechanism, supported by regular monitoring and capacity-building for CNTs, would help ensure consistent student guidance across all clinical sites (**Table 72**).

Table 72: CNT's support to students for clinical practices by each hospital

Name of the hospitals	Full Support (100%)	Partial Support (50%)	Total CNT Support (Full + Partial)	Meets 50% Target
ShSMCH	52.0	15.5	67.5	Yes
MMCH	18.5	9.0	27.5	No
CMCH	18.5	9.0	27.5	No
SOMCH	3.7	2.0	5.7	No
RMCH	5.1	3.0	8.1	No
RpMCH	76.0	20.1	96.1	Yes
SBMCH	18.5	9.0	27.5	No
ShTAMCH	8.6	7.0	15.6	No
Average	**-**	**-**	**42.8**	**-**

Training opportunity for nurses

Table 73 presents hospital staff participation rates in three types of professional development activities: systematic training, continuing education, and in-service training. These categories reflect different but complementary components of the nursing capacity development framework.

Systematic training refers to structured, formalized pre-service or induction programs provided to newly recruited nurses or nursing staff to help them understand hospital protocols, clinical standards, and patient care systems. These trainings are usually guided by established curricula and institutional guidelines. For example, orientation sessions for newly appointed nurses on infection control procedures or patient safety protocols are considered systematic training.

Continuing education training, on the other hand, includes periodic knowledge and skill-updating programs that allow nurses to stay current with emerging clinical standards, technologies, and practices relevant to their work. Examples include workshops or short courses on evidence-based nursing, updates on national treatment guidelines, or refresher sessions on maternal and neonatal care standards.

In-service training is typically on-the-job training conducted within the hospital setting, often facilitated by CNTs or MTs. These sessions are short, practical, and focused on improving specific clinical competencies, such as medication safety, nursing documentation, infection prevention, or patient communication. In-service training is usually held during regular duty hours and directly targets day-to-day clinical improvements.

As shown in **Table 73**, CMCH demonstrated the highest participation in systematic training (98%)

and full participation in continuing education (100%), followed closely by MMCH (90.6% and 96.2%, respectively). RMCH (79.6%) and SBMCH (76.5%) recorded moderate participation, while RpMCH reported lower rates (37.3% and 39.2%). In continuing education, CMCH and MMCH again led with the near-universal involvement, whereas RMCH (32.7%) and RpMCH (54.9%) lagged, suggesting a need for renewed focus on refresher education.

Participation in in-service training was limited across all hospitals, averaging only 12.9%. The highest participation was recorded at ShSMCH (40%), while RMCH reported none. This imbalance highlights that, while hospitals perform well in formalized, systematic, and continuing education, in-service training—which directly enhances hands-on clinical competency—remains underutilized and requires greater institutional support and coordination.

Table 73: Percentage for systematic training, continuing education, and in-service training by hospitals

Name of the hospitals	Participating in Systematic Training	Participating in Continuing Education Training	Participating In-Service Training
ShSMCH	92.0	94.0	40.0
MMCH	90.6	96.2	3.8
CMCH	98.0	100.0	16.0
SOMCH	62.7	84.3	17.6
RMCH	79.6	32.7	0.0
RpMCH	37.3	54.9	3.9
SBMCH	76.5	92.2	13.7
ShTAMCH	60.0	64.0	8.0
Total[1]	74.6	77.3	12.9

***Note**: Total score was only calculated for 8 intervention colleges excluding DGHM and SHB*

Satisfaction with the systematic training was reported mainly as "Satisfied" by most respondents for almost all hospitals (**Figure 26**). But only a few reported being "Very Satisfied," suggesting that the training tends to meet rather than exceed expectations. Among hospitals, CMCH, MMCH, RMCH, SBMCH, ShSMCH, ShTAMCH, and SOMCH reported almost uniformly high levels of satisfaction; however, MMCH was slightly more favorable among participants, with higher "Very Satisfied" responses. In contrast with the above, RpMCH shows a mild degree of satisfaction but none for overall strong approval.

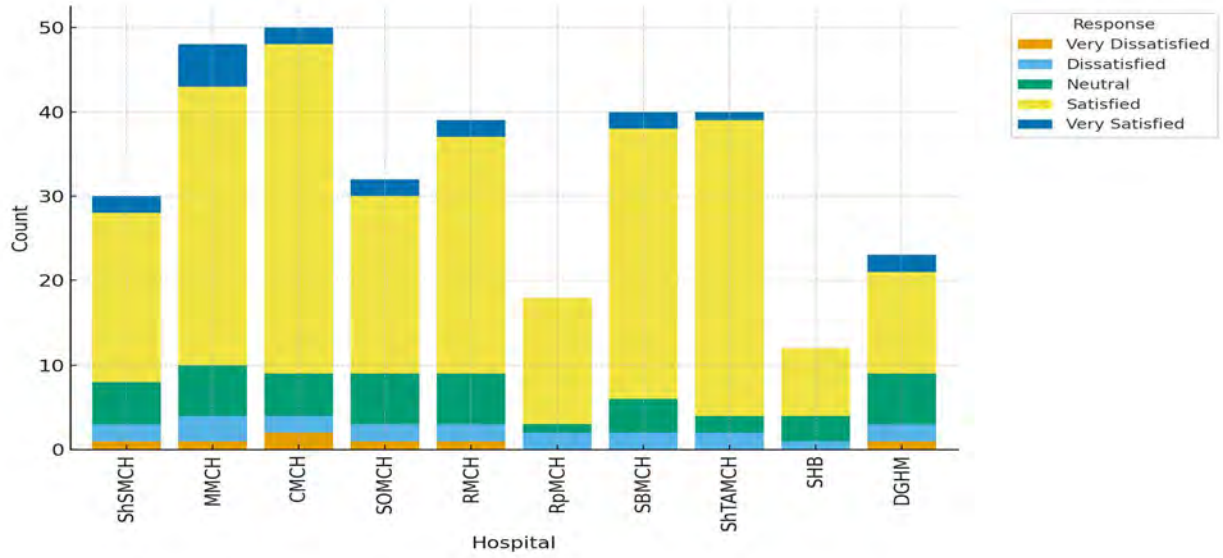


Figure 26: Satisfaction with systematic training by hospitals

Most hospitals reported high levels of "Satisfied" responses, indicating that continuing education has been generally well received (**Figure 27**). However, "Very Satisfied" ratings are rare, suggesting that programs are successful but lack exceptional merit in participants' eyes. MMCH, ShSMCH, and SOMCH had exceptionally high satisfaction rates, while CMCH and SBMCH showed higher shares of dissatisfied responses.

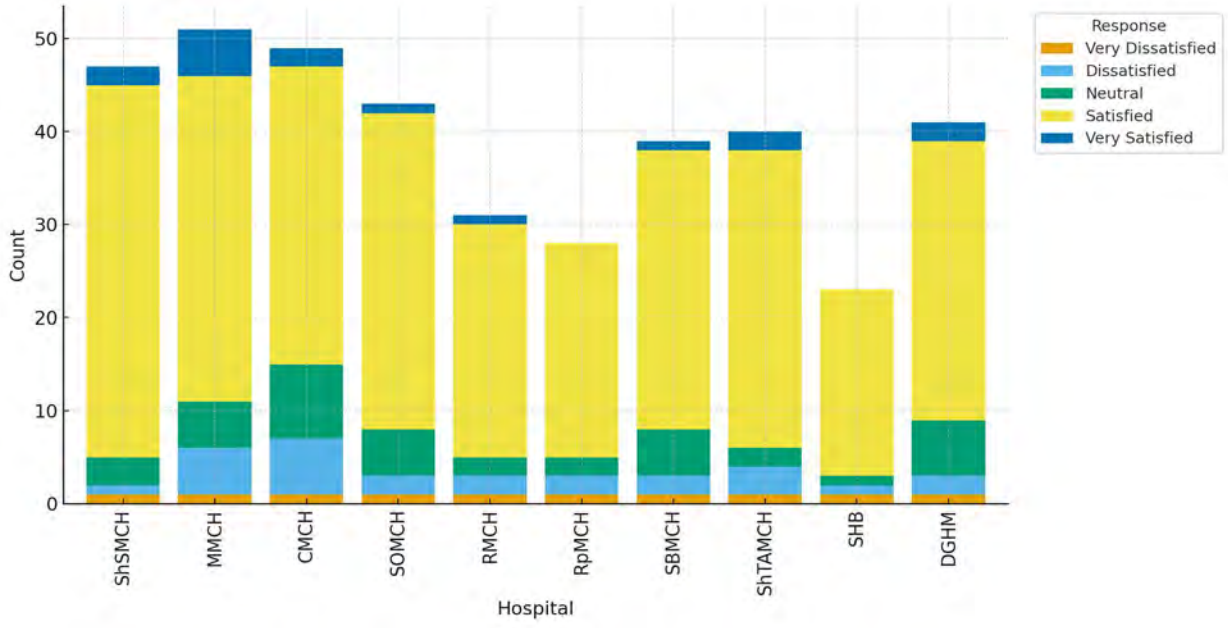


Figure 27: Satisfaction with continuing education by hospitals

Table 74 summarizes the availability of three key institutional systems that influence nurses' professional environment in hospitals:

(1) Post-exposure occupational management systems,

(2) Career path or professional promotion systems, and

(3) Opportunities to attend academic activities.

Table 74: Percentage for having post-exposure occupational management system, having career path or professional promotion system, having opportunities to attend academic activities by hospitals

Name of the hospital	Having post-exposure occupational management system	Having career path or professional promotion system	Having opportunities to attend academic activities
ShSMCH	72.0	82.0	94.0
MMCH	54.7	73.6	98.1
CMCH	84.0	94.0	100.0
SOMCH	56.9	66.7	94.1
RMCH	6.1	4.1	12.2
RpMCH	23.5	27.5	43.1
SBMCH	54.9	49.0	100.0
ShTAMCH	36.0	42.0	96.0
Total[1]	47.3	54.6	82.9
SHB	75.0	62.5	95.8
DGHM	23.5	47.1	100.0

***Note**: Total score was calculated for all targeted hospitals*

The post-exposure occupational management system is the hospital's protocol for responding to workplace hazards, such as needle stick injuries, exposure to infectious materials, or other occupational incidents. This includes procedures for immediate first aid, reporting mechanisms, medical evaluation, prophylaxis (if required), and follow-up counseling. The career path or professional promotion system indicates whether hospitals have an established and transparent structure for nursing career progression — such as defined ranks (e.g., Staff Nurse → Senior Staff Nurse → Ward In-charge), promotion criteria based on performance or education, and documented opportunities for advancement.

Opportunities to attend academic activities reflect the institutional encouragement and arrangements that enable nurses to participate in scholarly or professional development events, such as seminars, research presentations, conferences, or continuing professional education sessions. The data show that CMCH leads across all three areas, with 84.0% of respondents confirming post-exposure systems, 94.0% acknowledging promotion mechanisms, and 100% reporting opportunities to participate in academic activities. MMCH and ShSMCH also demonstrated relatively strong systems. Conversely, RMCH and RpMCH scored very low in all three categories, indicating limited organizational structures for staff safety, career growth, and academic exposure. The overall averages across all hospitals reveal that less than half (47.3%) reported having post-exposure management systems, slightly over half (54.6%) had promotion systems, while a higher proportion (82.9%) enjoyed access to academic activities.

Although these three elements differ in focus, they are closely connected in the context of institutional capacity and workforce motivation. Juxtaposing them in a single table and discussion is therefore meaningful because they collectively represent the organizational environment for nursing development —encompassing safety assurance, professional advancement, and knowledge enrichment.

There are clearly different patterns of findings among the three areas, as shown in the results (**Figure 28**). According to the occupational management system, most hospitals report satisfaction. RMCH, RpMCH, and SOMCH report satisfaction close to full (nearly 95-100%), while SBMCH, ShSMCH, and ShTAMCH have high performance figures ranging from 72 to 89%. CMCH and MMCH show a low level of satisfaction, while RMCH stands out as having high proportions of both "Dissatisfied" and "Neutral" responses, which indicate weaker confidence in its occupational management systems.

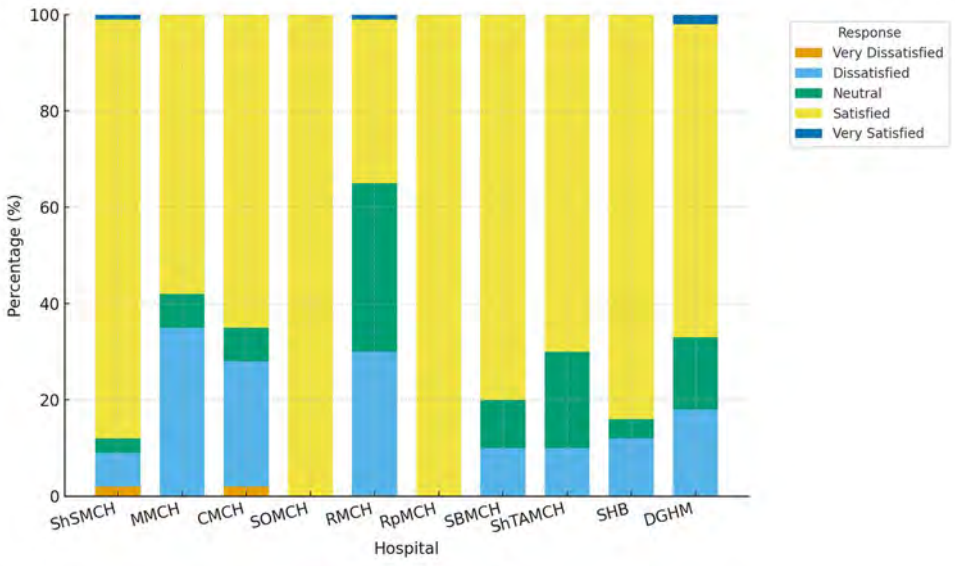


Figure 28: Satisfaction with occupational management system by hospitals

The results are highly mixed for the promotion system (**Figure 29**)—ShSMCH (87.8%), SBMCH (84%), and ShTAMCH (77.3%). SOMCH and RMCH are placed right in the middle, with intermediate levels of satisfaction. More alarmingly, CMCH appears to be the worst within this criterion, with over 70% of respondents denoting dissatisfaction. MMCH and RpMCH also report relatively high dissatisfaction at 28.2% and 35.7%, respectively. This implies that, while most colleges do reasonably well in running career promotion systems, CMCH requires urgent reform in this regard.

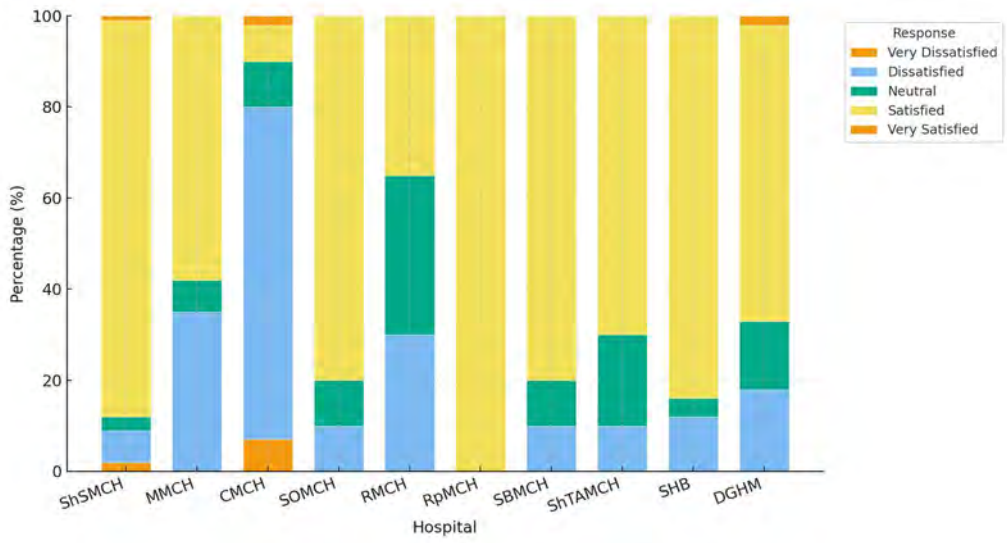


Figure 29: Satisfaction with promotion system by hospitals

Most hospitals reported high satisfaction with academic activities abroad (**Figure 30**). Among them are ShSMCH (93.6%), ShTAMCH (93.9%), SHB (87.0%), and SOMCH (81.3%), all of which received high ratings. RMCH also performed well, with satisfaction levels between 70% and 78%. In contrast to the above institutions are CMCH, MMCH, and RpMCH, which are going through a very tough time as they face high rates of dissatisfaction (68%, 57.7%, and 60.9%, respectively). This, however, has shown the vast difference in these institutions in providing satisfactory international academic opportunities compared to similar institutions.

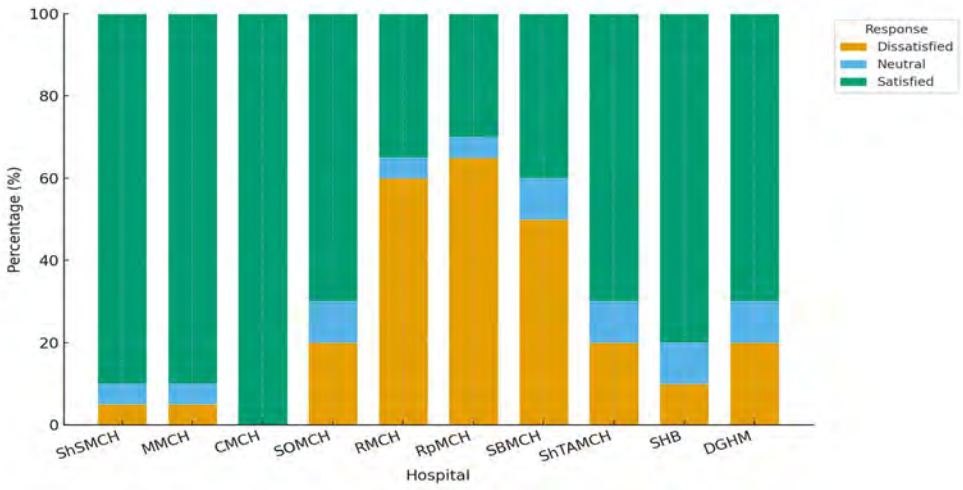


Figure 30: Satisfaction with academic activities abroad by hospitals

3.7 Summaries of Key Informant Interviews (KIIs) from Main Stakeholders

Introduction

KIIs have been conducted by two major national stakeholders- the DG of DGNM and BNMC - in the nursing education sector of the country. These national institutions of nursing education play a national role in policy formulation for nursing education, quality assurance, and professional development in Bangladesh. Thus, the purposes of these KIIs are to identify changes, improvements, challenges, and impacts experienced under the CBNS-II, and to provide recommendations for sustaining project outcomes in future policy.

3.7.1 Directorate General of Nursing and Midwifery (DGNM)

Key Results

According to the DG, DGNM, classroom teaching quality and student engagement have advanced considerably in colleges supported by the CBNS-II. Faculty members are now more organized and better prepared to deliver structured lessons. The training of Master Trainers (MTs), Faculty Development (FD) participants, and Clinical Nurse Teachers (CNTs) has strengthened the teaching performance and professional confidence of nursing faculty members.

"*We have seen a real transformation in classroom management and faculty preparedness — teachers now come to class well-organized and confident*," remarked the DGNM.

The DG, DGNM, also added, "*The CBNS-II has brought tangible improvement in both the academic sphere and administrative culture of our colleges*."

Changes and impacts of CBNS-II activities

The project has enhanced classroom management, teaching consistency, and student attendance. Faculty performance and lesson preparation have improved through structured capacity-building activities.

"*The training modules have helped standardize our teaching and brought more discipline and efficiency into our classrooms*," noted the DG, DGNM.

These practices are now being recognized as potential models for replication across other public nursing institutions.

Key challenges

Despite progress, several challenges persist. More clinical hands-on sessions are needed to strengthen practical skills, and both teachers and students require further education in research and

data analysis.

"*We still need more opportunities for clinical practice — hands-on training makes all the difference*," the DG, DGNM emphasized.

Additionally, a lack of dormitories, staff housing, and adequate laboratory equipment continues to affect college operations.

"*Infrastructure remains a major bottleneck — our teachers are trained, but facilities must also improve*," said the DG, DGNM.

Recommendations from DGNM

"JICA may consider bringing in Japanese specialists for long-term training in areas such as geriatric care," suggested the DG, DGNM.

"Improving hostel standards, staff quarters, and laboratories will ensure a better environment for both teaching and learning."

The DG, DGNM, also emphasized integrating language and clinical classes to prepare nurses for international job opportunities.

3.7.2 Bangladesh Nursing and Midwifery Council (BNMC)

Key results

During the interview, the BNMC Registrar reported that 12 nursing colleges nationwide have been accredited, including two of the CBNS-II target colleges (ShTANC and MNC)**,** and 2 more colleges have submitted applications and are currently under review. These accreditation achievements reflect broader national progress in quality assurance, while CBNS-II has contributed to strengthening institutional readiness within its target colleges.

"*We have successfully accredited twelve colleges — this reflects major progress in nursing education quality*," stated the Registrar. She also mentioned,

"*CBNS-II has helped teachers deliver more student-centered lessons, and students are now motivated to pursue advanced studies*".

Changes in studies of CBNS-II activities

The project has strengthened faculty skills and encouraged student-centered learning approaches, empowering students to pursue further education and international opportunities.

"*Our teachers are now more confident and capable of mentoring students — the overall classroom environment has become more engaging*," said the Registrar.

The Registrar also highlighted how CBNS-II complemented BNMC's accreditation system by helping colleges meet required quality standards.

Key challenges

Exposure to global best practices remains limited. Weaker institutions have not benefited equally from the project's initiatives.

"*Many of the stronger colleges have moved ahead quickly, but weaker institutions still lag,*" the Registrar observed.

Limited access to postgraduate training and international learning opportunities was also identified as a concern.

"*We need to create more pathways for advanced education and research collaboration*," the Registrar added.

Recommendations from BNMC

"*A standardized national curriculum and credit system are essential to ensure consistency in nursing education*," emphasized the Registrar.
"*We should also invite international experts to assist with curriculum modernization and align our teaching with global standards*."

The BNMC also recommended establishing structured counseling and scholarship support for nursing students aspiring to higher education.

Joint Conclusion from DGNM and BNMC

Both **DGNM** and **BNMC** agreed that the **CBNS-II** activities made notable progress in improving teaching quality, institutional management, and student academic performance in target colleges.

"*The project has set a strong foundation — now it is up to us to sustain and expand these achievements*," both stakeholders noted.

They emphasized the importance of integrating project outcomes into government systems, investing in infrastructure, and engaging in international collaboration to ensure the long-term sustainability of nursing education reforms in Bangladesh.

Chapter Four: Summary of PDM

4.1 Summary of the Project Design Matrix (PDM)

The Project for Capacity Building of Nursing Services Phase II (CBNS-II) is a DGNM-implemented project with technical cooperation from JICA **from March 2022 to March 2026**. The project targets eight public nursing colleges and their affiliated hospitals, aiming to strengthen the implementation, monitoring, and evaluation systems for nursing education in Bangladesh.

The Project Design Matrix (PDM) outlines the logical framework guiding project implementation, monitoring, and evaluation. The framework is summarized below.

Overall Goal: Improve the quality of nursing education in Bangladesh.

Indicator: The number of nursing colleges certified by government accreditation has increased.

Project Purpose: The Implementation, monitoring, and evaluation system of nursing education is strengthened.

Indicators:

1. At least 80% of students are satisfied with the educational environment of the target nursing colleges
2. The target colleges receive routine monitoring by DGNM.

Outputs and Indicators

Output 1: Management capacity for nursing administration is strengthened.
(1) Accreditation applications are submitted by the first two target colleges, and the review team conducts site visits.
(2) Post-test scores in management training for nursing administration exceed pre-test scores.

Output 2: The implementation of the BSc nursing education system is strengthened at the target public nursing colleges.
(3) More than 6 out of 8 target nursing colleges obtain 70% or more marks for the result of simplified evaluation for each of the five Standards based on the accreditation criteria.
(4) At least 80% of the planned meetings of committees are held in the target nursing colleges.

Output 3: The implementation system of clinical nursing practices is strengthened at the collaborative hospitals.
(5) At least 50% of students receive support from CNTs on clinical practices.
(6) At least 80% of the planned meetings of committees are held in the collaborative hospitals.

Output 4: Networking of nursing colleges and related organizations is strengthened.
(7) The number of non-target public nursing colleges participating in project-organized events.

4.2 Evidence of Overall PDM Achievement

Following the official summary of the Project Design Matrix (PDM), this section presents evidence from the CBNS-II Endline Assessment to evaluate progress against each indicator under the Overall Goal, Project Purpose, and Outputs. Data sources include the Course Experience Questionnaire (CEQ), DGNM monitoring records, and institutional performance assessments of the eight target nursing colleges and their collaborative hospitals.

A. Overall Goal

Indicator: The number of nursing colleges with government accreditation has increased.

Evidence: At the endline stage, two target colleges— MNC and CONSBN—had submitted their accreditation applications and completed site visits by the BNMC. Both institutions implemented corrective actions recommended during the reviews, including faculty development and improved documentation systems. The process demonstrates tangible progress toward national accreditation and reflects broader improvement in institutional readiness across the participating colleges.

B. Project Purpose

Statement: The Implementation, monitoring, and evaluation system of nursing education is strengthened.

Indicator 1: At least 80% of students are satisfied with the educational environment of the target nursing colleges.

Evidence: Student satisfaction (Course Experience Questionnaire, CEQ) increased from a baseline overall average of 72.5% to 76.0% at endline (weighted mean across six CEQ scales: Student Support, Learning Resources, Course Organization, Learning Community, Graduate Qualities, and Intellectual Motivation). Notable gains were observed in Student Support (53.6% → 61.9%) and Learning Resources (61.4% → 69.0%). Learning Community and Graduate Qualities reached >85% at endline. College-level highlights included CONSBN (86.1%), MNC (84.2%), and RpNC (78.3%).

Based on the endline report, the following factors contributed to both the challenges faced by colleges and the success of those that performed well (CONSBN, MNC, and RpNC).

Factors contributing to the failure to reach 80% satisfaction:

1. **Resource Constraints**: Several colleges, including CONSBN, reported challenges due to limited resources, access to research databases, and insufficient hospital facilities for clinical practices.

2. **Faculty Workload and Shortages**: Colleges such as MNC and BNC faced difficulties with faculty shortages and overburdened staff, impacting the delivery of training and the quality of education.
3. **Weak Coordination**: A lack of proper coordination between nursing colleges and hospitals, particularly in student placements and clinical training, contributed to dissatisfaction.
4. **Structural and Financial Barriers**: Colleges like RNC faced issues with accountability, resource shortages, and the inability to supervise students in clinical settings consistently.
5. **Research and Professional Development Limitations**: Several colleges struggled to provide sufficient opportunities for faculty research and professional growth due to financial constraints and a lack of institutional support.

Factors contributing to success (CONSBN, MNC, and RpNC):

1. **Strong Administrative and Leadership Support**: These colleges demonstrated effective leadership and a robust administrative framework, earning high scores in administration, leadership, and institutional organization.
2. **Quality of Faculty and Training**: CONSBN, MNC, and RpNC had well-trained faculty members who benefited from comprehensive faculty development programs and continued to improve their teaching methodologies.
3. **Structured Clinical and Educational Supervision**: These colleges had effective clinical supervision structures in place, contributing to better student engagement and satisfaction.
4. **Continuous Monitoring and Accountability**: Regular monitoring and institutional accountability, particularly at MNC, helped sustain high performance and foster continuous improvement.
5. **Resource Management**: Without challenges, these colleges had better resource management strategies, which helped them improve educational delivery and meet accreditation standards more effectively.

These factors illustrate that institutions with strong leadership, practical faculty training, and better resource management generally performed better, while those facing resource constraints, faculty shortages, and weak hospital coordination struggled to reach the 80% satisfaction benchmark.

Indicator 2: The target colleges receive routine monitoring by DGNM.

Evidence: According to KIIs with the DGNM and project records, the DGNM aimed to conduct routine monitoring of CBNS-II activities in collaboration with the project team. Although regular monitoring was not fully established at the time, DGNM tried to conduct monitoring as regularly as possible, leveraging opportunities such as training sessions and mutual visits organized by the project. These engagements allowed DGNM to monitor the progress and implementation of the project's activities.

Furthermore, the project team will compile the monitoring results throughout the remaining project period and present the final analysis at the conclusion of the project. This will ensure that the

impact of the monitoring activities and the overall project implementation is comprehensively assessed and documented.

Summary – Project Purpose:

The project's purpose has been **substantially advanced**. Student satisfaction and management oversight both improved, though further attention to underperforming colleges and to institutionalizing the monitoring system are required to achieve and sustain the 80% benchmark.

4.3 Evidence of Output-Level Achievement

4.3.1 Output 1: Management Capacity for Nursing Administration is Strengthened

This sub-chapter reports against the PDM indicators for Output 1 and summarizes progress made by target colleges.

Indicators:
Indicator 1: The accreditation application is submitted by the first two target colleges, and the review team conducts the site visit.

Evidence: MNC and CONSBN submitted their accreditation applications in line with national standards. The BNMC arranged site visits, during which the institutions were assessed on various factors such as management structure, faculty development, infrastructure readiness, and resource management. In response to the assessments, both colleges initiated corrective actions, including faculty training, improved documentation, and enhanced performance monitoring, to address the identified gaps. As a result, both colleges are on track to receive accreditation shortly.

Indicator 2: Post-test scores in management training for nursing administration exceed pre-test scores.

Evidence: No data available as the management training is scheduled to take place after this survey is completed. As stated in the PDM, the project team will compile the results from the project report. This information was not collected at the endline survey

Summary –Output 1: progress is evidenced by accreditation application and review processes at the first two target colleges (MNC and CONSBN)

4.3.2 Output 2: Implementation System of BSc Nursing Education is strengthened at target public nursing colleges

Indicator 3*:* More than 6 out of 8 target nursing colleges obtain 70% or more marks for the result of simplified evaluation for each of the 5 Standards based on the accreditation criteria.

Evidence: The simplified evaluation results against the five BNMC accreditation standards were compiled at endline. The verified count of the 8 target nursing colleges scoring ≥70% per standard is as follows. **Standard I (Administration and Leadership):** 8 colleges (All 8 colleges scored ≥70%).

- **Standard II (Student Type and Intake):** 8 colleges (All 8 colleges scored 100%).
- **Standard III (Teaching Staff and Learning):** 8 colleges (All 8 colleges scored ≥70%).
- **Standard IV (Curriculum Delivery):** 8 colleges (All 8 colleges scored ≥70%).
- **Standard V (Resources):** 5 colleges (5 out of 8 colleges scored ≥70%, excluding ShTANC, BNC, and CNC).

Overall, five of eight colleges met the 'all-five-standards ≥70%' threshold, showing substantial progress but still short of the PDM target of more than six. The gap was mainly due to resource limitations among the three lower-performing colleges.

The relatively lower results for Standard V were primarily influenced by factors that were difficult to improve solely through project interventions, such as infrastructure development, laboratory facilities, equipment upgrades, and student accommodation. These areas typically require substantial institutional or government investment beyond the project's direct control. Although the project strengthened management capacity, teaching quality, and governance systems, such structural gaps limited the potential for all colleges to achieve ≥70% under Standard V.

It should also be noted that the simplified evaluation method used in this assessment differs from the formal BNMC accreditation process, as it was designed primarily for internal project monitoring. Therefore, while helpful for tracking progress, this method has certain limitations in terms of comparability and scope relative to official accreditation evaluations.

Indicator 4: At least 80% of the planned meetings of the committees are held in the target nursing colleges.

The results derived from this endline survey are presented here as a reference. Ultimately, the project team will show the results of this indicator in a report by the end of the project.

Evidence -Nursing college results

Table 75 shows only 3 out of 8 colleges; ShTANC, MNC, and CONSBN achieved or exceeded the expected 80% of planned meetings (monthly; 12 times per year).

Table 75: Faculty Development Committee (FDC) meeting performance by colleges

Name of the College	Planned	Held	% of Planned Held on	Achieved (≥80%)
CONSBN	12	12	100.0	Yes
ShTANC	12	25	208.3	Yes

SNC	12	4	33.3	No
BNC	12	8	66.7	No
RpNC	12	1	8.3	No
MNC	12	12	100.0	Yes
CNC	12	5	41.7	No
RNC	12	3	25.0	No

Table 76 shows only **S**hTANC and MNC achieved the ≥80% of planned QIC meetings (monthly; 12 times per year). CONSBN achieved very low results, it may be due to other activities in the college.

Table 76: Quality Improvement Committee (QIC) meeting performance by colleges

Name of the College	Planned	Held	% of Planned Held on	Achieved (≥80%)
CONSBN	12	4	33.3	No
ShTANC	12	25	208.3	Yes
SNC	12	4	33.3	No
BNC	12	1	8.3	No
RpNC	12	2	16.7	No
MNC	12	12	100.0	Yes
CNC	12	4	33.3	No
RNC	12	2	16.7	No

Table 77 shows **o**nly 3 out of 8 colleges — ShTANC, MNC, and CONSBN achieved or exceeded the expected 80% of planned meetings (bi-monthly; 6 times per year) on research committee.

Table 77: Research Committee (RC) meeting performance by colleges

Name of the College	Planned	Held	% of Planned Held on	Achieved (≥80%)
CONSBN	6	12	200.0	Yes
ShTANC	6	25	416.7	Yes
SNC	6	4	66.7	No
BNC	6	2	33.3	No
RpNC	6	1	16.7	No
MNC	6	12	200.0	Yes
CNC	6	3	50.0	No
RNC	6	1	16.7	No

Table 78 shows only 3 out of 8 colleges — ShTANC, MNC, and CONSBN achieved or exceeded the expected 80% of planned meetings (bi-monthly; 6 times per year)

Table 78: Coordination Committee (CC) meeting performance by college

Name of the College	Planned	Held	% of Planned Held on	Achieved (≥80%)
CONSBN	12	12	100.0	Yes
ShTANC	12	30	250.0	Yes
SNC	12	4	33.3	No
BNC	12	5	41.7	No
RpNC	12	1	8.3	No
MNC	12	12	100.0	Yes
CNC	12	3	25.0	No
RNC	12	1	8.3	No

The ELS helps explain why FDC meetings vary across nursing colleges. ShTANC, MNC, and CONSBN—supported by strong administrative systems, leadership autonomy, sufficient qualified faculty, and FD/MT training under CBNS-II—held meetings consistently and often exceeded targets. In contrast, RNC, RpNC, and SNC—limited by weaker planning, fewer trained faculty, and ongoing accreditation issues—conducted fewer meetings. The same pattern appeared in Quality Improvement, Research, and Coordination committees: colleges with clearer management and stronger faculty participation showed higher activity and better documentation. Overall, leadership engagement, human-resource capacity, and exposure to CBNS-II capacity-building were the decisive factors.

Summary — Output 2

Overall, the implementation of nursing education for BSc has made substantial progress, with five of eight target nursing colleges meeting the benchmark of ≥70% across all five accreditation standards. In addition, ShTANC, MNC, and CONSBN showed strong participation across all committees, often meeting or exceeding the planned number of meetings, with ShTANC being the most active. In contrast, RNC and RpNC demonstrated limited engagement and required improvement, particularly in FDC, QIC, and RC.

4.3.3 Output 3: Implementation System of Clinical Nursing Practices is strengthened at Collaborative Hospitals

Indicators:

Indicator 5) At least 50% of students get support from CNTs on clinical practices.

The results derived from this endline survey are presented here as a reference. Ultimately, the project team will show the results of this indicator in a report by the end of the project, since the CNT training will continue even after the completion of this endline survey**.**

The endline survey assessed student-reported support from CNT during clinical placements, as shown on 3.6.11. Students received support from CNTs on clinical practices. The total percentage

of students receiving CNT support is as follows. Among the eight hospitals, ShSMCH, MMCH, and RpMCH met the≥50% CNT support target, demonstrating effective mentoring and clinical supervision. Other hospitals showed limited CNT engagement, suggesting the need for enhanced supervision and continuous capacity-building.

Table 79: Percentage of clinical nurse teachers supporting the students for clinical practices

Name of the Hospitals	Total CNT Support	Meets 50% Target
ShSMCH	67.5	Yes
MMCH	27.5	No
CMCH	27.5	No
SOMCH	5.7	No
RMCH	8.1	No
RpMCH	96.1	Yes
SBMCH	27.5	No
ShTAMCH	15.6	No
Average	42.8	-

Indicator 6: At least 80% of the planned meetings of the committees are held in the collaborative Hospitals.

The results derived from this endline survey are presented here as a reference. Ultimately, the project team will show the results of this indicator in a report by the end of the project period.

Evidence: The monthly targets for IC and CC meetings were set at 12, in alignment with the hospital's expectations. The performance is calculated as Achievement (%) = (Held/Planned) ×100. The hospitals that achieved or surpassed the 80% target are marked as "Yes," and those falling short are marked as "No. These results indicate that hospital committee functions are essentially institutionalized and operating at or above the PDM benchmark, strengthening governance and coordination for clinical nursing education.

Hospital-based evidence

Table 80: Internal Committee (IC) meetings performance by collaborative hospitals

Name of the hospital	Planned	Held	% of Planned Held on	Achieved (≥80%)
ShSMCH	12	12	100.0	Yes
MMCH	12	12	100.0	Yes
CMCH	12	11	91.7	Yes
SOMCH	12	9	75.0	No
RMCH	12	7	58.3	No

Name of the hospital	Planned	Held	% of Planned Held on	Achieved (≥80%)
RpMCH	12	12	100.0	Yes
SBMCH	12	8	66.7	No
ShTAMCH	12	10	83.3	Yes

Table 81: Coordination Committee (CC) meetings performance by each hospital

Name of the hospital	Planned	Held on	% of Planned Held on	Achieved (≥80%)
ShSMCH	12	12	100.0	Yes
MMCH	12	12	100.0	Yes
CMCH	12	10	83.3	Yes
SOMCH	12	9	75.0	No
RMCH	12	6	50.0	No
RpMCH	12	10	83.3	Yes
SBMCH	12	8	66.7	No
ShTAMCH	12	10	83.3	Yes

Summary — Output 3

The implementation system of clinical nursing practices has been notably strengthened across collaborative institutions. For Indicator 1, three hospitals — ShSMCH, MMCH, and RpMCH — met the 50% target for CNT support, demonstrating adequate supervision and mentoring during student clinical placements, though other hospitals showed gaps in CNT deployment and guidance. For Indicator 2, 5 out of 8 hospitals achieved the ≥80% benchmark for both Coordination and Internal Committees, indicating that hospital governance and monitoring systems are now well institutionalized. Overall, these results confirm improved collaboration between colleges and hospitals, leading to stronger clinical training environments and more consistent quality assurance in nursing education and practice.

4.3.4 Output 4: Networking of Nursing Colleges and Related Organizations is strengthened

Indicator 7: Number of non-target public nursing schools participating in project-organized events.

Evidence: The project has not yet conducted these types of events but during the project period the team will make a plan for conducting such events later on.

Overall Conclusion

The endline findings confirm that CBNS-II has substantially advanced the establishment of a robust, accountable, and quality-oriented nursing education system in Bangladesh. While considerable progress has been made in governance, faculty capacity, and monitoring, continued investment in resource mobilization, infrastructure development, and inter-institutional networking remains essential to sustain gains and achieve full accreditation for all target colleges.

Chapter Five: Discussion, Conclusion and Recommendations

5.1 Discussion

The endline survey results showed substantial improvements resulting from the CBNS-II's activities in nurturing the quality and institutional capacity of nursing education and clinical practices in Bangladesh. Compared with the baseline, significant progress was observed in institutional governance, faculty competency, and academic–clinical collaboration. In this context, governance refers to the institutional and administrative level, particularly the strengthened roles of college management committees, internal quality assurance bodies, and coordination mechanisms between nursing colleges and their partner hospitals. These improvements demonstrate enhanced leadership, better decision-making processes, and more systematic monitoring within the target institutions. Collectively, these improvements indicate that the project interventions have begun to pave the way for the installation of a sustainable system of quality assurance and professional development across the target nursing colleges and their partner hospitals.

In summary, the entire nursing college sector has substantially improved in implementing the BSc education program. The endline assessment also found that most colleges achieved high performance across the five BNMC accreditation standards: administration and leadership, student type and intake, teaching staff and learning, curriculum delivery, and resources. Governance, curriculum delivery, and teaching quality were identified as the areas of most significant development; however, lingering gaps in physical infrastructure and learning resources continue to pose a challenge to complete standardization.

The establishment of the Faculty Development Committees (FDCs) and Quality Improvement Committees (QICs) and their active functioning under the project were instrumental, particularly in colleges where these bodies were fully operational, driving improvements in teaching quality and academic governance. In these colleges, the FDCs facilitated systematic peer learning and promoted continuous improvements in teaching practices, while the QICs enhanced academic monitoring, lesson planning, and adherence to institutional calendars. These mechanisms have begun to cultivate a culture of internal accountability and self-evaluation within the institutions where they are active, contributing to the embedding of continuous professional development and evidence-based teaching. However, given that only a subset of nursing colleges had fully functional FDCs and QICs at the time of the endline assessment, these effects should be interpreted as localized successes rather than uniformly system-wide outcomes. Nonetheless, the positive outcomes observed in these colleges provide valuable evidence of the potential for these mechanisms to contribute to broader institutional transformation as their implementation expands.

Significant progress was made in both clinical education and practice, in line with Output 3 in PDM. The endline results indicated the achievement of at least 80 percent of the targets set for committee meetings by five out of eight collaborating hospitals, revealing improvements in regularity and coordination between the college and the hospital structures. This institute's system of coordination and internal review has strengthened clinical governance and ensured proper supervision, monitoring, and evaluation of nursing students in clinical placements. These committees also paved the way for improved communication between academic supervisors and clinical supervisors in tackling the long-standing coordination problems that were mentioned during the baseline survey report.

In addition, the findings revealed a mixed trend in nursing management and supervisory capacity across the collaborating hospitals. While the number of senior supervisory positions, such as superintendents, remained largely stable, reductions were observed in several mid-level leadership roles, including deputy and supervisor positions. This shift poses risks to the continuity of effective monitoring, mentoring, and clinical supervision—functions critical to maintaining quality nursing care. If such declines persist, they may affect the sustainability of the gains achieved under the project, particularly in clinical oversight and staff development. Addressing these gaps through targeted recruitment, redistributing supervisory responsibilities, or providing leadership training for existing staff will be essential to maintaining balanced and effective supervisory structures in the long term.

Another significant achievement lies in the development and deployment of MTs and CNTs. This human resource innovation has significantly influenced the professional development landscape of the participating institutions. MTs conducted in-house capacity-building sessions to strengthen faculty's pedagogical and technical skills, while CNTs implemented bedside mentoring, feedback, and clinical demonstrations to enrich students' practical learning experience. Both groups also **tried to play an essential role in bridging theory with practice**, working to ensure that the competencies outlined in the national curriculum were increasingly reflected in clinical settings. While these efforts have contributed to narrowing the gap between classroom instruction and clinical application, limited experience, competing workloads, and institutional constraints have constrained their ability to achieve this alignment fully. Nevertheless, their contributions mark an essential first step toward institutionalizing practice-based learning and improving the overall quality of nursing education.

Qualitative analyses lend further credence to these findings, highlighting enhancements in motivation, professional accountability, and teamwork fostered among nursing educators. An improved system of data management and recordkeeping, coupled with a conducive environment for committee documentation that respects operational standards, has fostered a strong institutional culture of transparency and evidence-based decision-making. However, significant disparities remain, particularly in resource-poor colleges, which suffer from inequitable progress due to inadequate laboratory space, library resources, and accommodation facilities.

In sum, it has been discussed that the CBNS-II has, in large part, established the basic systems needed for sustainable institutional development in nursing education and practice. In other words, the project has translated disparate prior initiatives into a relatively coherent, standardized framework embraced by national and international quality assurance mechanisms. To sustain these gains, however, balancing policy support and resource allocation and embedding project-driven structures into the permanent systems of the DGNM and the BNMC will be essential.

5.2 Limitations

To appropriately contextualize the findings of the CBNS-II ELS, it is essential to distinguish between (1) limitations inherent to the assessment process itself, and (2) limitations faced by the institutions participating in the survey.

5.2.1 Limitations inherent to the ELS

- **Data quality and consistency:** The assessment primarily depended on self-reported institutional data and available administrative records. Variations in documentation practices, incomplete archives, and differing levels of data verification across institutions introduced potential inconsistencies that may have affected the accuracy of specific indicators.

- **Limited qualitative exploration:** The ELS relied mainly on quantitative indicators to assess institutional progress. The absence of qualitative methods—such as key informant interviews, focus group discussions, or classroom observations—restricted the survey's ability to capture deeper behavioral, motivational, and cultural dimensions of institutional change.

- **Short implementation window:** The interval between the baseline and endline assessments was relatively brief. This limited timeframe constrained the observation of long-term institutional transformation and the sustainability of project outcomes beyond the immediate intervention period.

- **Self-reported measures of skill improvement:** Some indicators—particularly those in Table 49—were based on respondents' own perceptions of whether their skills had improved following CBNS-II activities. These dichotomous "improved/not improved" responses reflect subjective judgment rather than objective competency assessment. Consequently, the results should be interpreted as perceived improvement rather than measured changes in performance.

5.2.2 Limitations faced by the survey targets

- **Human resource constraints:** Persistent shortages of qualified faculty members, MTs, and CNTs, together with high workloads among existing staff, limited consistency and depth of progress in teaching quality, supervision, and institutional reforms.

- **Infrastructure and resource gaps:** Despite improvements, some colleges continued to face deficits in laboratory facilities, teaching-learning materials, and student accommodation. Such disparities undermined equitable progress toward accreditation and reduced the uniformity of educational quality across institutions.

- **Coordination and monitoring challenges:** While most colleges achieved their committee activity targets, irregular meeting schedules and weak coordination mechanisms between colleges and affiliated hospitals hindered consistent implementation and systematic monitoring of planned activities.

Summary statement: In summary, while the ELS findings provide credible evidence of institutional progress, the above limitations—both methodological and contextual—should be considered when interpreting the results and drawing policy implications.

5.3 Recommendations

A. Short-Term (within the remaining project period)

1. Increase Clinical Mentorship

- **Action:**
    1. Each college should give the students appropriate mentorship during clinical practices.
    2. Select and train additional CNTs from among the existing nursing staff to ensure all hospitals meet the 50% student supervision support target.
- **How:**
  1.1 Conduct a rapid assessment to identify supervision gaps by each college.
  1.2 Integrate clinical mentorship sessions into the regular academic calendar like weekly monitoring system.
  2.1 Prioritize increasing CNT training within under-resourced institutions. Temporary reassignments or rotations may be used only as an interim measure to maintain supervision coverage until additional CNTs are trained locally.

2. Standardize Committee Functionality and Performance

- **Action:** Strengthen the operations of FDC and QIC, as these are the two core mechanisms directly responsible for faculty skill enhancement and institutional performance monitoring.
- **How:**

    - Develop and distribute a standardized template for recording minutes, attendance, and decisions.
    - Require committees to meet monthly and submit brief progress summaries to the project M&E team.
    - During the remaining project period, conduct virtual mentoring visits by project focal persons to review committee outputs and provide feedback.
    - After project completion, the DGNM and BNMC should assume responsibility for ongoing monitoring through periodic virtual check-ins or by integrating it into their routine supervisory visits.

3. Enhance College–Hospital Coordination

- **Action:** Reinforce structured collaboration between colleges and partner hospitals to sustain ≥ 80% coordination committee functionality.
- **How:**
    - Establish joint monthly planning meetings involving both academic and hospital management representatives.
    - Use a shared logbook to document clinical placement schedules, student feedback, and supervision challenges.
    - Assign a liaison officer from each side to ensure communication and problem-solving.

4. Strengthen Research Capacity

- **Action:** Initiate hands-on training on research methods and data analysis for faculty and senior students.
- **How:**
    - Functioning the research committee actively
    - Conduct short modular training sessions facilitated by experienced researchers or academic mentors.
    - Support mini research projects aligned with ongoing college improvement activities.
    - Integrate student-led data collection into routine academic assignments to foster evidence-based learning.

5. Maintain Accreditation Readiness

- **Action:** Continue regular self-assessments to maintain readiness for BNMC institutional accreditation.
- **How:**
    - Use the BNMC accreditation checklist to perform bi-annual internal audits.
    - Develop a simple action tracker to document progress on compliance gaps.
    - Submit summary reports to the project team to inform targeted technical support visits.

B. Long-Term (for DGNM, BNMC, and related institutions)

1. Institutionalize Clinical Mentorship

- **How:** Embed MTs and CNTs deployment into DGNM's human resources planning and budget frameworks, ensuring sustained coverage beyond project period.

2. Formalize Committee Accountability

- **How:** Incorporate FDC and QIC performance indicators into annual college performance evaluations led by DGNM/BNMC.

3. Infrastructure and Resource gaps

- **Action:** Improve equitable access to essential teaching and learning resources across colleges.
- **How:**
    - Conduct a quick resource inventory (labs, hostels, and teaching aids) to identify gaps.
    - After project completion, the DGNM and BNMC should integrate infrastructure maintenance and resource upgrades into their regular operational and development budgets, seeking additional support through government and partner-funded programs where needed.
    - Coordinate with local authorities or hospital partners for cost-sharing in urgent maintenance.

4. Research and Academic Growth

- **How:** Establish research units within colleges and integrate faculty research output into promotion criteria to nurture a culture of evidence-based practice.

5. Sustain Accreditation and Quality Assurance

- **How:** Strengthen BNMC's accreditation monitoring system to ensure periodic review, feedback, and continuous improvement across all college

5.4 Conclusions

The CBNS-II has comprehensively developed the institutional and educational capacities of nursing colleges and collaborative hospitals in Bangladesh. Under the guidance of the project design matrix, measurable changes in the quality of nursing education, faculty development, and clinical practice management were instituted. The active functioning of Faculty Development Committees, Quality Improvement Committees, and joint hospital coordination mechanisms provided a system for sustainable quality assurance in academics and clinics.

The endline assessment evidence corroborates that the nursing colleges climbed the ladder toward accreditation readiness and faculty competency. Partner hospitals, too, were maturing institutionally by functioning through committees and supervising on-the-job training. MTs and CNTs have closed the gap between theory and practice, thereby contributing to learning and professional accountability.

Persistent challenges remain in resource allocation, faculty sufficiency, and systematic monitoring. Some colleges continue to experience irregular committee operations and delays in maintaining or upgrading physical facilities. These limitations mirror the resource and management disparities observed in the endline findings. Nevertheless, most colleges have progressed from fragmented systems toward more structured, accountable, and quality-oriented approaches in both education and clinical practice.

In conclusion, the CBNS-II is achieving its objectives through institutional reforms, enhanced professional development, and collaboration between nursing education and hospital settings. For sustained maintenance and development of these gains, continuous investment in human resources, infrastructure, and governance processes must follow.

SL No		July-2025		August-2025				September-2025				October-2025	Assignment
	Activities	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11-12**	
1	- Survey tools development and questionnaire finalization - Collect authorization letter from JICA and all stakeholders												Dr. Syed Dr. Rahman Dr. Abedin Mr. Benay
2	- Literature and document reviews for the inception report												Drs Syed, Rahman & Abedin
3	- Finalize the Inception report **Submission date: 25 July**												Drs Syed, Rahman & Abedin
4	- Staffs' recruitment and train them for ready to start - Pre-testing and finalize the questionnaire by the support from JICA project personnel												Dr. Syed Dr. Rahman Mr. Benay Mr. Zia
5	- Data collection in the field and supervise accordingly - Project personnel can visit to the field to observe data collection												Dr. Syed Dr. Rahman Mr. Benay
6	- Data cleaning and analysis completion and share it with the project personnel												Dr. Rahman Dr. Abedin Mr. Benay
7	- Write the first draft of the end-line survey and share it with the project personnel **Submission date: 14 September**												Drs Syed, Rahman & Abedin
8	- Make final the report for sharing with the project personnel **Submission date: 28 September**												Drs Syed, Rahman & Abedin
9	- Complete presentation materials both English and Bengali.												Drs Syed, Rahman & Abedin
10	- Share the materials with the JICA project personnel and end the project.												Dr. Syed

Chapter Six: Annexure

Appendix 6.1: Questionnaire Part A

The Endline survey of the Project for Capacity Building of Nursing Services Phase 2 (CBNS-II)

A. Provider-Based Nursing College Questionnaire

Date of interview: ----/---/----
Name of the Interviewee: ----------
Participants' Phone Number: | | | | | | | | | | | |

Name of the College: ----------
The Year of college establishment: ----------

1. Program(s) Offered: [ ] Diploma [ ] BSc [ ] Post-basic BSc [ ] MSc [ ] Other:_____
2. Number of Students Enrolled (Current Year): _____
3. Number of Clinical Partners (Hospitals): _____(Criteria 1.8 on accreditation)
4. Hostel Facility: [ ] Yes [ ] No Total Capacity: _____
5. Number of Classrooms and Lab Facilities: _____
6. Number of Total Graduates in the Past 5 Years: _____

I. Program Director/Head data:		
1. **1.1**	The Highest academic degree of the Program Head/ Director/Principal (This is criteria accreditation number 1.1)	a. Bachelor of Science in Nursing b. Other Bachelor degree c. Master of Science in Nursing d. Master in Public Health (MPH) e. Other Master's degree f. Doctor of Nursing practice g. Doctor of Philosophy in Nursing h. Other doctoral degree
2 **1.2**	Does the program director have dedicated administrative support? *[Administrative support includes general office management such as answering phones, doing clerical work, and a variety of other tasks.]*	Yes /No If answer is yes, please specify the type of support: _____
3 **1.2**	Do the Head of the Nursing and Midwifery Educational Institution have autonomy in decision making within his/her jurisdiction, e.g., *Administration of the Nursing and Midwifery Educational Institutions students, instructors, & support staff?*	Yes/No
4 **1.2**	Are the competencies of Head of the Institute approved by the BNMC?	Yes/No
5	Does your college assess student learning, knowledge and skill development throughout the	Yes/No

	curriculum using reliable evaluation methodologies and tools?	
6 **1.4; d & e**	Do you communicate the results to the students?	Yes/No
7	What is the current accreditation status?	Nothing proceed/ self-assessment conducted/ in the process of accreditation Years of accredited ----------
II. Administrative data:		
1 **1.10**	Is the college Organogram clear, updated, and publicly displayed?	Yes/ No/ Partially (If yes, please obtain/see the document) ----------
2 **1.9; a**	Does your college have a prospectus including vision, mission and future plans and a resource plan that is followed?	Yes/No/partially (If yes, please obtain/see the document) ----------
3 **1.9; c**	Does your college have a human resource plan & budget plan? *(Document review)*	Yes/No ----------
4 ~~**5.9**~~	~~**Does your college recruit human resources as per BNMC policy?**~~	~~**Yes/No**~~
5 **1.9;**	Does your college have any academic calendar/yearly master plan?	Yes/No (If yes, please obtain the document) ----------
6 **1.4**	The administrative and digital information systems in the nursing college should be well organized or effective a. Duties are assigned based on job description b. A master plan for student placements is used c. An academic calendar is used d. There is a notice board or other information system to inform educators, staff and students e. There is a dynamic website and information of the college, facilities, teachers, & students, curriculum, course content	 Yes/ No/ Partially Yes/ No/ Partially Yes/ No/ Partially Yes/ No/ Partially Yes/ No/ Partially
7 **1.3**	Do you have any written administrative policies available for faculty and students?	Yes/No/Partially (If yes, please ask for the document) ----------
8 **1.5**	Does your college maintain well-organized and up-to-date records of *(Document review)*	a. student admissions Yes/ No b. student registration Yes/ No c. student transcripts Yes/ No d. student master roll call Yes/ No e. student personal file Yes/ No f. examination rolls call book Yes/ No g. other admin. File systems? Yes/ No

9	Does your college have any quality improvement strategies, particularly related to;	a. student outcomes? b. course evaluations?	Yes/ No Yes/ No
10 **1.9; c**	Financial resources	Budgetary scale;---------- Government and donor support only	
III. Program Data:			
1 **2.1**	Does your college admit students with a background education according to government admission policy?	Yes/No	
2 **1.4; e**	What types of learning modalities does the program offer?	1. In person only 2. Online 3. Hybrid	
3 **4.1**	The nursing college provides learning experiences that will enable graduates to develop the entry-to practice competencies for nurse-midwives in Bangladesh.	Yes/No	
4	Does the program administer a formal student orientation process? *[A formal student orientation is a process of introducing new nursing students to program and healthcare facility policies, procedures, and technologies. This may include, but is not limited to, the following with the student: student responsibilities/expectations, professional dress/ behavior codes, etc.]*	Yes/No If answer is yes, please specify the contents and duration of the orientation ---------- ----------	
5	Does the program offer support services to help low socioeconomic students in accessing available resources? *[e.g., peer mentoring services, tuition assistance, a work-study program, etc.)? [Students have books and resources throughout the program and the program has strategies to help students who can't afford books and resources.]*	Yes/No If answer is yes, please specify---------- ----------	
6	Does the program have a formal remediation process in place for students needing academic support or who commit errors/near misses in their clinical experiences? *[The remediation process is designed to promote success for students who are at risk of failure and should include the following elements: a description of the deficient areas; an outline of specific, measurable goals to demonstrate success; an individualized plan for each student; time frame for completion, agreed upon by the faculty and student.]*	Yes/No If answer is yes, please specify; ----------	
7 **4.3**	The nursing college have the facilities:	a. Assesses student knowledge with a range of methods (case presentation, buzz group, posters, role play, etc.-----Yes/No b. Assesses skills development (i.e.; OSCE, Skill lab) -------Yes/No c. Users reliable evidence-based evaluation methods (i.e.; MCQ, Scenario-based questions ---- Yes/No d. Communicates the results to the student-----Yes/No	

8	How many hours do students spend in direct patient care per week?	_____hours
9	Among them, how many hours are faculty-supervised?	_____hours
10 **4.7**	Do your clinical settings use different varieties of patients?	Yes/No
11	Do you practice the opportunities in clinical experiences for promoting safety and quality?	Yes/No If answer is yes, please specify; --- ---
12	Does this program cover 50% or more of clinical experiences?	Yes/No
13	Is the number of hours in the clinical placement enough to cover the requirement in the curriculum?	Yes/No
14	How many hours do students spend in simulation at college? *["A technique that creates a situation or environment to allow persons to experience a representation of a real event for the purpose of practice, learning, evaluation, testing, or to gain an understanding of systems or human actions."]*	1st year--------hour 2nd year------hour 3rd year--------hour 4th year---------hour
15	Students spend % in the theory class and-% in lab-practice? *(in the classroom for theory and lab practice for: Fundamental Nursing and Med-surg Nursing)* *[A skills laboratory is equipped with manikins, task trainers, and hospital equipment where students can apply basic procedural skills such as administering injections.]*	Theory: ---------% Lab practice: ------%
IV. Faculty Data [Document review]:		
1 **3.7**	How many full-time faculties are in the program? *[Full time equivalent (FTE) faculty is expected to work at least 40 hours per week.]*	_____
2	How many part-time faculties are in the program? *[Part-time faculty work less than 40 hours per week.]*	_____
3	How many clinical adjunct/guest faculties are in the program?	_____
4	How many of the full-time faculty has a graduate-level education? *[MSc in Nursing, MSC other than nursing]*	_____
5	Please specify the typical number of students to one faculty member for theory courses.	_____
6	Please specify the number of students to one clinical faculty member. (Across all faculty levels and clinical experiences).	_____
7 **1.7**	Are the guest/adjunct faculties' who are hired expert in their specific field?	Yes/No
8 **3.4**	The educators develop clinical reasoning, problem solving, and critical thinking in students.	Yes/No If yes, please give an example

		---------- ----------
9 **1.6**	Are your nursing instructors supported in updating their clinical expertise, nursing knowledge, and competency as educators and in participating in professional development activities?	Yes/No If answer is yes, please specify; ----------
10 **3.1**	Do nursing instructors (registered nurses, registered midwives, or registered nurse-midwives), who demonstrate knowledge and competence in the areas that they teach have a minimum of a bachelor's in nursing, public health nursing, or midwifery, or a degree higher than the educational program?	Yes/No
11 **3.2**	Do the nursing instructors use well-recognized teaching methods to foster student learning, including, but not limited to, adult education approaches (multimedia, projector, white board, etc.), self-directed learning, e-learning, and clinical simulations?	Yes/No If answer is yes, please specify the contents; ----------
12 **3.3**	Do the nursing instructors provide lesson based on the most current reliable evidence?	Yes/No
13 **3.8** **a, b**	The individuals who are responsible for students in the clinical setting: a. Hold a minimum of a bachelor's degree in nursing/ public health nursing? b. Possess clinical expertise and sound knowledge in their specialty area	i. Subject teacher (nursing instructor) ii. Principal iii. CI/CS; ----Yes/No Yes/No
14 **3.5**	Do other health professionals who are guest lecturers hold graduate degrees and possess clinical and educational expertise in their teaching specialty?	Yes/No
15	Is appointment of the guest lecture followed by the government policy?	Yes/No
16 **3.6**	Does your college maintain the ratio of 1 educator to 40 students or less in classroom courses and 1 instructor to 8 students in clinical placements and in the laboratory?	Class room: Yes/No Laboratory: Yes/No
17 **3.7**	Does your college have more than 25% part-time instructors?	Yes/No
18 **3.9**	Does your college collaborate with qualified registered nurses, midwives, and nurse-midwives, as well as other medical providers, in clinical practices who supervise and teach students appropriately?	Yes/No
19 **3.1** **1**	Clinical instructors responsible for students in clinical placements supervise and teach students in the clinical practice areas in which they have clinical expertise.	Yes/No

20 **3.1** **0**	Are the educators, provide clinical teaching and other educational support by rotation to the students on a regular basis in the clinical site?	Yes/No	
V. Student Data:			
1	Do students have the sufficient educational materials (like books, software, internet access, syllabus, etc.) they need to succeed provided by the college?	Yes/No	
2	How many students are enrolled in the nursing program at the beginning of the current academic year?	----------	
3	In the most recent graduating cohort, how many students dropped out?	----------	
4 **2.2**	Does your college admit students who are medically and physically fit?	Yes/No	
5 **2.3**	Do the students admit into your college demonstrate a willingness to serve in health care and to be independent learners?	Yes/No	
6 **4.2**	Does your college offer students' opportunities for multidisciplinary learning (general education/physical education/cultural) and inter-professional teamwork collaboration?	Yes/No	
VI. Teaching & Learning Resources (Infrastructure):			
1 **5.8**	Does your college has at least 30,000 square feet (Yes/No) and includes	a. furnished separate common room for students and teachers	Yes/ No
		b. prayer room	Yes/ No
		c. facilities for indoor and outdoor games	Yes/ No
		d. an audiovisual classroom	Yes/ No
		e. an individual office for you (head)	Yes/ No
		f. a meeting room	Yes/ No
		g. a room for nursing instructors	Yes/ No
		h. an office room for the accountant and cashier	Yes/ No
		i. changing rooms	Yes/ No
		j. a general office room	Yes/ No
		k. an attached washroom for teachers	Yes/ No
2 **4.4** **5.3**	Does your college provide a good balance of classroom (one classroom for 50 students) and practice learning experiences?	Yes/ No	
3 **4.6**	Does your college ensure subject based clinical experiences by placing students in other health care facilities? *[e.g., ENT, orthopedics, psychiatry, and midwifery-led care?]*	Yes/ No	

4 **5.1**	Does your college provide hostel accommodation and support to students including	Yes/ No If yes please response Q5	
5 **5.1**	What are the facilities existing in the hostel?	a fully furnished hostel for students	Yes/ No
		hostel security for students	Yes/ No
		separate washroom for girls& boys students in the hostel	Yes/ No
		students' visiting rooms	Yes/ No
		common room	Yes/ No
		guard's room	Yes/ No
		transportation for students to clinical sites	Yes/ No
		other necessary facilities	Yes/ No
6 **5.2**	Does your college ensure students and instructors have safe drinking water?	Yes/ No	
7 **5.4**	Does your college have at least 1 bathroom for 20 students?	Yes/ No	
8 **5.5**	Does your college have appropriately equipped lab space for	fundamental nursing	Yes/No
		nutrition	Yes/No
		microbiology	Yes/No
		anatomy	Yes/No
		physiology	Yes/No
		midwifery skills lab	Yes/No
		computer lab	Yes/No
9 **5.6**	Do the students at your college have liberal access to skills laboratory (lab), computer lab, and the internet to support their learning?	Yes/No	
10 **5.7**	Does your college have a furnished library for students with up-to-date books (with 1:5 ratio text books), journals, and magazines?	Yes/No	

Name of Interviewer: ---------- Signature: ----------

Appendix 6.2: Questionnaire Part B

B. NURSING COLLEGE STUDENT-BASED QUESTIONNAIRE
(All students of the 2nd and 4th year)

1. Students' ID:----------
2. Age: ----------Years 3. Gender: [ ] Male [ ] Female [ ] Other
4. Academic Year: [ ] 2nd Year [ ] 4th Year
5. Marital Status: [ ] Single [ ] Married [ ] Other: _____
6. Residence Type: [ ] Hostel [ ] Home [ ] Rented Room [ ] Other: _____

Please answer your opinion honestly and frankly. This questionnaire sheet will be shredded after the survey and also individuals will not be identified. Self-Administrator

Course experience questionnaire (CEQ):					
A	**The Student Support Scale (SSS)**	**Strongly agree**	**agree**	**strongly disagree**	**disagree**
1	The library services were readily accessible.				
2	I was able to access information technology resources when I needed them				
3	I was satisfied with the course and careers advice student learning outcomes				
4	Health, welfare and counselling services met my requirements				
5	Relevant learning resources were accessible when I needed them				
B	**The Learning Resources Scale (LRS)**				
1	The library resources were appropriate for my needs				
2	Where it was used, the information technology on the appropriateness and in teaching and learning was effective				
3	It was made clear what resources were available to help me learn				
4	The study materials were clear and concise				
5	Course materials were relevant and up to date				
C	**The Course Organization Scale (COS)**				
1	The course was well organized				
2	The course content was organized in a systematic way				
3	There was sufficient flexibility in my course to suit my needs				
D	**The Learning Community Scale (LCS)**				
		Strongly agree	**agree**	**strongly disagree**	**disagree**
1	I felt part of a group of students and staff committed to learning				

2	I was able to explore academic interests with staff and students				
3	I learned to explore ideas confidently with other people				
4	Students' ideas and suggestions were used during the course				
5	I felt I belonged to the college community				
E	**The Graduate Qualities Scale (GQS)**				
		Strongly agree	**agree**	**strongly disagree**	**disagree**
1	College stimulated my enthusiasm for further learning				
2	The course provided me with a broad overview of my field of knowledge				
3	My college experience encouraged me to value perspectives other than my own				
4	I learned to apply principles from this course to new situations				
5	The course developed my confidence to investigate new ideas				
F	**The Intellectual Motivation Scale (IMS)**				
1	I found my studies intellectually stimulating				
2	I found the course motivating				
3	The course has stimulated my interest in the field of study				
4	Overall, my college experience was worthwhile				

G	**Perception of Clinical and Academic experiences:**	
1	I am satisfied with the quality of my clinical placements.	**Yes/No** If yes, the reason: ---------- If no, the reason; ----------
2	My clinical placement is relevant to classroom learning.	**Yes/No** If yes, please describe on how your clinical placement has reinforced or connected with what you learned in the classroom.---------- If No, please describe why not clinical placement has reinforced or connected with what you learned in the classroom. ----------
3	I am satisfied with the quality of classroom lectures.	**Yes/No** If yes, the reason: ---------- If no, the reason;----------
4	Lab sessions are helpful and adequately resourced?	**Yes/No** If yes, please describe on how your lab sessions was helpful and adequately resourced. ---------- If No, please describe the reason why lab sessions are not helpful and adequately resourced.

<table>
<tr><td></td><td></td><td>----------</td></tr>
<tr><td>5</td><td>I feel confident and prepared for clinical practice.</td><td>Yes/No
If yes, please describe on why you feel confident and prepared for clinical practice.

If No, please describe why not feel confident and prepared for clinical practice.
----------</td></tr>
<tr><td>6</td><td>I receive sufficient guidance from faculty during clinical practice.</td><td>Yes/No
Please mention; ----------</td></tr>
<tr><td>7</td><td>Which wards are you doing clinical practices after year 2024? Please write down the whole ward name and duration?</td><td><table><tr><td></td><td>Ward Name</td><td>Duration</td></tr><tr><td>1</td><td></td><td></td></tr><tr><td>2</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td></tr><tr><td>4</td><td></td><td></td></tr></table></td></tr>
<tr><td>9</td><td>Is there any clinical nurse teacher in the ward where you are doing clinical practices?</td><td>Yes/No</td></tr>
<tr><td>10</td><td>If 11 is yes then, what kind of support you received from clinical nurse teacher (CNT)?</td><td>----------</td></tr>
<tr><td>11</td><td>Are you satisfying with overall educational environment at your college?</td><td>Yes/No
If yes, the reason: ----------
If no, the reason; ----------</td></tr>
<tr><td>12</td><td>How do you give the rate out of 10 on overall educational environment?</td><td>----------/10</td></tr>
<tr><td>13</td><td>What are your suggestions for improving more?</td><td>_____</td></tr>
<tr><td>14</td><td>What is your career goal after graduation?</td><td>_____</td></tr>
<tr><td>15</td><td>Do you plan to pursue further education after completing this program?</td><td>[ ] Yes [ ] No
If yes, specify: ----------</td></tr>
<tr><td>16</td><td>I am satisfied with the research opportunities in your college?
(This question is for only 4th year student)</td><td>Yes/No
If yes, the reason: ----------
If no, the response;----------</td></tr>
<tr><td>17</td><td>I feel encouraged to engage in research activities.
(This question is for only 4th year student)</td><td>Yes/No</td></tr>
</table>

Signature of the student: ---------- College ID:

Appendix 6.3: Questionnaire Part C

C. PARTNER HOSPITALS NURSING STAFF-BASED QUESTIONNAIRE:

Target Interviewee: Nursing Staff **Method: Self-administered Questionnaire**

Employee ID: ----------

Date of data collection: ----/----/-----

Name of the partner hospital: ----------**Hospital-ID**: ☐

1. Gender: [ ] Male [ ] Female [ ] Other
2. Position: Nursing supervisor/ Ward in-charge/Senior Staff Nurse
3. Specialist nurse: Yes (Specialty: ……...)/No
4. Academic degree:
    a. Secondary School certificate
    b. Higher Secondary Certificate
    c. Diploma in Nursing
    d. Post basic in BSc in Nursing
    e. Bachelor's degree (BSc Nursing)
    f. Master of Science in Nursing
    g. Master of Public Health (MPH)
5. Contract type: temporary employee/permanent staff
6. Years of nursing experiences: ----------

Please answer your opinion honestly and frankly. This questionnaire sheet will be shredded after the survey and also individuals will not be identified.

Practice Environment Scale of the Nursing Work Index:	
I. Training opportunity for nurses:	
1. Systematic training is provided to newly recruited nurses.	Yes / No ***(if response is No then skip 1a & 1b)***
1a. Are you satisfied with the training?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied ***(if response is neutral/ satisfied/ very satisfied then skip 1b)***
1b. What is the reason that you are (very) dissatisfied?	Reason: ---------- ----------
2. Corresponding continuing education is provided to nurses relevant to their job requirements	Yes / No ***(if response is No then skip 2a & 2b)***
2a. Are you satisfied with the corresponding continuing education?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied ***(if response is neutral/ satisfied/ very satisfied then skip 2b)***
2b. What is the reason that you are (very)	Reason:

dissatisfied?	_____
3. Did you participate in-service training which is conducted by CNT?	Yes/No ***(If <u>No</u>, please skip Q-3a & 3b)***
3a. What was the useful points for your clinical practice and/or patient care?	---------- ----------
3b. Did you apply lesson learned from the training in your clinical practice and/or patient care? And how?	Yes/No How;----------
II. Carrier development:	
4. There is an established post-exposure occupational management system that can be carried out effectively?	Yes / No ***(If response is <u>No</u> then skip 4a & 4b)***
4a. Are you satisfied with the established post-exposure occupational management system?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied ***(if response is neutral/ satisfied/ very satisfied then skip 4b)***
4b. What is the reason that you are (very) dissatisfied?	Reason: ---------- ---------- ----------
5. There is a clear career path or professional promotion system for nurses in the hospital?	Yes / No ***(if response is <u>No</u> then skip 5a & 5b)***
5a. If yes, are you satisfied with the existing career path or professional promotion system for nurses in the hospital?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied ***(if response is neutral/ satisfied/ very satisfied then skip 5b)***
5b. If not satisfied, what are the possible reasons?	Reason; ---------- ----------
6. Nurses have the opportunity to attend academic activities domestically and abroad.	Yes / No ***(if response is <u>No</u> then skip 6a & 6b)***
6a. If yes, are you satisfied with the existing opportunity to attend academic activities domestically and abroad?	Very dissatisfied/dissatisfied/neutral/ satisfied/ very satisfied ***(if response is neutral/ satisfied/ very satisfied then skip 6b)***
6b. If not satisfied, what are the reasons?	Reason; ---------- ----------

Signature of the staff nurse: ----------

Appendix 6.4: Questionnaire Part D

D. Partner Hospitals Nursing Staff Questionnaire for Nurses Look After the students (Current Situation of Clinical Practices for Student Nurses).

Target Interviewee: Hospital Master Trainers (MTs) and Clinical Nurse Teachers (CNTs)

Your Title: **Master Trainer (MT)/ Clinical Nurse Teacher (CNT)** **Method**: KII

Date of Data collection: ----/---/-----

Name of the partner hospital:……..**Hospital-ID:** [ ]

1. Name of the wards where you worked after certified as MT/CNT :----------
2. Gender: [ ] Male [ ] Female [ ] Other
3. Specialist nurse: Yes (Specialty:…… ……) /No
4. Name of the nursing college / institution you graduated: ……..
5. Academic degree:
    a. Secondary School certificate
    b. Higher Secondary Certificate
    c. Associate degree (Nursing Diploma)
    d. Post basic----------
    e. Bachelor's degree (BSc Nursing)
    f. Master's degree

Please answer your opinion honestly and frankly. This questionnaire sheet will be shredded after the survey and also individuals will not be identified.

1. Which department / ward do you work in?	
2. How many year(s) of nursing experience(s) you had when you start supervising nursing students?	……..year(s)
3. How many student nurses do you supervise usually per day?	Govt. Nursing college; ----------/day Private Nursing College; ----------/day
4. Are lecturers / teachers from the nursing college are reachable during the student's practice placement?	**Yes / No**
5. What are the most difficult aspects of teaching in the clinical practice (management, teaching method, etc.).	---------- ----------
6. What kind of knowledge you gained/changed about clinical practice after MT training or CNT training?	----------
7. What kind of support you provide the students during clinical practices?	1.---------- 2---------- 3----------
8. How many CNTs per ward do you think is appropriate?	----------
9. Why did you decided to become an MT/CNT? (please select the three most important reasons and number them in order of predominance)	a. for my career b. to obtain certificate c. Because it's a good chance to acquire knowledge and skill.

	d. because I have interest in the role of MT/CNT e. Others:----------
10. Do you plan to continue as a clinical nurse?	**Yes/No**
11. What is your next career plan	Next plan;---------- ----------
12. Within how many years do you plan to achieve this?	Within years
13. What is best thing about being a MT/CNT?	---------- ----------
14. Established month, years, and members of committees (Document review; minutes and list of participants)	1. Internal Committee (capacity development committee) ---/-----Month/Year; Members------ 2. Coordination Committee-----/---; Members; ---
15. Are you involved in any of above-mentioned committee? And what is your role?	**Yes/No** (If yes, the mention the role); ----------
16. Are there any good effects by conducting each activity (notable change, good practice etc.)	1. Internal Committee (capacity development committee); ---------- 2. Coordination Committee---------- ---------
17. What are the difficulties or challenges for each committee activities?	1. Internal Committee (capacity development committee)---------- 2. Coordination Committee----------
18. Do you have any experiences that you find that your skills in the following sector have been strengthened by participating CBNS-II project activities? If yes, please describe the details.	1. Teaching lecture session---------- 2. Teaching lab-practices---------- 3. Joint-Research activities with college--------- 4. Teaching in Clinical Practice---------- 5. Coordinating Clinical Practice-------- 6. Conducting Committee activities---- 7. Others----------
19. What improvements have you noticed in the education environment in clinical practice or clinical nursing care due to CBNS-II?	---------- ----------
20. What is the good impact on your hospital related to the following the CBNS-II activities?	1. MT Training---------- 2. CNT Training---------- 3. Joint-Research activities with college ---------- ---------- 4. In service training---------- 5. Strengthening clinical practice system---------- 6. Others----------

21. What is the difficulties or challenges in your hospital related to the following the CBNS-II activities?	1. MT Training---------- 2. CNT Training---------- 3. Joint-Research activities with college ---------- 4. In service training---------- 5. Strengthening clinical practice system--- 6. Others----------
22. What kind of activities as Master Trainer or CNT do you do in your hospital?	----------
23. What is your motivation in working as Master Trainer/ Clinical nurse teacher?	----------
24. What do you think the most important thing as Master Trainer/ Clinical nurse teacher?	----------
25. How often do you communicate with faculties of nursing college?	----------
26. If you have any recommendation related to the project activities, please describe.	----------
27. Please recommend the effective intervention for improving nursing education in Bangladesh?	----------

Appendix 6.5: Questionnaire Part E

E. Question to the Partner Hospitals

Target Interviewee: Director/Nursing Superintendent of Hospital Method: KII

Name of the Hospital: ---------- Hospital-ID: ☐

The year of the hospital establishment: ----------

1. Please provide the number of beds, departments, and wards in your hospital.	……..……..beds; ……..……..wards ……..…..……..dept.(s)
2. What is the average admission rate (occupancy rate) in this hospital?	---------- **Daily**
3. Please provide the number of staff for each position:	Nursing Superintendent;……. Deputy Nursing Superintendent;…….. Nurse Supervisor;……. Senior Staff Nurse;……
4. What is the number of senior (before 2019) & newly (After Jan 2020) qualified nurses?	---------- : ----------
5. Please provide the number of nurses by background qualification	MSc in nursing:…….. BSc in Nursing:……. Post-basic BSc in Nursing: ---------- Diploma in nursing …….
6. Number of BSc students and college number you accepted in a fiscal year (The number of students and how many colleges they are from?)	FY2022: Number of total student ……. Number of college …… FY2023: Number of total student …… Number of college …… FY2024: Number of total student …….. Number of college ……
7. Which departments or wards accept clinical placement for BSc nursing students (especially in specific fields such as ENT, OT, Emergency, Medicine, Surgery, psychiatry ward)?	…….. ……. ……. ……..
8. Number of Clinical Nurse Teachers (CNTs) per nursing student, per ward?	Per ward;---------- Per Nursing student;----------
9. Challenges and good practice in clinical nursing setting during CBNS-II?	Challenges; ---------- Good practice; ----------
10. Number of clinical nurse who have received MT or CNT	MT training; ---------- CNT training; ----------

<table>
<tr><td>training?</td><td></td></tr>
<tr><td>11. Which ward CNTs are available and the number?</td><td><table>
<tr><th></th><th>Ward Name</th><th>Number</th></tr>
<tr><td>1</td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td></tr>
<tr><td>3</td><td></td><td></td></tr>
<tr><td>4</td><td></td><td></td></tr>
<tr><td>5</td><td></td><td></td></tr>
<tr><td>6</td><td></td><td></td></tr>
<tr><td>7</td><td></td><td></td></tr>
<tr><td>8</td><td></td><td></td></tr>
<tr><td>9</td><td></td><td></td></tr>
</table></td></tr>
<tr><td>12. Supervision plan for nursing student at the ward level</td><td>Details----------</td></tr>
<tr><td>13. Portfolio/assignment responsibility for nursing supervisor</td><td>Details----------</td></tr>
<tr><td>14. Portfolio/assignment responsibility for MT</td><td>Details----------</td></tr>
<tr><td>15. Portfolio/assignment responsibility for CNT</td><td>Details----------</td></tr>
<tr><td>16. In-service training plan for all senior staff nurses</td><td>Yes/No</td></tr>
<tr><td>17. What is the challenges in conducting in- service training?</td><td>Details----------</td></tr>
<tr><td>18. Number of nurses who have received in-service training in past 12 month and its contents</td><td>Total number----------
Contents----------</td></tr>
<tr><td>19. Has a system for improving the clinical Practice and any format for the supervising/ check been created in the hospital?

* System: CNT rotation plan
* Format: Attendance sheet, uniform and attitude check sheet, supervision sheet</td><td>System:
1. Yes, already set up and implementing ;
----
2. Yes but not implemented yet. (Or partially implementing);
----
3. In planning; …….
4. No. (Reason :……)

Format: ……..
…….</td></tr>
<tr><td>20. Have any new initiatives been introduced into the hospital for better nursing care through in-service training?</td><td>1. Yes, we are trying to introduce/ introduced;

2. No.</td></tr>
<tr><td>21. Number of nurses who have conducted nursing research and published papers in last 12 month?</td><td>----------</td></tr>
</table>

22. What is the notable change in your hospital since the CBNS-II started?	In-clinical care---------- In-the mind set of nurses---------- In the quality of the clinical practice----------	
23 The percentage of clinical teaching support providing by CNTs to BSc nursing students'.	23a. Number of wards CNTs educate nursing students	
	23b. Total number of wards at each target hospital and number of the ward which accept the nursing student for clinical practice?	_____ _____
24. There are two core committees do you know that?	**Yes/ No**	
25. What was discussed as themes in the committees meetings	1. Coordination committee---------- 2. Internal committee----------	
26. What led to the activities to improve the situation in the hospital?	1. Coordination committee---------- 2. Internal committee---------- 3. MT Training---------- 4. CNT Training---------- 5. Research activities---------- 6. In service training---------- 7. Strengthening clinical practice system--------- 8. Others----------	

Appendix 6.6: Questionnaire Part F

F. COLLEGE FACULTY QUESTIONNIRE

Target: Master Trainer (MT) Method: **KII**

Date of Data collection:-----/-----/------

Name of the Nursing College:---------- **College-ID**:

Name of the participant: ----------

Gender: [ ] Male [ ] Female [ ] Other

Please answer your opinion honestly and frankly. This questionnaire sheet will be shredded after the survey and also individuals will not be identified.

1. How many year(s) of clinical nursing experience(s) did you have?	……..year(s)
2. How many year(s) of nursing education experience(s) did you have?	……..year(s)
3. What is your current role and how long you have been serving in this college?	Role; ---------- ----------Years in this college
4. What are your key responsibilities related to teaching and clinical supervision?	---------- ---------- ----------
5. What challenges do you face in delivering quality classroom instruction?	---------- ----------
6. How often you engage students in clinical practice?	Daily/ Weekly/ occasionally
7. Has a system for improving the clinical Practice and any format for the supervising/ check been created in the hospital? * System: CNT rotation plan * Format: Attendance sheet, uniform and attitude check sheet, supervision sheet	System: 1. Yes, already set up and implementing ; …… 2. Yes but not implemented yet. (Or partially implementing); ---------- 3. In planning; ……. 4. No. (Reason :……) Format: …….. ……
8. Have any new initiatives been introduced into the hospital for better nursing care through in-service training?	1. Yes, we are trying to introduce/ introduced; 2. No.
9. How often do you supervise students in clinical settings?	Daily/ Several times a week/ Weekly / Occasionally / Rarely
10. What kind of support students received from CNT?	1.---------- 2.----------

	3.----------
11. Which knowledge of CNT helped most for the students clinical practice placement?	----------
12. What kind of support you wish more from CNT's?	----------
13. What types of training or workshops have you attended in the last 12 months?	Number: ---------- Name of the training; ---------- ----------
14. What additional support would help improve your teaching/supervisory work?	----------
15. Are there any regular meetings with nursing staffs as a preparation of nursing students' clinical practice?	**Yes / No**
16. If Yes for No.15, how often do you have this meeting with clinical nursing staffs?	Weekly/ Bi-weekly (15 days) /Monthly /Bi-monthly (60 days)/ Quarterly (90 days)
17. Do you visit the hospital to supervise the students during the student's practice placement?	**Yes / No**
18. What are the most difficult aspects of teaching in-clinical practice (management, teaching method, etc.)	----------
19. Established month, years, and members of committees	1. Faculty Development Committee established; ---/-----. Members; ------- 2. Quality Improvement Committee established; ---/------. Members; ------- 3. Research Committee established; ---/-----. Members; ------ 4. Coordination Committee established; ---/---. Members; ------- Checking the committee meeting minutes and grasp the main discussion points
20. Are you involved in any of above mentioned committee? And what is your role?	Yes/ No;---------- Role; ---------- ----------
21. Are there any good effects by conducting each activity (notable change, good practice etc.)	1. Faculty Development Committee (FDC) ---------- 2.Quality Improvement Committee (QIC)---------- 3.Research Committee (RC) ---------- 4.Coordination Committee (CC); ----------
22. What are the difficulties or challenges for each committee activities?	1. Faculty Development Committee ---------- 2.Quality Improvement Committee ---------- 3.Research Committee ---------- 4.Coordination Committee; ----------
23. Do you have any experiences that you find that your skills in the following sector have been	1.Teaching lecture session ---------- 2.Teaching lab-lesson ---------- 3.Research activities ----------

strengthened by participating CBNS-II project activities? If yes, please describe the details.	4.Teaching in Clinical Practice---------- 5.Coordinating Clinical Practice---------- 6.Conducting Committee activities---------- 7.Others----------
24. What improvements have you noticed in the education environment due to CBNS-II project activities?	---------- ----------
25. What is the good impact on your nursing college related to the following the CBNS-II activities?	1. MT Training ---------- 2. In-house FD Training ---------- 3. Research activities ---------- 4. Promote subject-based nursing ---------- 5. Strengthening clinical practice system ---------- 6. Others ----------
26. What is the difficulties or challenges in your nursing college related to the following the CBNS-II activities?	1. MT Training ---------- 2. In-house FD Training ---------- 3. Research activities ---------- 4. Promote subject-based nursing---------- 5.Strengthening clinical practice system ---------- 6.Others ----------
27. Do you think any of the following CBNS-II activities were ineffective? If any activities is ineffective then describe the reason?	1. MT Training ---------- 2. In-house FD Training ---------- 3. Research activities ---------- 4. Promote subject-based nursing---------- 5.Strengthening clinical practice system---------- 6.Others ----------
28. What kind of activities as Master Trainer do you do in your college?	----------
29. Did you conduct any in-house Faculty Development training in the last 12 month?	**Yes/No** If yes, how many times; ---------- Topic; ----------
30. What is your motivation in working as Master Trainer?	
31. What do you think the most important thing as Master Trainer?	----------
32. How often do you communicate with clinical instructors or hospital?	----------
33. Are your feedback and suggestions considered by the administration?	**Yes/No**
34. If you have any recommendation related to the project activities, please describe.	_____ ----------
35. Please recommend the effective intervention for improving nursing education in Bangladesh?	----------

Appendix 6.7: Questionnaire Part G

G. Question to the Nursing College Principal

Target Interviewee: Principal Method: KII

Name of the Nursing College: ---------- College-ID: ☐

Date of data collection: -----/-----/-------

Name of the participant: ---------- Mobile Number; ----------

Gender: [ ] Male [ ] Female [ ] Other

1. How many years do you have experiences as a nursing college Principal?	---------- Years
2. How many years do you experiences teaching in nursing colleges?	---------- Years
3. Did you conducted any In-house Faculty Development (FD) Training for last 12 months?	Yes/No
4. What are the activities you lead for getting accreditation standards?	----------
5. How many committees are active for developing nursing education in your college? And what are they?	----------
6. How often the committee meetings hold on in your nursing college in the last 12 months?	1. Faculty Development Committee (FDC); How often; ---------- 2.Quality Improvement Committee (QIC) How often; ---------- 3. Research Committee (RC) How often; ---------- 4.Coordination Committee (CC) How often;
7. In the meetings, what types of discussion and decisions have been made?	Document review (meeting minutes) ---------- 1. Faculty Development Committee (FDC); ----- ---------- How often; 2. Quality Improvement Committee (QIC) ---------- How often; 3.Research Committee (RC) ---------- How often; 4.Coordination Committee (CC) How often;

8. Number of in-house trainings held each year during your period of time and the details.	Number ---------- Details; ----------
9. The number of faculties who have conducted nursing research and published papers in last 12 months	----------
10. What is the good impact in your nursing college related to the following the CBNS-II activities?	1. MT Training---------- 2. In-house FD Training---------- 3. Research activities---------- 4. Promote subject-based nursing, ------ 5. Strengthening clinical practice system--------- 6. Training in Japan---------- 7. Others----------
11. How do you analyze the cause of such a good impact occurred?	Details: ---------- ----------
12. What is the difficulties or challenges in your nursing college related to the following the CBNS-II activities?	1. MT Training---------- 2. In-house FD Training---------- 3. Research activities---------- 4. Promote subject-based nursing, ---------- 5. Strengthening clinical practice system--------- 6. Training in Japan---------- 7. Others----------
13. How do you overcome the difficulties?	----------
14. What is the notable change in your nursing college since the CBNS-II project started?	In-nursing education: ---------- In-nursing research:---------- In the mind set of faculty: ---------- In the quality of the clinical practice: ----------
15. If you have any recommendation related to the project activities, please describe.	----------
16. Do you have plan for conducting in-house training for faculties' skill development? What topic(s) will be the priorities?	Yes/ No ----------
17. Please recommend the effective intervention for improving nursing education in Bangladesh?	---------- ----------

Name of the interviewer:---------- **Signature**:----------

Appendix 6.8: Questionnaire Part H

H. Question to the Director of DGNM

Target Interviewee: DG/ Director (Admin)/Director (Education) Method: KII

Name of the organization: Directorate General of Nursing and Midwifery (DGNM)

Date of data collection: -----/----/-----

Gender: [ ] Male [ ] Female [ ] Other

1. As a DGNM representative what do you think for developing nursing education in Bangladesh?	----------
2. How often do DGNM monitor the activities of a nursing college and hospital? And what are the contents?	----------
3. Do you know about the CBNS-II activities?	Yes/ No
4. Did you saw any improvement of the mentioned right side activities running by the CBNS-II project?	1. MT Training--------- 2. In-house FD Training---------- 3. Research activities---------- 4. Promote subject-based nursing -------- 5. Strengthening clinical practice system---- 6. CNT training---------- 7. In-service training---------- 8. Japan training---------- 9. Others----------
5. How do you realize the cause of such a good impact occurred?	Details: ----------
6. What is the difficulties or challenges related to the following the CBNS-II activities?	1. MT Training--------- 2. In-house FD Training---------- 3. Research activities---------- 4. Promote subject-based nursing -------- 5. Strengthening clinical practice system---- 6. CNT training---------- 7. In-service training---------- 8. Japan training---------- 9. Others----------
7. What do you think about the overcome of the difficulties?	----------

8. What is the notable change you noticed since the CBNS-II project started?	In nursing education: ---------- In nursing research: ---------- In the mind set of faculty and clinical nurse ---------- In the quality of the clinical practice----------
9. Do you have any plan to ensure the continuity of this project?	----------
10. If you have any recommendation related to the project activities, please describe.	---------- ----------
11. Do you have plan to conduct future MT training as a Govt. training?	**Yes/No**
12. How do you manage the budget for these MT training?	---------- ----------
13. Currently there are hardly no budget support for clinical nurses working at the local level include purchasing training equipment. Do you have a plan to support an in-service training at college (Faculty development training for example) or hospital (Clinical Nurse Teacher training for example) anytime soon?	**Yes/No**
14. How do you manage the budget for local level training as FD training at college or CNT training in the hospital?	---------- ----------
15. Please recommend the effective intervention for improving nursing education in Bangladesh?	----------

Name of the interviewer:---------- **Signature**:----------

Appendix 6.9: Questionnaire Part I

I. Question to the Register of BNMC

Target Interviewee: Register of BNMC Method: KII

Name of the organization: Bangladesh Nursing and Midwifery Council (BNMC)

Date of data collection:

Gender: [ ] Male [ ] Female [ ] Other

1. As a BNMC Register what do you think for developing nursing education in Bangladesh?	---------- ----------
2. Would you kindly share the number of nursing colleges accredited? And how many colleges are submitted?	---------- ----------
3. Do you know about the CBNS-II activities?	Yes/ No
4. Did you saw any improvement of the mentioned right side activities running by the CBNS-II project?	1. MT Training---------- 2. In-house FD Training---------- 3. Research activities---------- 4. Promote subject-based nursing ---------- 5. Strengthening clinical practice system----- 6. CNT training---------- 7. In-service training---------- 8. Japan training---------- 9. Others----------
5. How do you realize the cause of such a good impact occurred?	Details: ---------- ----------
6. What is the difficulties or challenges related to the following the CBNS-II activities discussed by the respective colleges?	1. MT Training---------- 2. In-house FD Training---------- 3. Research activities---------- 4. Promote subject-based nursing ---------- 5. Strengthening clinical practice system------ 6. CNT training---------- 7. In-service training---------- 8. Japan training---------- 9. Others----------
7. What do you think about the overcome of the difficulties?	----------

	---------- ----------
8. What is the notable change in you noticed since the CBNS-II project started?	In nursing education: ---------- In nursing research:---------- In the mind set of faculty and clinical nurse: ---------- In the quality of the clinical practice:----------
9. If you have any recommendation related to the project activities, please describe.	---------- ----------
10. How will BNMC contribute to support future MT training as a Govt. training?	---------- ----------
11. Please recommend the effective intervention for improving nursing education in Bangladesh?	---------- ----------

<u>Appendix 6.10:</u> Key Informant Interviews (KIIs) Questions Guideline for Endline Survey

To capture the contextual, institutional, and experiential dimensions of the CBNS-II project impact, tailored Key Informant Interview (KII) guides will be used for various respondent groups. These interviews will be conducted **face-to-face by trained qualitative researchers**, and audio recordings will be taken with **informed consent**. Transcripts will undergo thematic analysis using a framework based on project objectives and the accreditation benchmarks.

1. For Nursing College Principals and Senior Administrators

- What major **challenges** have you faced in implementing faculty development and mentoring initiatives?
- How has participation in **CBNS-II activities** (e.g., committee work, faculty development [FD] training, research capacity-building, and subject-based curriculum promotion) changed your institution's approach to teaching and clinical practice?
- What are some **good practices** that emerged during the project period related to teaching, clinical instruction, or institutional collaboration?
- What are the **main difficulties** encountered in implementing new educational standards, mentoring systems, or clinical partnerships?
- How has the college adjusted its **strategies for academic leadership, supervision, and faculty support** as part of this project?

2. For Faculty and Clinical Instructors (CNTs, MTs, and others)

- What specific **faculty development opportunities** have you participated in during the CBNS-II period?
- What do you perceive as the **key achievements** of these activities in terms of your teaching approach, clinical practice support, and/or research engagement?
- What **challenges** do you face in mentoring students, especially during clinical placements?
- Can you describe any **improvements or changes** in your approach to clinical teaching, simulation, or academic mentorship since the project began?
- In your view, how well do current institutional systems support **interdisciplinary collaboration**, academic promotion, or research engagement?

3. For Nursing Students

- What is your overall **impression of the clinical practice experience** during your training?
- Have you been supervised or taught by **Clinical Nurse Teachers (CNTs)** or **Master Trainers (MTs)** developed through the CBNS-II project? If yes, how would you describe the **difference** in those clinical learning experiences?
- Have you noticed any **changes in the quality** of clinical placements, classroom teaching, or lab-based learning since the CBNS-II project began?
- What challenges do you face during clinical placements or in understanding course materials?

- Do you feel adequately supported by your **faculty and CNTs** during clinical practice?
- What would you recommend to improve the overall **learning environment** and the quality of clinical practice at your college?

4. For Hospital Management (Superintendent or Nursing Focal Person)

- How well do you think current **nursing education programs align with the clinical needs** of your hospital?
- What are the **strengths and weaknesses** of new graduate nurses entering the workforce?
- Are there specific **skills gaps** or areas of concern (e.g., clinical reasoning, patient communication, use of technology)?
- What has your hospital's **experience working with MTs and CNTs**? Have they helped improve clinical education quality?
- How do you evaluate **changes in clinical teaching quality** or supervision systems since the CBNS-II project began?
- How could hospital-college collaboration be improved to enhance the clinical learning environment for nursing students?
- What are your **long-term goals** for improving nurse readiness and performance in clinical settings?

Appendix 6.11: Observation Checklist

SL No	Name of the College	Organogram	Prospectus	Notice Board	Year Planner	Admin Policy	Result Sheet	Attendants Sheet	Student Welfare Org
1	College of Nursing, Sher-E-Bangla Nagar	√	√	√	√	√	√	√	√
2	Shaheed Tajuddin Ahmad Nursing College	√	√	√	√	√	√	√	√
3	Manikganj Nursing College	√	√	√	√	√	√	√	√
4	Sylhet Nursing College,	√	√	√	√	√	√	√	√
5	Barisal Nursing College	√	√	√	√	√	√	√	√
6	Rangpur Nursing College,	√	√	√	√	√	√	√	√
7	Mymensingh Nursing College	√	√	√	√	√	√	√	√
8	Chattogram Nursing College	√	√	√	√	√	√	√	√
9	Bandarban Nursing College	√	√	√	√	√	√	√	√
10	Rajshahi Nursing College	√	√	√	√	√	√	√	√

Appendix 6.12: KIIs typed data

Date of data collection: 02/ 09/ 2025

Gender: [√] Male [ ] Female [ ] Other

4. As a DGNM representative what do you think for developing nursing education in Bangladesh?	Need more specialized training for nurses and students, especially for genetic-care and others. The training must global standard like Japanese nurses are getting in their country.
5. How often do DGNM monitor the activities of a nursing college and hospital? And what are the contents?	DGNM's staff visit sometimes to monitor activities and they focused on clinical training.
6. Do you know about the CBNS-II activities?	√Yes/ No
4. Did you saw any improvement of the mentioned right side activities running by the CBNS-II project?	1. MT Training----; **Some improvements** 2. In-house FD Training--; **Improved** 3. Research activities-; **A few** 4. Promote subject-based nursing -; **Few improved** 5. Strengthening clinical practice system-; **Need more** 6. CNT training-; **Improved** 7. In-service training-; **Need more improvement** 8. Japan training-; **Need more international training** 9. Others----------
5. How do you realize the cause of such a good impact occurred?	Details: **CBNS-II project's objective was to** provide support for nursing education in Bangladesh. Thus, some cases were improved.
6. What is the difficulties or challenges related to the following the CBNS-II activities?	1. MT Training-; **Need more practical sessions** 2. In-house FD Training--; **Need more training** 3. Research activities--; **Need more capacities to the faculties** 4. Promote subject-based nursing -; **Subject oriented trainings are needed.** 5. Strengthening clinical practice system-; **Need more specific training** 6. CNT training-; **Need more as a result they can work internationally.** 7. In-service training-; **Need more training** 8. Japan training-; **Need more training** 9. Others----------
7. What do you think about the overcome of the difficulties?	Capacity development through international collaborations
8. What is the notable change you noticed since the CBNS-II project started?	In nursing education: **Class-based education improved** In nursing research: **A few places but not everywhere** In the mind set of faculty and clinical nurse --; **Nurses want more** In the quality of the clinical practice-; **Need more supports**
9. Do you have any plan to ensure the continuity of this project?	Need more modifications including infrastructure development of nursing education. Need a hostel. The project must emphasis Govt. priorities.
10. If you have any recommendation related to the project activities, please describe.	1) Need to develop Japanese language skills then they can be able to work in abroad. 2) More clinical trainings are needed to be included.
11. Do you have plan to conduct future MT training as a Govt. training?	**Yes/No**

12. How do you manage the budget for these MT training?	It depends on many factors and yes, Govt. can do some colleges though fund allocations.
13. Currently there are hardly no budget support for clinical nurses working at the local level include purchasing training equipment. Do you have a plan to support an in-service training at college (Faculty development training for example) or hospital (Clinical Nurse Teacher training for example) anytime soon?	**Yes/No** Need more support by the project for capacity development
14. How do you manage the budget for local level training as FD training at college or CNT training in the hospital?	Available Govt. funds can be used local level training
15. Please recommend the effective intervention for improving nursing education in Bangladesh?	We expect specialized training for nurses as Japanese nurses are getting in their country.

I.

Date of data collection: 01/ 09/2025

Gender: [ ] Male [√] Female [ ] Other

4. As a BNMC Register what do you think for developing nursing education in Bangladesh?	1) Teacher's development 2) Career path development for graduate nurses
5. Would you kindly share the number of nursing colleges accredited? And how many colleges are submitted?	**Completed; 12** **Submitted; 02**
6. Do you know about the CBNS-II activities?	√ Yes/ No
4. Did you saw any improvement of the mentioned right side activities running by the CBNS-II project?	1. MT Training--; **Yes** 2. In-house FD Training--; **Yes** 3. Research activities--; **No idea** 4. Promote subject-based nursing--; **Yes** 5. Strengthening clinical practice system--; **Yes** 6. CNT training----; **Yes** 7. In-service training--; **Yes** 8. Japan training---; **Yes** 9. Others----------
5. How do you realize the cause of such a good impact occurred?	Details: CBNS II run the project activities in the well-established nursing colleges
6. What is the difficulties or challenges related to the following the CBNS-II activities discussed by the respective colleges?	1. MT Training--; **Need more training** 2. In-house FD Training--; **Need foreign faculties** 3. Research activities-; **Need more scopes** 4. Promote subject-based nursing -; **Skills development** 5. Strengthening clinical practice system--; **Need training by foreign faculties** 6. CNT training--; **Need training by foreign faculties** 7. In-service training-; **Need more** 8. Japan training-; Need **scope to learn from aboard** 9. Others----------
7. What do you think about the overcome of the	Japanese trainers can come to Bangladesh and train our MTs and CNTs

difficulties?	
8. What is the notable change in you noticed since the CBNS-II project started?	In nursing education: **Faculties can be more confident.** In nursing research:-; **Develop more interest** In the mind set of faculty and clinical nurse: **Changes their attitude** In the quality of the clinical practice:-; **More interested**
9. If you have any recommendation related to the project activities, please describe.	1) Faculty development though foreign nurses 2) Follow international system for developing nursing education in Bangladesh
10. How will BNMC contribute to support future MT training as a Govt. training?	DGNM supports on MT training.
11. Please recommend the effective intervention for improving nursing education in Bangladesh?	1) More capacity development initiatives 2) More research initiatives

Appendix 6.13: Codes and Thematic Analysis - Full Codebook for good effects of clinical practices and nursing education grouped by affiliated college (Table 49)

CONSBN — Theme: Professional and Academic Development

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Professional and Academic Development	Faculty engagement	This code represents faculty members improving their pedagogical techniques.	Example: "The workshops helped me improve my teaching style significantly." (Faculty Member 1)
Professional and Academic Development	Faculty engagement	Sharing knowledge among colleagues or with students to enhance professional development.	Example: "I shared the latest research with my peers during a faculty meeting." (Faculty Member 2)
Professional and Academic Development	Research culture	Engaging in research activities to contribute to the academic field.	Example: "We were encouraged to publish more articles in peer-reviewed journals." (Faculty Member 3)
Professional and Academic Development	Skills enhancement	Practical training provided to enhance the skills of the faculty.	Example: "The hands-on training was essential for improving my teaching methods." (Faculty Member 4)

ShTANC — Theme: Quality Improvement in Teaching and Patient Care

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Quality Improvement in Teaching and Patient Care	Teaching quality improvement	Enhancing the quality of teaching through various methods, such as curriculum changes and faculty training.	Example: "After the workshops, I noticed a significant improvement in student engagement." (Faculty Member 5)
Quality Improvement in Teaching and Patient Care	Clinical evaluation tools	Implementing standardized checklists to improve clinical evaluations.	Example: "The checklist helped ensure that we followed the correct procedures during clinical practice." (Clinical Instructor 1)
Quality Improvement in Teaching and Patient Care	Quality of patient care	Improving the quality of care delivered to patients.	Example: "Our focus on quality care has led to better patient outcomes." (Clinical Instructor 2)

SNC — Theme: Clinical Teaching Excellence

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Clinical Teaching Excellence	Student engagement	Measuring the level of student involvement and enthusiasm during practical sessions.	Example: "Students were more motivated and eager to participate in clinical practice after the new curriculum was introduced." (Faculty Member 6)
Clinical Teaching Excellence	Practice-based teaching	Clinical Nurse Trainers (CNTs) demonstrate clinical practices to students.	Example: "The CNT demonstrated the proper technique for taking blood pressure." (Clinical Instructor 3)
Clinical Teaching Excellence	Practice-based teaching	Incorporating research and evidence into teaching practices.	Example: "We based our clinical procedures on evidence from the latest medical studies." (Faculty Member 7)
Clinical Teaching Excellence	Mentorship	Fostering the development of Clinical Nurse Trainers to guide students.	Example: "We need to develop more experienced CNTs to help mentor our students." (Faculty Member 8)

BNC — Theme: Institutional Support and Supervision

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Institutional Support and Supervision	Lesson plan reform	Revising and improving lesson plans for better teaching effectiveness.	Example: "We revamped the lesson plans to focus more on practical skills." (Faculty Member 9)
Institutional Support and Supervision	Teacher motivation	Encouraging both teachers and students to perform better in academic settings.	Example: "I make sure to give positive feedback to keep my students motivated." (Faculty Member 10)
Institutional Support and Supervision	Supervision	Improving supervision practices to monitor the teaching and learning process more effectively.	Example: "Regular check-ins with teachers have improved teaching standards." (Administrator 1)

RpNC — Theme: Organizational Strengthening and Research Capacity

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Organizational Strengthening and Research Capacity	Organizational development	Improving the clinical teaching environment for students and staff.	Example: "We upgraded the clinical labs to support more hands-on activities." (Administrator 2)
Organizational Strengthening and Research Capacity	Organizational development	Developing comprehensive lesson plans for clinical practices.	Example: "New lesson plans were designed for better integration of theory and practice." (Faculty Member 11)
Organizational Strengthening and Research Capacity	Research promotion	Setting up a research unit to promote and manage research activities.	Example: "The research cell was a great initiative to push forward our academic work." (Faculty Member 12)
Organizational Strengthening and Research Capacity	Research promotion	Encouraging self-development among faculty to enhance teaching quality.	Example: "I attended several workshops to improve my research skills." (Faculty Member 13)

MNC — Theme: Accountability and Continuous Improvement

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Accountability and Continuous Improvement	Faculty accountability	Holding faculty members accountable for their teaching and research performance.	Example: "The new system of regular evaluations increased faculty accountability." (Faculty Member 14)
Accountability and Continuous Improvement	Continuous monitoring	Constant monitoring of research progress to ensure quality.	Example: "We regularly monitor the progress of ongoing research projects." (Administrator 3)
Accountability and Continuous Improvement	Supervised learning	Students learning directly from Master Trainers and Clinical Nurse Trainers.	Example: "Students are closely supervised during their clinical rotations, improving learning outcomes." (Faculty Member 15)

CNC — Theme: Innovation and Motivation in Clinical Education

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Innovation and Motivation in Clinical Education	Innovative teaching	Adopting new teaching methodologies to	Example: "We introduced simulation-based teaching to improve practical skills." (Faculty Member 16)

		improve learning outcomes.	
Innovation and Motivation in Clinical Education	Motivation	Motivating both teachers and students to participate in academic activities.	Example: "I encourage my colleagues and students to continuously improve their skills." (Faculty Member 17)
Innovation and Motivation in Clinical Education	Research collaboration	Collaborating on research projects to promote academic development.	Example: "Our collaborative research activities have enhanced our institutional reputation." (Faculty Member 18)
Innovation and Motivation in Clinical Education	Research collaboration	Developing Clinical Nurse Trainers to support teaching and research activities.	Example: "We focus on developing CNTs who can mentor students effectively." (Administrator 4)

RNC — Theme: Improved Clinical Outcomes and Professionalism

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Improved Clinical Outcomes and Professionalism	Quality patient care	Improving patient care through enhanced clinical practices.	Example: "We have seen better outcomes with patients after implementing the new care protocols." (Clinical Instructor 4)
Improved Clinical Outcomes and Professionalism	Professional growth	Improving professional skills for better clinical practice.	Example: "Regular skills workshops have been vital for my professional growth." (Clinical Instructor 5)
Improved Clinical Outcomes and Professionalism	Professional growth	Encouraging professional development to enhance clinical practice.	Example: "The motivation to improve my skills has made me more confident in clinical settings." (Faculty Member 19)
Improved Clinical Outcomes and Professionalism	Professional growth	Continuous self-improvement to enhance professional capabilities.	Example: "I am constantly working on my self-development through training programs." (Faculty Member 20)

Appendix 6.14: Thematic Summary of Challenges by College (Table 52)

CoNSBN — Theme: Institutional Resources and Capacity Limitations

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Institutional Resources and Capacity Limitations	Resource constraints	Lack of teaching materials, limited clinical facilities, or insufficient equipment for instruction.	"We don't have enough equipment in the lab, so it's difficult to teach the full procedure." (Faculty Member 1)
Institutional Resources and Capacity Limitations	Faculty workload	Heavy workload limits the ability of faculty to fully engage in teaching, supervision, or training.	"I am handling so many responsibilities that I barely have time to prepare for my classes." (Faculty Member 2)
Institutional Resources and Capacity Limitations	Limited research access	Faculty cannot access research databases or academic resources needed for professional growth.	"We want to do research, but we can't access any journals or databases." (Faculty Member 3)
Institutional Resources and Capacity Limitations	Staff shortage	Lack of qualified teachers or administrative staff needed to run academic and clinical activities.	"We have too few teachers. One person covers multiple subjects." (Administrator 1)
Institutional Resources and Capacity Limitations	Weak clinical support	Limited support from hospital units in facilitating clinical practice or supervision.	"Sometimes the wards are too busy, and no one is available to help teach the students." (Clinical Instructor 1)
Institutional Resources and Capacity Limitations	Coordination issues	Difficulty aligning academic schedules and requirements with hospital clinical activities.	"We struggle to coordinate with the wards because they don't follow the planned rotation schedule." (Faculty Member 4)

ShTANC — Theme: Coordination and Professional Development Barriers

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Coordination and Professional Development Barriers	Training coordination issues	Challenges organizing or scheduling faculty development trainings.	"Our trainings keep getting postponed because we can't coordinate dates with everyone." (Faculty Member 5)

Coordination and Professional Development Barriers	Weak college–hospital link	Poor communication or cooperation between college and hospital for student placements.	"The hospital often doesn't prepare the ward for our students when we send them." (Faculty Member 6)
Coordination and Professional Development Barriers	Low promotional activity	Limited activities that encourage professional or academic advancement.	"There are no initiatives to motivate staff to improve their skills." (Faculty Member 7)
Coordination and Professional Development Barriers	Administrative gaps	Issues with scheduling, communication, or managing academic responsibilities.	"We don't get timely information about meetings or changes in schedules." (Administrator 2)

SNC — Theme: Operational and Scheduling Challenges

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Operational and Scheduling Challenges	Faculty scheduling	Faculty development trainings or class schedules are not followed consistently.	"Training schedules keep changing, and it disrupts our classes." (Faculty Member 8)
Operational and Scheduling Challenges	Clinical placement support	Students face difficulties due to lack of planned support at clinical sites.	"When we arrive at the ward, no one is ready to receive the students." (Faculty Member 9)
Operational and Scheduling Challenges	Administrative system issues	Weak operational processes such as rotation calendars and academic decision-making.	"The rotation calendar exists, but it's not implemented properly." (Administrator 3)
Operational and Scheduling Challenges	Supervision issues	Inconsistent supervision by CNTs during clinical practice.	"Some days the CNTs supervise, other days no one checks on the students." (Clinical Instructor 2)
Operational and Scheduling Challenges	Committee issues	Coordination and participation in committee activities is weak.	"Our committee meetings rarely happen as scheduled." (Faculty Member 10)

BNC — Theme: Funding and Collaboration Constraints

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts

Funding and Collaboration Constraints	Financial limitations	Insufficient funds for faculty development, materials, or academic activities.	"We want more training, but there's no budget for it." (Faculty Member 11)
Funding and Collaboration Constraints	Research challenges	Lack of support and resources for conducting research.	"We struggle to manage research because there's no funding or guidance." (Faculty Member 12)
Funding and Collaboration Constraints	Hospital linkage gaps	Problems collaborating with hospitals for clinical training.	"Sometimes the hospital refuses to take students because they are too busy." (Faculty Member 13)
Funding and Collaboration Constraints	Training infrastructure gaps	Lack of adequate skills lab infrastructure or practical training facilities.	"Our skills lab has very limited equipment for practice." (Administrator 4)
Funding and Collaboration Constraints	Motivation issues	Low faculty motivation due to workload or lack of incentives.	"Teachers don't feel motivated because there's no recognition of our extra work." (Faculty Member 14)
Funding and Collaboration Constraints	Administrative limitations	Limited autonomy in scheduling or academic planning.	"We can't make decisions independently; everything needs higher approval." (Administrator 5)

RpNC — Theme: Faculty Development and Workload Burden

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Faculty Development and Workload Burden	Time management	Faculty lack time to attend training or development activities.	"I want to join faculty development sessions, but I'm too overloaded." (Faculty Member 15)
Faculty Development and Workload Burden	Facility shortages	Lack of adequate research or teaching facilities.	"We need more space and equipment to conduct proper research." (Faculty Member 16)
Faculty Development and Workload Burden	Workload issues	Heavy workload limit ability to teach or develop professionally.	"There are too many tasks, and it affects my teaching quality." (Faculty Member 17)
Faculty Development and Workload Burden	Staffing issues	Shortage of staff affects academic and administrative operations.	"We urgently need more instructors." (Administrator 6)

Faculty Development and Workload Burden	Administrative delays	Approvals for activities or resources are slow.	"It takes months to get permission for even small requests." (Faculty Member 18)
Faculty Development and Workload Burden	Training capacity gaps	Lack of Master Trainers available to conduct training.	"We only have a few MTs, so training sessions are limited." (Faculty Member 19)

MNC — Theme: Human Resources and Pedagogical Gaps

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Human Resources and Pedagogical Gaps	Staffing	Colleges lack sufficient qualified instructors.	"We don't have enough qualified teachers for specialized subjects." (Faculty Member 20)
Human Resources and Pedagogical Gaps	Skill gaps	Faculty require more training in management or modern teaching methods.	"We need more training on updated teaching techniques." (Faculty Member 21)
Human Resources and Pedagogical Gaps	Teaching content issues	Lack of teachers with expertise in certain subject areas.	"Some topics are not taught well because we lack specialists." (Administrator 7)
Human Resources and Pedagogical Gaps	Coordination gaps	Weak coordination with hospitals for clinical teaching.	"Communication with the hospital is inconsistent." (Faculty Member 22)
Human Resources and Pedagogical Gaps	Administrative functioning issues	Limited participation in committees affects academic governance.	"Our committee activities are not functioning properly." (Administrator 8)

CNC — Theme: Financial and Collaboration Barriers

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Financial and Collaboration Barriers	Financial barriers	Budget limitations affect educational and research activities.	"We couldn't run the planned workshop because the budget was too small." (Faculty Member 23)
Financial and Collaboration Barriers	Clinical collaboration needs	Need for stronger coordination with hospitals for student practice.	"We need more structured collaboration with the hospital." (Faculty Member 24)
Financial and Collaboration Barriers	Staffing needs	Need for more MTs or faculty to support teaching and clinical activities.	"We only have one MT, which is not enough for the workload." (Faculty Member 25)

Financial and Collaboration Barriers	Administrative support gaps	Weak administrative communication between academic and clinical units.	"We often don't receive timely communication from the hospital side." (Administrator 9)
Financial and Collaboration Barriers	Research limitations	Faculty lack opportunities or skills to conduct research.	"We don't have enough support for research." (Faculty Member 26)

RNC — Theme: Teaching and Research Skill Limitations

Theme (Category)	Subtheme (Subcategory)	Definition	Examples from Transcripts
Teaching and Research Skill Limitations	Teaching limitations	Faculty face challenges teaching certain subjects or skills.	"We cannot teach some topics properly due to lack of resources." (Faculty Member 27)
Teaching and Research Skill Limitations	Skill deficits	Faculty lack research knowledge or statistical skills.	"I struggle with research because I don't have training in data analysis." (Faculty Member 28)
Teaching and Research Skill Limitations	Insufficient supervision	Shortage of CNTs affects clinical supervision.	"Students don't get enough supervision in the wards." (Clinical Instructor 3)
Teaching and Research Skill Limitations	Resource gaps	Limited access to teaching materials or clinical resources.	"We don't have updated textbooks or digital materials." (Faculty Member 29)
Teaching and Research Skill Limitations	Workload issues	Heavy workload affects teaching quality and research involvement.	"My workload is so high that I can't focus on improving my teaching." (Faculty Member 30)

References

1. Boniol M, Kunjumen T, Nair TS, et.al. “The global health workforce stock and distribution in 2020 and 2030: a threat to equity and ‘universal’ health coverage?” BMJ Global Health 2022;7: e009316.

Photos of field data collection



Training session for the field data collection and its preparation by consultants and other team members

College of Nursing, Sher-E-Bangla Nagar (CONSBN), Dhaka



Students were providing data from CONSBN



Providing information by the Principal of CONSBN

Mymensingh Nursing College (MNC), Mymensingh



Students were providing data from MNC



Providing information by the Principal of MNC

Sylhet Nursing College (SNC), Sylhet



Principal of SNC was proving information



Nursing students of SNC were providing information

Barisal Nursing College (BNC) and Sher-E-Bangla Medical College & Hospital (SBMCH), Barisal



Data collection from the Superintendent of SBMCH



Students of BNC were providing information

Rangpur Nursing College (RpNC) and Rangpur Medical College & Hospital (RpMCH), Rangpur



Sharing information by the Principal of RpNC



Nurses of RpMCH were providing information

Chattogram Nursing College (CNC) and Chattogram Medical College & Hospital (CMCH), Chattogram



Providing information by the staff nurse of CMCH



CNC students were providing information

Rajshahi Nursing College (RNC) and Rajshahi Medical College & Hospital (RMCH), Rajshahi



Superintendent of RMCH was giving information



The Principal of RNC was giving information

Shaheed Tajuddin Ahmad Nursing College (ShTANC), Gazipur



Nurses were providing information from ShTANC



Demonstration by students at ShTANC

Bandarban Nursing College (BaNC) and Zila Sadar Hospital (SHB), Bandarban



Data collection from the 4th year students of BaNC



MTs and the Principal with field Research Assistant

Manikganj Nursing College (MaNC) and District General Hospital, Manikganj (DGHM)



The Principal of MaNC was giving information



Nursing students were providing information



Data collection team members with experts and consultants after the completion of training session

Agenda

Purpose of the Workshop:

This workshop aims to strengthen the ongoing discussion and practical efforts for nursing administration enhancement in Bangladesh. Through a lecture on how Japan has developed nursing systems and legislation, and advanced career paths and nursing professionalization, participants will gain insights applicable to the improvement of nursing governance in Bangladesh.

2026/1/26 : Lecture Session

No.	Time	Activity	Person Responsible
1	8:50-9:00	Registration	
2	9:00-9:10	Introduction of Participants	CBNS-II
3	9:10-9:15	Welcome Address	Director General, DGNM
4	9:15-9:25	- Overview of the CBNS-II Project - Purpose of the Workshop	CBNS-II
5	9:25-9:30	- Introduction of the Lecturer, Dr. Yayoi Tamura - Self-introduction Video by Dr. Tamura	CBNS-II
6	9:30-10:10 (40 min)	**Session 1:** The Role of Nursing Professionals in Nursing Administration (Video lecture)	Dr. Yayoi Tamura
7	10:10-10:30	Discussion & Question Card Submission	CBNS-II
8	10:30-11:15 (45 min)	**Session 2:** Promotion of Higher Education in Nursing, enrichment of educational Content, and Advancement of Public Understanding of Nursing (Video lecture)	Dr. Yayoi Tamura
9	11:15-11:40	Discussion & Question Card Submission	CBNS-II
10	11:40-11:55	Break	
11	11:55-13:00 (65 min)	**Session 3:** Development and Institutionalization of Highly Specialized Nurses, and Nursing Career Path and Classification Systems (Video lecture)	Dr. Yayoi Tamura
12	13:00-13:25	Discussion & Question Card Submission	CBNS-II
13	13:25-13:45	Q and A Session	
14	13:45-14:15 (30 min)	Preparation for the Follow-up Discussion Session 1(Individual work)	
15	14:15-15:05	Lunch	
16	15:05-15:55 (50 min)	Preparation for the Follow-up Discussion Session 2 (Group work)	CBNS-II
17	15:55-16:00	Closing Remarks	TBD

2026/2/8 : Follow-up Discussion Session

No.	Time	Activity	Person Responsible
1	9:00-9:10	Registration	
2	9:10-9:25 (10 min)	Review session for the video lectures	CBNS-II
3	9:25-9:35 (10 min)	Preparation for Group Presentation	
4	9:35-9:50	Break	
5	9:50-10:50 (60 min)	Self-introduction & Q and A session	CBNS-II Dr. Yayoi Tamura
6	10:50-12:40 (110 min)	Group presentation (6 groups)	CBNS-II Dr. Yayoi Tamura
7	12:40-13:40 (60 min)	Feedback and Discussion	CBNS-II Dr. Yayoi Tamura
8	13:40-13:45	Closing Remarks	TBD
9	14:00	Lunch	

JICA Project for Capacity Building of Nursing Services Phase II (CBNS-II), Bangladesh

Sharing Japan's Experience for Strengthening Nursing Administration

SESSION 1
THE ROLE OF NURSING PROFESSIONALS IN NURSING ADMINISTRATION

Yayoi TAMURA, RN, PHN, PhD

President of Japan Visiting Nursing Foundation

Professor emeritus of National College of Nursing, Japan

Former Chief Nurse of Nursing Division, Ministry of Health, Labour and Welfare, Japan

Background to the Establishment of the Nursing Division in the MoHW in Japan

In 1945, following the end of World War II, Japan began building a new national administrative system under the strong guidance of the General Headquarters of the Allied Forces (GHQ), led primarily by the United States.

The GHQ made the following key recommendations related to nursing:

- To enact an independent law concerning nursing;
- To require at least three years of nursing education following high school;
- To establish a section within the Ministry of Health and Welfare responsible for nursing administration;
- To appoint a nurse as the head of that section;
- To establish a professional organization for nurses.

Through these reforms, Japan aimed to establish nursing as an independent professional discipline.



Miss Margaret (Peggy) Ord, GHQ Chief of Nursing Division

Role of the Nursing Division: Contributing to the health, medical care, and welfare of the public by ensuring both the quantity and quality of nursing services

1. 1948~: The Public Health Nurses, Midwives and Nurses Act (Primarily related to ensuring the quality of nursing)

This law defined the professional framework for nursing in postwar Japan. It includes provisions on:

- Purpose of the Act
- Definition of each profession (public health nurse, midwife, nurse)
- Licensing regulations, including grounds for disqualification
- National examination and eligibility requirements
- Scope of practice, including practice limitations, designated procedures, and professional obligations
- Penal provisions

Role of the Nursing Division (continued): Contributing to the health, medical care, and welfare of the public through both quantitative and qualitative development of nursing services

2. 1992~: Act on Promotion of the Securing of Nursing Personnel (Related to both the quantitative supply and qualitative improvement of nursing human resources)

This law was enacted to strengthen the national framework for securing and developing the nursing workforce.
It includes provisions on:
Formulation of Basic Guidelines for the Promotion of Securing Nursing Personnel;
Duties and responsibilities of the national and prefectural governments, hospital administrators, and nurses;
Establishment of Nursing Centers at both national and prefectural levels.

[Contents of the Basic Guidelines for Securing Nursing Personnel]

- Collection and dissemination of key data on the supply and demand of nursing personnel (employment, education and training, turnover, new recruitment, and re-employment);
- Development and evaluation of medium-term projections on supply and demand in response to social change and the advancement of medical care;
- Promotion of better working conditions, work reform, and enhancement of welfare benefits for nurses;
- Initiatives to improve public understanding and appreciation of nursing;
- Other relevant measures.

Involvement of Nursing Professionals in the Formation of Administrative Systems (1)

What institutional issues need to be reformed?

It is precisely because nurses are professionals that they can recognize and address administrative challenges unique to the nursing field.

Key areas that require continued attention include:

- The gap between the ideal image of the nursing profession and the current reality;
- New challenges emerging from changes in nursing practice and nursing education;
- New issues arising from demographic shifts, epidemiological transitions, and advances in science and medical technology;
- New challenges brought about by changes in the health, medical, and welfare environment surrounding nursing, among others.

Involvement of Nursing Professionals in the Formation of Administrative Systems (2)

The foundation of reform lies in the problem-solving process.

- Develop the ability to explain issues both quantitatively and qualitatively, including their background, current situation, and possible directions for solutions.
- Engage in dialogue with stakeholders such as the Japanese Nursing Association and members of the National Diet, to share awareness of issues and the significance of reform.
- Within the Ministry of Health and Welfare, collaborate with related departments and establish relevant committees or working groups.
- In these meetings, seek discussion and consensus among stakeholders, including those with conflicting interests, in order to create or revise systems.
- When developing new systems, implement pilot projects (model programs) to clarify their social impact and deepen understanding among stakeholders.
- If legal amendment is required, provide briefings not only to nursing-related Diet members but also to ruling and opposition parties.

Institutional reform takes time!

It is essential to persist with patience and continuity, ensuring that the effort is carried forward as the will of the organization, even when personnel change.

History of Amendments to the Public Health Nurses, Midwives and Nurses Act

Reflecting the demands of the times and the advancement of the nursing profession: A result of collaboration among the Nursing Division of the MoHW, members of the National Diet, and the Japan Nursing Association

- 1969: Realization of male nurses
- 1995: Realization of male public health nurses
- 2001: Revision of qualification titles to eliminate gender differences and to adopt names suitable for a professional occupation in line with the promotion of gender equality

  From *Hokenfu* (female)/*Hokenshi* (male) and *Kangofu* (female)/*Kangoshi* (male)

  > To Public Health Nurse, Midwife, and Nurse (both female and male)
- 2006: Revision to strengthen confidentiality obligations

  Revision to add a new registration requirement for public health nurses and midwives (must have passed the national examination for nurses)
- 2009: Revision to include the obligation to make efforts for post-graduate training

  Revision to explicitly grant eligibility for the national examination to college graduates
- 2014: Establishment of the training system for nurses performing specified medical procedures (*Tokutei Kōi* training program)

Initiatives Led by the Nursing Division of the MoHW to Address the Nursing Shortage

- Formulation of the Nursing Personnel Supply and Demand Plan (forecast of supply and demand): Implemented since 1970 and currently in its 8th plan cycle.
- Launch of the Nurse Bank Project to provide employment placement services for job seekers: Jointly implemented by the MoHW and the Japan Nursing Association, offering free employment placement services through prefectural nursing associations.
- Scholarship loan programs for nursing students facing financial difficulties: Implemented in collaboration between the MoHW and prefectural governments.
- Provision of government subsidies for facility development to increase the number of nursing schools and colleges.
- Establishment of the National Nursing Education and Research Center: Aimed at ensuring both the quantity and quality of nursing educators.

Example of a Newly Established System: The Home-Visit Nursing Scheme
How did nursing administrators and professional associations work together?

- 1970: Hospital nurses recognized the lack of post-discharge patient care and initiated home-visit nursing on their own.
- 1975: The Japan Nursing Association (JNA) publicly called for institutionalization of home-visit nursing services.
- 1976: The JNA requested the inclusion of home-visit nursing fees in the national medical fee reimbursement system.
- 1985: The JNA established a Home-Visit Nursing Development Office.
- 1987: The Ministry of Health and Welfare (MoHW), through its Nursing System Study Committee, proposed the training of home-visit nurses.
- 1988: The MoHW introduced home-visit nursing fees into the national medical insurance reimbursement system.
- 1988: Prefectural nursing associations began training courses for home-visit nurses.
- 1988: The MoHW, prefectural governments, and prefectural nursing associations jointly implemented model projects on home-visit nursing and related services.
- 1992: The MoHW launched the Elderly Home-Visit Nursing Scheme through revision of the Health and Medical Services Act for the Aged.
- 1994: The MoHW expanded coverage of home-visit nursing to all home-based patients, including those with cancer or intractable diseases.
- 1994: The JNA established the Japan Visiting Nursing Foundation to promote and support home-visit nursing.

Outcomes and Concerns Following the Establishment of the Home-Visit Nursing Scheme

Patients and Families

- Enabled patients to continue treatment and care at home, in a familiar environment.
- Allowed nurses to provide care tailored to patients' daily lives and habits.
- Placed greater value on patients' and families' wishes, ensuring that their dignity is respected.

Nurses

- Nurses could establish and manage home-visit nursing stations, thereby enhancing their professional autonomy and independence.
- Concerns arose about nurses providing care alone, such as possible errors in judgment or management.

> Addressed through training and two-nurse home visits.

Physicians

- Some physicians initially feared losing their patients to nurses.

> Addressed through the introduction of "home-visit nursing instruction forms", ensuring physicians' involvement in the care process.

- Physicians who had been providing pioneering home medical care also worried that nurses might simply replicate hospital-based care at home.

> Addressed through training programs emphasizing appropriate home-based nursing practices distinct from hospital care.

Summary and Discussion

- In Japan, a law appropriate for the nursing profession was enacted in 1948 under the guidance of the General Headquarters (GHQ) after World War II.
- In response to changing times and the evolving roles of nursing professionals, legal amendments and various policy initiatives have been implemented. The driving force behind these reforms has been the close collaboration among the Nursing Division of the Ministry of Health and Welfare, the Japan Nursing Association (JNA), and members of the National Diet.
- Whenever a new system is established, there are inevitable concerns and challenges. The key lies in how to address and resolve them constructively.

Discussion Points

- Are there any good practices in Bangladesh where DGNM, BNMC, BNA, and, if applicable, members of Parliament have worked in close collaboration? If so, what were the outcomes or lessons learned? If not, in what areas might such collaboration be possible in the future?
- Which laws and regulations form the foundation for nursing and midwifery education and practice in Bangladesh?
- Are all nursing professionals aware of these laws and regulations?
- Do these laws protect public health and also safeguard nurses and midwives as professionals?

Question？

If you have any questions, please access the QR code below, enter your question, and submit it.

JICA Project for Capacity Building of Nursing Services Phase II (CBNS-II), Bangladesh

Sharing Japan's Experience for Strengthening Nursing Administration

SESSION 2
PROMOTION OF HIGHER EDUCATION IN NURSING, ENRICHMENT OF EDUCATIONAL CONTENT, AND ADVANCEMENT OF PUBLIC UNDERSTANDING OF NURSING

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President of Japan Visiting Nursing Foundation

Professor emeritus of National College of Nursing, Japan

Former Chief Nurse of Nursing Division, Ministry of Health, Labour and Welfare, Japan

Why Did the University-Level Nursing Education (Upgrading Nursing Schools to Colleges/Universities) System Advance So Rapidly?

- 1985: Major policy shift through the revision of the Medical Care Act, introducing a new health care policy framework that regulated the number of hospital beds based on regional medical service areas ("*iryouken*" concept).
- Before the regulation took effect, many hospital owners and administrators rushed to increase the number of hospital beds, anticipating future restrictions.
- However, this sudden expansion led to a serious shortage of nurses to care for inpatients, which soon became a major social issue.

1992: Enactment of the Act on Promotion of the Securing of Nursing Personnel, along with the Basic Guidelines for Measures to Secure Nursing Personnel (a joint ministerial notification issued by the Ministers of Education, Health, and Labor).

Main Points of the "Basic Guidelines for Measures to Secure Nursing Personnel"

1. **Education and Training**: Development of colleges/universities, graduate schools, and training programs for educators.
2. **Improvement of Working Conditions**: Reduction of night duty burdens, better salaries, work reform, welfare benefits, and employment management.
3. **Enhancement of Professional Competence**: Lifelong training and training for those in supervisory or managerial positions.
4. **Promotion of Employment**: Re-employment, retention, prevention of resignation, job placement and counseling, identification of inactive nurses, and support for Nurse Centers.
5. Improvement of the **Work Environment**.
6. **Other Important Matters**: Promotion of public understanding of nursing (Nursing Day, Nursing Week, etc.).

Government and Academic Efforts to Expand and Strengthen University-Level Nursing Education

Government Initiatives

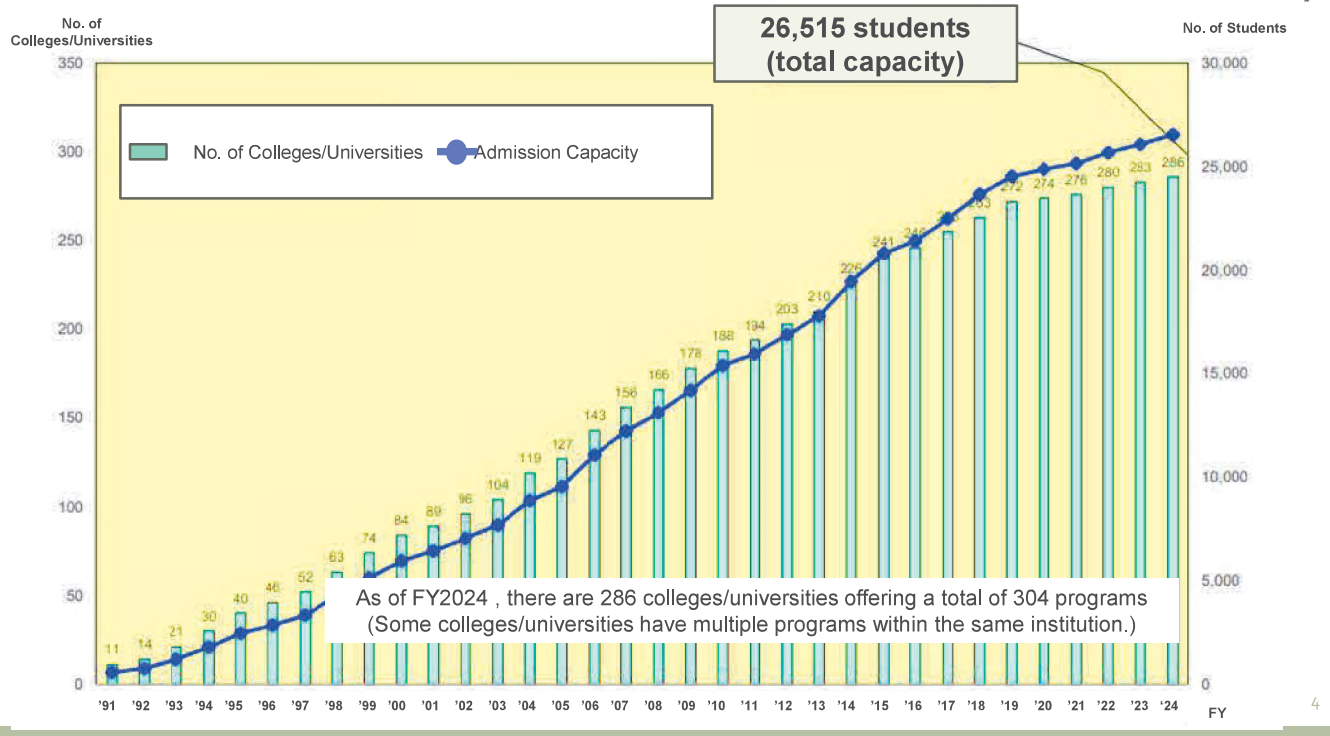
1. **Ministry of Education**: Establishment of faculties of nursing in universities and graduate schools for nursing.
2. **Ministry of Home Affairs** (supervising local governments): Implementation of financial support measures for the establishment of public nursing colleges.

   > Rapid increase in public nursing colleges.

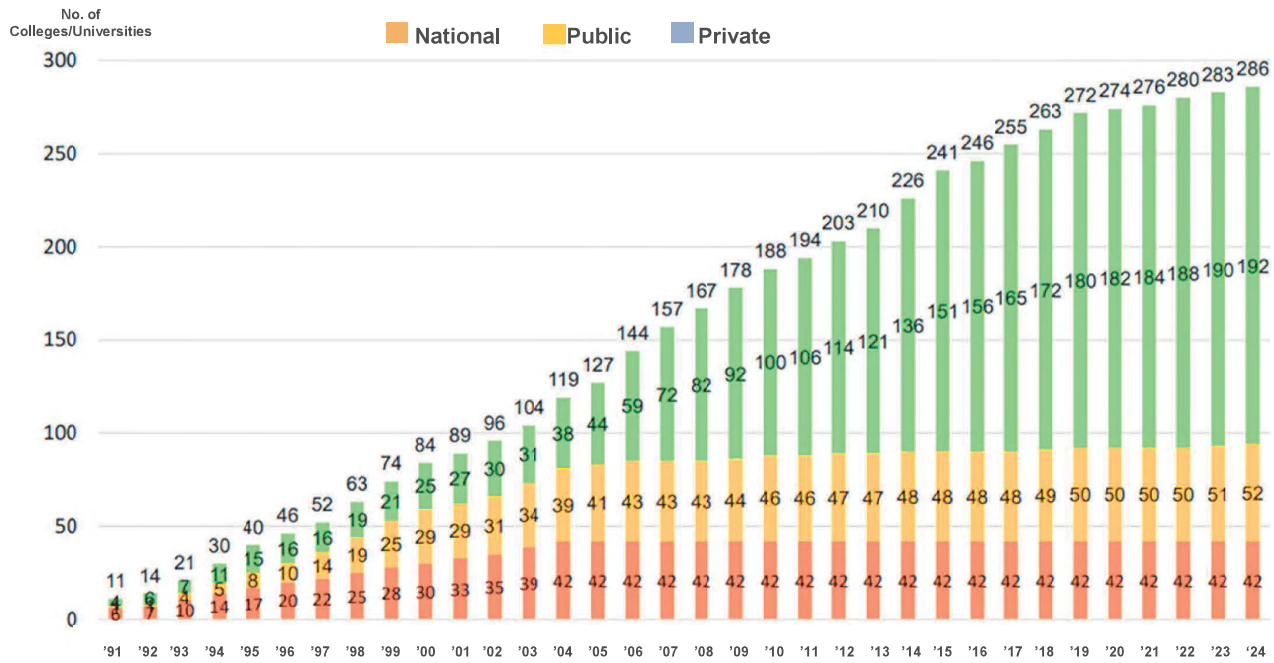
Efforts by the Nursing Education Community

1. Formation of a national council of nursing deans: Japan Association of Nursing Programs in Universities (JANPU)
2. Establishment of academic societies such as the Japan Academy of Nursing Science and the Japan Association of Nursing Academies (JANA)
3. Faculty initiatives: Increase in the number of nurses pursuing graduate studies.

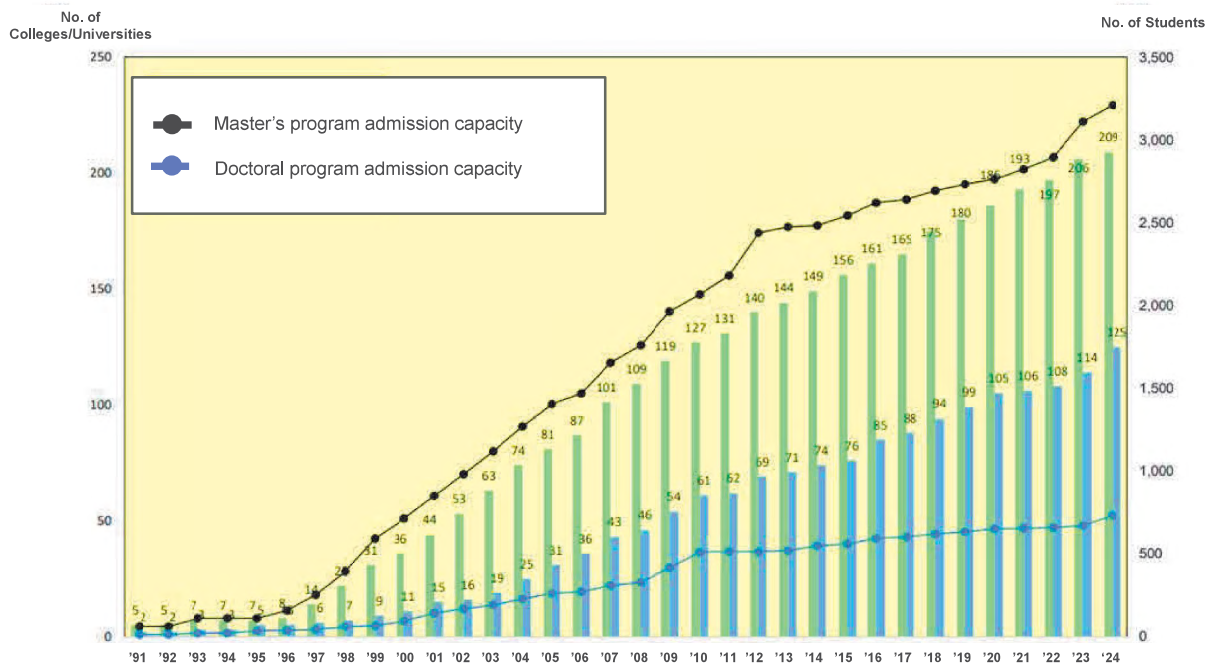
Trends in the Number of Nursing Colleges/Universities and Admission Capacity



Trends in the Number of Nursing Colleges/Universities by Type of Institution (National, Public, Private)



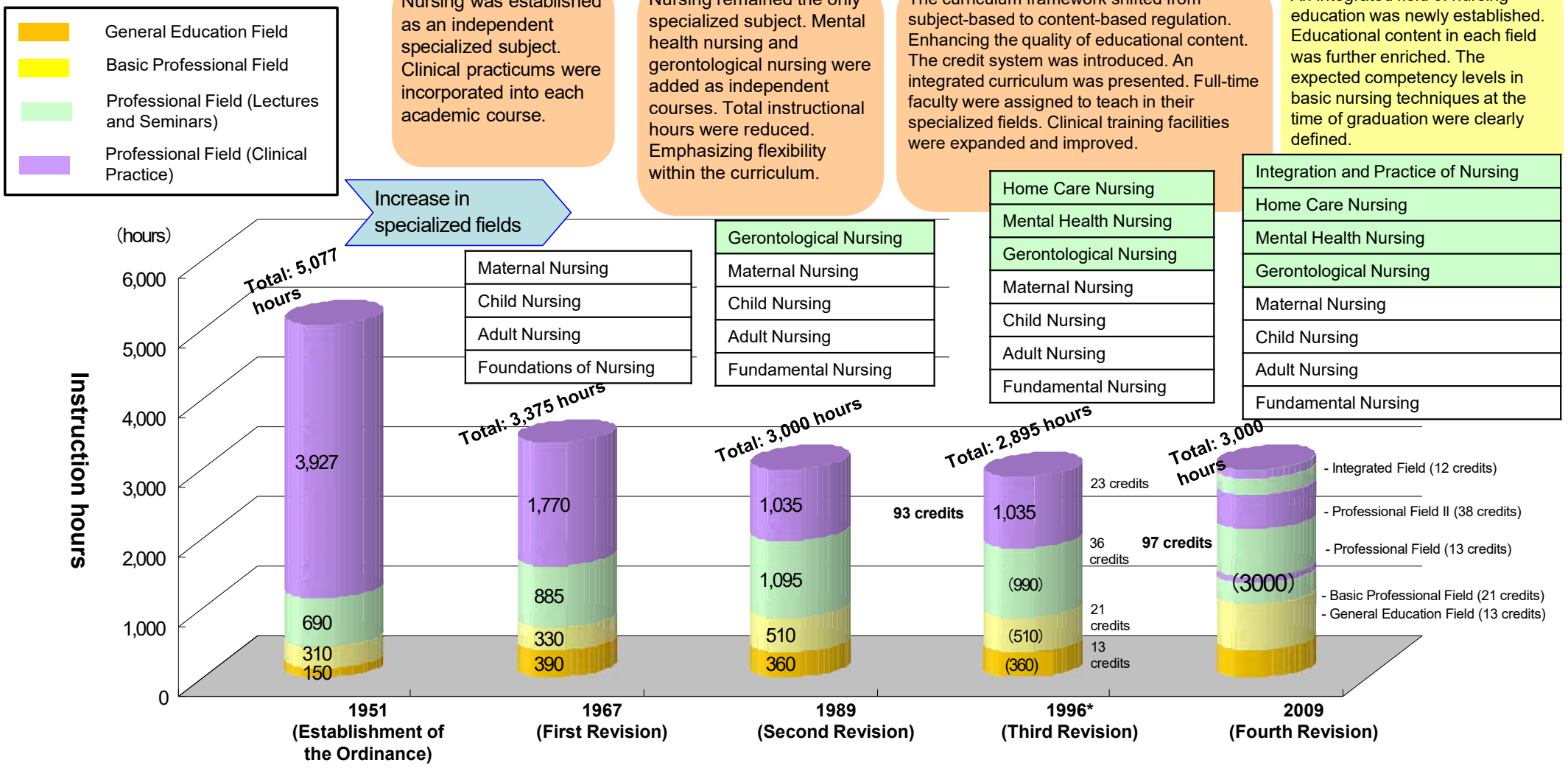
Trends in the Number of Nursing Graduate Schools and Admission Capacity



Enhancement of Nursing Education Content

- Under the Act on Public Health Nurses, Midwives and Nurses, nursing education is provided at colleges/universities designated by the Minister of Education, and training schools designated by prefectural governors, both of which grant eligibility for the national licensing examination.
- The minimum standards for curriculum content, educational facilities, and faculty structure are defined in the Ordinance for Designation of Public Health Nurse, Midwife, and Nurse Schools (*Hoken-shi Josan-shi Kangoshi Gakkō Yōseisho Shitei Kisoku*).
- This ordinance has been revised five times through careful deliberation among nursing educators, to reflect changes in population structure, disease patterns, and social needs:
  - 1967: Nursing education organized into four fields: fundamental, adult, pediatric, and maternal nursing.
  - 1989: Addition of gerontological nursing.
  - 1996: Addition of psychiatric nursing and home nursing.
  - 2009: Introduction of an integrated field.
  - 2022: Establishment of community nursing, including home nursing.
- At colleges/universities, curricula often go beyond these minimum standards, reflecting each institution's educational philosophy and mission.

Changes in Nursing Education Curriculum Over Time



* In 1996, a credit-based system was introduced. Clinical training was calculated as one credit per 45 hours, according to the “Guidelines for the Administration of Training Schools for Public Health Nurses, Midwives, and Nurses.”

Promotion of Public Understanding of Nursing

- In 1991, the Ministry of Health and Welfare (MoHW) designated May 12 as "Nursing Day" and the week including that day as "Nursing Week", based on the recommendation of the "Nursing Day Establishment Committee.

  The slogan: "**Let the spirit of nursing live in everyone's heart**."

- Each year, national and prefectural governments, together with the Japan Nursing Association, Japan Medical Association, Japan Hospital Association, social welfare organizations, and well-known public figures and celebrities, collaborate to promote public awareness and understanding of nursing.

- **Activities include**: public lectures, dialogue meetings, posters and leaflets, promotional goods, newspaper advertisements, TV and radio programs, essay and video contests with awards, one-day nursing experiences at hospitals, health and nursing consultations, and dissemination of nursing knowledge and skills.



promotional goods

Summary and Discussion (1)

- Due to the shortage of nurses, the Act on Promotion of the Securing of Nursing Personnel was enacted in 1992, followed by the Basic Guidelines for Securing Nursing Personnel, which accelerated the transition of nursing education to the college/university level. At the same time, a nationwide initiative was launched to promote public understanding of nursing, including the establishment of "Nursing Day" and a variety of awareness-raising activities that have continued to this day.
- Deans of nursing faculties established during the 1980s contributed to the formation of academic associations and alliances of nursing colleges/universities, which played an important role in advancing the field of nursing education.
- The Ministry of Health and Welfare (MoHW) and the Ministry of Education responded to societal changes by revising the Ordinance for Designation of Public Health Nurse, Midwife, and Nurse Schools, thereby enhancing the quality and content of nursing education.

Summary and Discussion (2)

Discussion Points

- Are there any independent or voluntary associations of nursing colleges in Bangladesh?
- If there is collaboration between public and private nursing colleges, in what areas or activities does this collaboration take place?
- If you think collaboration is insufficient, what possibilities do you see for improvement? If there is no collaboration at all, in what areas could such collaboration be possible?
- In Bangladesh, where there is no unified national licensing examination, how is the quality of nursing education ensured? Are there any aspects you think should be improved?
- In what ways can nursing colleges and the nursing association collaborate to strengthen nursing education and the profession?

Question ?

If you have any questions, please access the QR code below, enter your question, and submit it.

JICA Project for Capacity Building of Nursing Services Phase II (CBNS-II), Bangladesh

Sharing Japan's Experience for Strengthening Nursing Administration

SESSION 3
DEVELOPMENT AND INSTITUTIONALIZATION OF HIGHLY SPECIALIZED NURSES, AND NURSING CAREER PATH AND CLASSIFICATION SYSTEMS

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Professor emeritus of National College of Nursing, Japan

Former Chief Nurse of Nursing Division, Ministry of Health, Labour and Welfare, Japan

What Are "Highly Specialized Nurses" in Japan?

Based on the Public Health Nurses, Midwives and Nurses Act:

- Nurses who have completed the Specified Medical Acts Training Program

Certified by the Japan Nursing Association (JNA):

- Certified Nurse Specialist (CNS)
- Certified Nurse (CN)
- Certified Nurse Administrator (CNA) - not covered in this session

Establishment of the Specified Medical Acts Training System

1. **Background of the System**
   ① Shortage of physicians
   ② Expansion of higher education for nurses (particularly master's programs)
   ③ Nationwide policy trend toward deregulation

2. **Deliberations by the Government and the Ministry of Health, Labour and Welfare (MoHLW)**

   2007: Cabinet decision to consider introducing the Nurse Practitioner (NP) system

   2009: Establishment of the "Study Group on the Promotion of Team-Based Medical Care"

   2010-2013: Implementation of research and pilot projects under the "Team-Based Medical Care Promotion Council," examining the institutional framework

   2014: Revision of the Public Health Nurses, Midwives and Nurses Act to establish the Specified Medical Acts Training System

   2015: Enforcement of the system

Initial Reactions of Professional Organizations to the Specified Medical Acts Training System

[Supportive Organizations]

- Japan Nursing Association (JNA): Expansion of the role of nursing
- Japan Association of Nurse Practitioner Educational Institutions: Broader opportunities for graduates
- Japanese Association for Acute Medicine: Reduction of workload for emergency physicians

[Opposing Organizations]

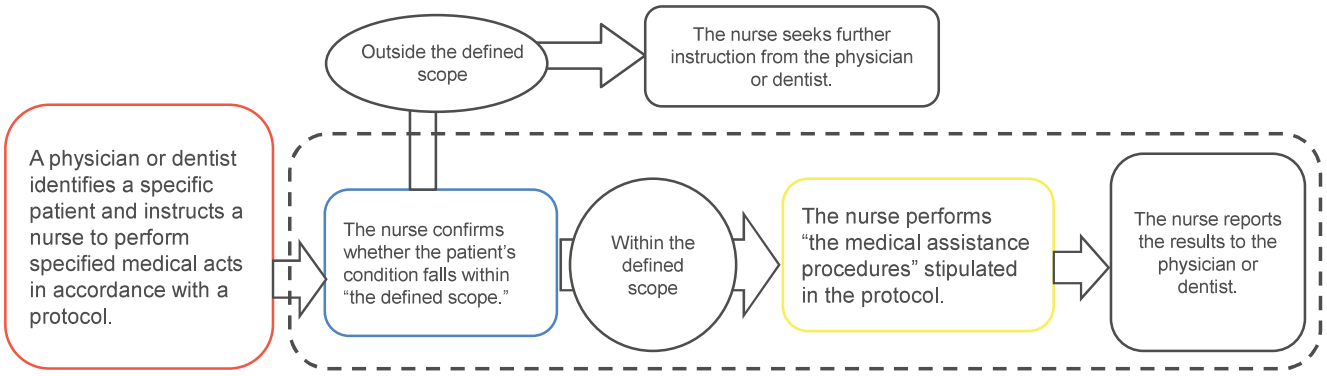
- Japan Medical Association (JMA): Concern that allowing nurses to perform medical procedures traditionally conducted by physicians could jeopardize patient safety
- Japan Association of Nursing Colleges: In the context of the ongoing nurse shortage, assigning more medical procedures to nurses may compromise nursing care quality. Instead of approving individual procedures, Japan should aim to establish a full Nurse Practitioner (NP) system.

Public Health Nurses, Midwives and Nurses Act (Extract) (Act No. 203 of 1948; enforced October 1, 2015)

Article 37-2

(Training for Nurses Performing Specified Medical Acts Based on Protocols)

- A nurse who performs specified medical acts in accordance with a protocol shall complete the designated training related to the category of such specified acts at an authorized training institution.



Specified Medical Acts and Categories

Specified Medical Acts

"Specified medical acts" refer to 38 procedures listed in the appendix, which fall under medical assistance and require particularly advanced practical understanding, critical thinking, and judgment, as well as a high level of specialized knowledge and technical skills, when performed by nurses based on a protocol.

(Public Health Nurses, Midwives and Nurses Act, Article 37-2, Paragraph 2, Item 1; Ministerial Ordinance on Training for Specified Medical Acts, Article 2 and Appended Table 1)

Specified Medical Act Categories

The "categories of specified medical acts" refer to 21 classifications of these acts, as listed in the appendix.

(Public Health Nurses, Midwives and Nurses Act, Article 37-2, Paragraph 2, Item 3; Ministerial Ordinance on Training for Specified Medical Acts, Article 4 and Appended Table 2)

Examples of Specified Medical Act Categories

Respiratory system	Replacement of tracheal cannula
Circulatory system	Operation and management of temporary pacemaker
	operation and management of percutaneous cardiac assist device
Thoracic drainage	Removal of chest drainage tube
Catheter management for nutrition	Removal of central venous catheter
Arterial blood gas management	Blood sampling by direct arterial puncture
Blood glucose control	Adjustment of insulin dosage
Administration of drugs for circulatory dynamics	Adjustment of continuous intravenous infusion dosage of catecholamines and antihypertensive agents
Administration of drugs for psychiatric and neurological symptoms	Temporary administration of anxiolytic medication

Certified Nurse Specialist (CNS)

[Background]

- 1987: The Advisory Committee on the Nursing System of the Ministry of Health and Welfare (MoHW) proposed the development of a system for advanced practice nurses.
- 1994: The Japan Nursing Association (JNA) General Assembly approved the proposal on “Establishing a Certification System for Certified Nurse Specialists.”

[Status of the Nursing Field in Japan in the mid-1990s]

- The global standard for CNS education required a master’s degree, but at that time Japan had only seven graduate schools, making it difficult to produce sufficient numbers of graduates.
- In Japan, medical specialist certification was managed by academic societies. Although there were nursing societies, they lacked the human and financial resources to operate such a certification system.
- It was concluded that the Japan Nursing Association (JNA) was the only organization with the organizational capacity to establish and sustain the system.



- Certification and renewal of CNS individuals and specialties: Japan Nursing Association (JNA)
- Accreditation of CNS educational programs (minimum 38 credits in each specialty): Japan Association of Nursing Programs in Universities (JANPU)

Competencies and Roles Required of CNSs

1. **Practice**: Provide excellent nursing care to individuals, families, and groups.
2. **Consultation**: Offer expert consultation to care providers, including nurses and other health professionals.
3. **Coordination**: Coordinate among those involved in health, medical, and welfare services to ensure the smooth delivery of necessary care.
4. **Ethical Coordination**: Address and resolve ethical issues and conflicts to protect the rights of individuals, families, and groups.
5. **Education**: Fulfill diverse educational functions to improve the quality of care, including training, research guidance, and lecturing activities for nurses and other professionals.
6. **Research**: Conduct research in clinical settings to advance and develop specialized nursing knowledge and skills.

CNS: Areas and Current Status

- **Certification started**: 1996
- **Specialized fields** (14 areas as of 2025):
  Psychiatric Nursing, Cancer Nursing, Community Health Nursing, Gerontological Nursing, Pediatric Nursing, Maternity Nursing, Chronic Care Nursing, Critical Care Nursing, Infection Control Nursing, Family Health Nursing, Home Care Nursing, Genetic Nursing, Disaster Nursing, Radiation Nursing
- **Qualification Requirements**: Individuals who have completed at least 36 credits in a master's program designated by the Japan Association of Nursing Programs in Universities (JANPU) as an educational institution in one of the above specialty areas.
- **Number of CNSs**: 3,473 (as of December 2024)
- **Renewal**: Every 5 years for quality assurance
- **Challenges**: Although over 30 years have passed since the system's launch and around 330 colleges/universities offer CNS programs nationwide, the number of certified CNSs remains limited.
  Reasons:
  - Overly demanding and intensive master's curricula leading to dropouts
  - Placement in departments where CNS certification is not required, resulting in non-renewal
  - Some nursing administrators do not fully utilize CNS competencies etc.

Certified Nurse (CN)

[Background]

In Japan, many highly skilled nurses with advanced knowledge and techniques, particularly in areas such as stoma care and pressure ulcer management, had graduated from nursing schools rather than universities, and were already active in clinical practice. There was a growing need to acknowledge and promote their clinical expertise.

Since the Certified Nurse Specialist (CNS) system required completion of a master's program, it was recognized that a separate certification system for "Certified Nurses (CNs)" should be established to accommodate these experienced clinical nurses.

- 1995: The Japan Nursing Association (JNA) General Assembly approved the proposal for the Certified Nurse System (Draft).
- 1997: Certification officially started.

CN: Roles, Fields, and Current Status

- **Roles in Clinical Practice**
  1. Provide advanced nursing care based on high-level clinical reasoning and pathophysiological assessment.
  2. Instruct and guide other nurses in specialized knowledge and technical skills through clinical practice.
  3. Offer consultation on issues and questions that arise in the clinical setting.
- **Fields of Certification** (19 fields as of 2026)

  Infection Control, Cancer Radiation Therapy Nursing, Cancer Chemotherapy Nursing, Palliative Care, Critical Care, Respiratory Nursing, Home Care, Operating Room Nursing, Pediatric Primary Care, Neonatal Intensive Care Nursing, Heart Failure Nursing, Renal Failure Nursing, Reproductive Nursing, Dysphagia Nursing, Diabetes Nursing, Breast Cancer Nursing, Stroke Nursing, Dementia Nursing, and Wound, Ostomy, and Continence Nursing (WOC Nursing).
- Candidates become eligible for the certification exam after completing approximately 800 hours of training at an educational institution designated by the Japan Nursing Association (JNA).
- **Number of CNs**: 24,974 (as of December 2024)
- **Renewal**: Every 5 years for quality assurance
- Training programs for Certified Nurses will be combined with the Specified Medical Acts Training system. Those completing the integrated program will be designated as Certified Nurses Pertaining to Specified Medical Acts.

Diverse Career Paths for Nurses

Career Path	Required Knowledge & Skills	Overview of Work	Recommended Qualification(s)
Staff Nurse	• Basic nursing techniques • Communication skills	• Patient care in hospital wards, outpatient departments, or operating rooms • Nursing care in health and welfare facilities	• Certified Nurse (CN) • Certified Nurse Specialist (CNS) • Completion of Specified Medical Acts Training
Nurse Manager **(Head Nurse, Director of Nursing [Nursing Superintendent], Home-Visit Nursing Station Manager)**	• Leadership • Knowledge and skills in adult education • Organizational management	• Organizational management • Administrative leadership • Staff education	Certified Nurse Administrator
Home-Visit Nurse	• Basic knowledge of home care nursing • Understanding of community health • Interprofessional collaboration	Providing nursing care at patients' homes as part of home medical services	• Home Care CNS • Home Care CN, • Completion of Specified Medical Acts Training
Occupational Health Nurse **(including Public Health Nurses in industrial settings)**	• Knowledge of occupational health • Counseling and health education skills	Health management for employees and their families in workplace settings	Public Health Nurse License
School Nurse **(*Yogo* Teacher)**	Knowledge and skills in child health and school health	• Health observation • First aid • Infection prevention • Collaboration with teachers	*Yogo* Teacher License (School Nurse Certificate)
Educator / Researcher	Knowledge and skills in nursing education and research	• Teaching and research in universities or colleges of nursing • Public engagement through lectures and publications	Master's or Doctoral Degree

Career Progression and Salary Structure of Nursing Professionals in Japan

Example: Career path and corresponding salary scales of a national government nurse official

Age	Position / Institution	Category of Work
22	Technical Official, Faculty of Medicine	Administrative Service
28	Head Nurse, University Hospital	Medical Service
31	University Faculty Member (Lecturer, Associate Professor) (Graduate studies between ages 40–45)	Educational Service
45	Assistant Director, Nursing Division, Ministry of Health and Welfare	Administrative Service
49	Director, National Nursing Research and Training Center	Administrative Service
50	Director, Nursing Division, Ministry of Health and Welfare	Administrative Service
57	President, National College of Nursing	Special Service
65	Retirement Extension	Special Service
68	Mandatory Retirement	Special Service

[Salary Structure According to Job Category]

- The applicable salary scale varies depending on the nature of the position.
- Even if the individual holds a nursing license, the medical service salary scale does not apply unless the person is directly involved in providing nursing care.
- When transferring to a position governed by a different salary scale, the individual's salary is recalculated as if they had been employed under that scale from the beginning.
- Because educational service salaries are relatively higher, transferring to administrative or medical service positions may result in a salary decrease.
- Salaries for special service positions are fixed.

Outline of the National Government Salary Scale for Medical Service (Category III)

(Regulation No. 9-2 by the National Personnel Authority)
The Salary Table for Medical Service (III) applies to public health nurses, midwives, nurses, and assistant nurses who are employed at medical facilities (such as hospitals, sanatoria, and clinics), correctional facilities (such as prisons and detention centers), quarantine stations, and schools, and are engaged in health guidance or nursing services. However, this salary table does not apply to those covered under the Salary Table for Educational Service.

[Grades and Typical Job Responsibilities]

Grade	Representative Duties
Grade 1	Duties of an Assistant Nurse
Grade 2	1. Duties of a Registered Nurse 2. Duties of a Public Health Nurse or Midwife
Grade 3	1. Duties of a Deputy Head Nurse in a medical institution 2. Duties of a nurse performing highly complex work requiring advanced knowledge and experience
Grade 4	Duties of a Head Nurse managing significantly complex tasks in a medical institution
Grade 5	Duties of a Chief Nurse (Nursing Director) or Deputy Chief Nurse (Deputy Nursing Director) handling difficult managerial responsibilities
Grade 6	Duties of a Chief Nursing Director or Nursing Director at a large-scale medical institution
Grade 7	Duties of a Nursing Director at an exceptionally large-scale medical institution

Note: The blue text indicates duties newly established in the 2023 revision following COVID-19.

Summary and Discussion (1)

- Japan has several systems for highly specialized nurses: those recognized under national law as nurses who have completed training for specified medical acts, and those certified by the Japan Nursing Association (JNA) as Certified Nurse Specialists (CNS), Certified Nurses (CN), and Certified Nurse Administrators (CNA).
- Japanese nurses have diverse career paths, allowing them to freely change workplaces according to their interests, life events, and stage of life.
- The salary system for national government-employed nurses providing nursing services is based on the Medical Service (Category III) scale established by the National Personnel Authority, which also serves as a model for local government employees. Nurses engaged in education are covered under the Salary Table for Educational Service.
- The Medical Service (Category III) scale was revised in 2023 in response to COVID-19, recognizing and rewarding the provision of advanced nursing care.

Summary and Discussion (2)

Discussion Points

- The number of nurses in Bangladesh remains extremely limited, and nursing practice continues to be centered on hospital-based care, leaving career path development insufficient.

  Where else, besides hospitals, are there people in Bangladesh who need nursing care? What kinds of nursing services do these people require?

- To influence national policy, collaboration and unity among nursing organizations are essential. What kinds of opportunities or initiatives could help foster cooperation among Bangladesh's nursing organizations?

- Is the government administration effectively utilizing the capacities of nursing organizations? In what kinds of occasions or processes would it be useful to seek their opinions and input?

Question ?

If you have any questions, please access the QR code below, enter your question, and submit it.

Bangladesh JICA Project CBNS－ II

看護行政強化に向けた日本の経験共有研修

第1回　看護行政における看護専門職の役割

Yayoi TAMURA, RN, PHN, PhD
President of Japan Visiting Nursing Foundation
Professor emeritus of National College of Nursing, Japan
Former Chief Nurse of Nursing Division , Ministry of Health, Labour and Welfare, Japan

看護課設置の背景

- 1945年、第2次大戦後の日本では、米国を中心とした連合軍総司令部（GHQ）の強力な指導により、国全体の新体制作りを開始。

- 看護に関する独立した法律を制定すること
- 看護教育は高卒後３年以上とすること
- 厚生省に看護行政を担当する課を設置すること
- 課長は看護職とすること
- 看護の職能団体を設立すること



GHQ　オルト看護課長

これらを通じて、看護専門職の確立を目指す！

看護課の役割：
　看護の量的、質的確保を通じて国民の保健医療福祉に貢献する

１．1948～　保健師助産師看護師法（主に看護の質の確保に関連）

- 法律の目的
- 各職種の定義
- 免許に関する規定（欠格事項に関することを含む）
- 国家試験、受験資格に関する規定
- 業務に関する規定　業務制限、特定行為研修、義務
- 罰則

看護課の役割：
看護の量的質的確保を通じて国民の保健医療福祉に貢献する

２．1992～　看護師等人材確保の促進に関する法律
（量的確保と質向上に関連）

- 看護師等の人材確保の促進に関する基本指針の策定
- 国、都道府県、病院等設置者、看護師など関係者の責務規定
- ナースセンター（中央、都道府県）に関する規定

{看護師等の人材確保の基本指針の内容}

- 需給に関する基本情報の収集と発信（就業、養成、離退職、新規採用、再就業）
- 社会の変化や医療の高度化等に伴う中期的な需給見通しの策定と評価
- 看護師の処遇改善、業務改革の推進、福利厚生の充実
- 看護に対する国民の理解促進の取り組み　など

行政における看護専門職者の制度形成への関与　1

改革すべき制度上の課題は何か？
　：看護職であるからこそ、認識できる行政課題を大切にする！

- 　ありたい看護専門職の姿と現実のギャップ
- 　看護業務や看護教育の変化に伴う新たな課題
- 　人口構造や疾病構造、科学技術・医療技術等の発展に伴う新たな課題
- 　看護を取り巻く保健医療福祉の環境変化に伴い生じた新たな課題　など

行政における看護専門職者の制度形成への関与　2

改革の基本は問題解決プロセス

- 課題の背景や現状、解決策の方向性など、量的質的に説明できる力を持つ！
- 日本看護協会、国会議員などと意見交換し、課題認識と変革の意義を共有
- 厚生省内部では関係部局と連携し、会議体を設置する。
- 会議では、利害関係者を含むステークホルダーの協議・合意を得て、制度の創設や改正を目指す。
- 新しい制度作りでは、モデル事業によりその社会的影響を明らかにし、関係者の理解を深める。
- 法律改正が必要な場合は、看護系国会議員だけでなく政府与党や野党へも説明

- 制度の改革は時間がかかる！
  粘り強く、担当者が変わっても「組織の意思」として継続すること！

時代の要請と専門職にふさわしい保助看法改正の歴史
～厚生省看護課、国会議員、看護協会の連携の成果～

- 1969　男性の看護士の実現
- 1995　男性の保健士の実現
- 2001　性により資格名称が異なる状態を解消し、
  専門職にふさわしく男女共同参画社会推進に資する名称へ改正
  保健婦(士）、看護婦(士）から　保健師助産師看護師へ
- 2006　守秘義務規定を整備
  保健師・助産師の免許登録要件の追加（看護師国家試験合格者でもあることが必要）
- 2009　卒後研修の努力義務規定を整備
  大学卒業者に受験資格を付与することを明示的に規定
- 2014　特定行為研修制度を整備

厚生省看護課主導の看護師不足対策への取り組み

- 看護職員需給計画（需給見通し）の策定 （1970年以降、現在は第８次）
- 求職者に職業紹介をする「ナースバンク事業」の開始

　厚生省・日本看護協会が連携し、都道府県看護協会において無料職業紹介事業を開始

- 経済的に困難な看護学生への奨学金貸与事業

　　厚生省は都道府県と連携して貸与事業を実施

- 学校養成所増設のため、国庫から施設整備補助金を支給
- 看護教員の量的確保・質向上のため、厚生省看護研修研究センターの設置

新たな制度創設の例：訪問看護制度
～看護の行政職と職能団体はどのように動いたのか～

- 1970　病院の看護師：退院後の患者ケア不足に気づき、訪問看護を開始
- 1975　日本看護協会：訪問看護事業の制度化の必要性を公表
- 1976　日本看護協会：訪問看護料を診療報酬制度改定を要望
- 1985　日本看護協会：訪問看護開発室を設置
- 1987　厚生省：看護制度検討会で訪問看護師の育成を提言
- 1988　厚生省：在宅患者の訪問看護に診療報酬制度を新設
- 1988　都道府県看護協会：訪問看護師養成講習会開始
- 1988　厚生省・都道府県・都道府県看護協会：訪問看護等モデル事業実施
- 1992　厚生省：老人保健法改正による老人訪問看護制度スタート
- 1994　厚生省：がん、難病などの在宅患者全般への訪問看護制度スタート
- 1994　日本看護協会：日本訪問看護推進財団設立

訪問看護制度創設による効果と表明された懸念・対応

- 患者と家族

  住み慣れた自宅での療養継続が可能になった

  生活習慣、生活行動に即した看護ケアが提供されるようになった

  患者・家族の希望、願いの実現に価値が置かれ、尊厳が守られるようになった

- 看護師

  看護師は訪問ステーションの開設者になり、自立性・自律性が強化された

  看護師が一人でケアすることに伴う懸念（状態の判断やミスなど）←　研修、２人訪問

- 医師

  自分の患者を看護師に取られるとの懸念　←「訪問看護指示書発行」により医師の介在を確保

  先駆的に在宅医療を行っていた医師からは「看護師は病院での看護ケアを患者宅でも行うのではないか」と懸念　←　研修

まとめと議論

- 日本では、1948年に看護専門職にふさわしい法律がGHQの指導により成立
- 時代の変化、望ましい専門職の在り方の観点から、法律改正や各種政策を推進
  その原動力は看護課だけでなく、日本看護協会、国会議員との密な連携である
- 新制度の創設には懸念される事柄があるもの。どう取り除く努力をするかが鍵！

- バングラデシュ国では、DGNM、BNMC、BNA、いれば国会議員とで連携したGood Practice はありますか？　ある場合、どのようなことですか？
  ない場合、どのような事柄であれば連携の可能性があるでしょうか？
- バングラデシュの看護師・助産師の教育や業務は、どのような法令に基づいていますか？
- その法令はすべての看護職が知っていますか？
- その法令は国民の健康を守り、看護師・助産師を専門職として守っていますか？

Bangladesh JICA Project CBNS－ II

看護行政強化に向けた日本の経験共有研修

第2回　看護学教育の高等教育化の推進と教育内容の充実、そして看護に対する国民の理解の促進

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Former Chief Nurse of Nursing Division , Ministry of Health, Labour and Welfare, Japan

日本では、なぜ看護教育の大学化が急速に進んだのか？

- 1985　医療法改正による医療政策の大転換：医療圏構想に基づく病床数の規制が決定
- 規制が始まる前に、病床を増加させたいと考えた経営者によって、急速に病床数が増加。
- しかし、「入院患者をケアする看護師がいない！」と社会問題化



- 「看護師等の人材確保の促進に関する法律」制定　および
- 「看護師等の確保を促進するための措置に関する基本的な指針」の策定（文・厚・労大臣告示）

「看護師等の確保ための基本指針」の主な内容

- １．養成：大学・大学院の整備充実、教員養成
- ２．処遇の改善：夜勤負担軽減、給与水準、業務改革、福利厚生、雇用管理体制整備など
- ３．資質の向上：生涯にわたる研修の必要性、指導的管理的立場の者の研修の必要
- ４．就業の促進：再就業の促進、定着促進、離職防止、職業紹介事業、就業相談の充実、潜在看護師の把握、ナースセンター事業の支援
- ５．勤務環境の整備向上
- ６．その他の重要事項；国民の看護への理解の向上：看護の日、看護週間等

大学教育の整備拡充に向けた政府、教育界の努力

- 政府の取り組み

①文部省：大学・大学院設置

②自治省（地方自治体の指導監督）：

　地方自治体立の看護大学の開設に必要な財政支援措置を実施→急速に公立看護大学が増加

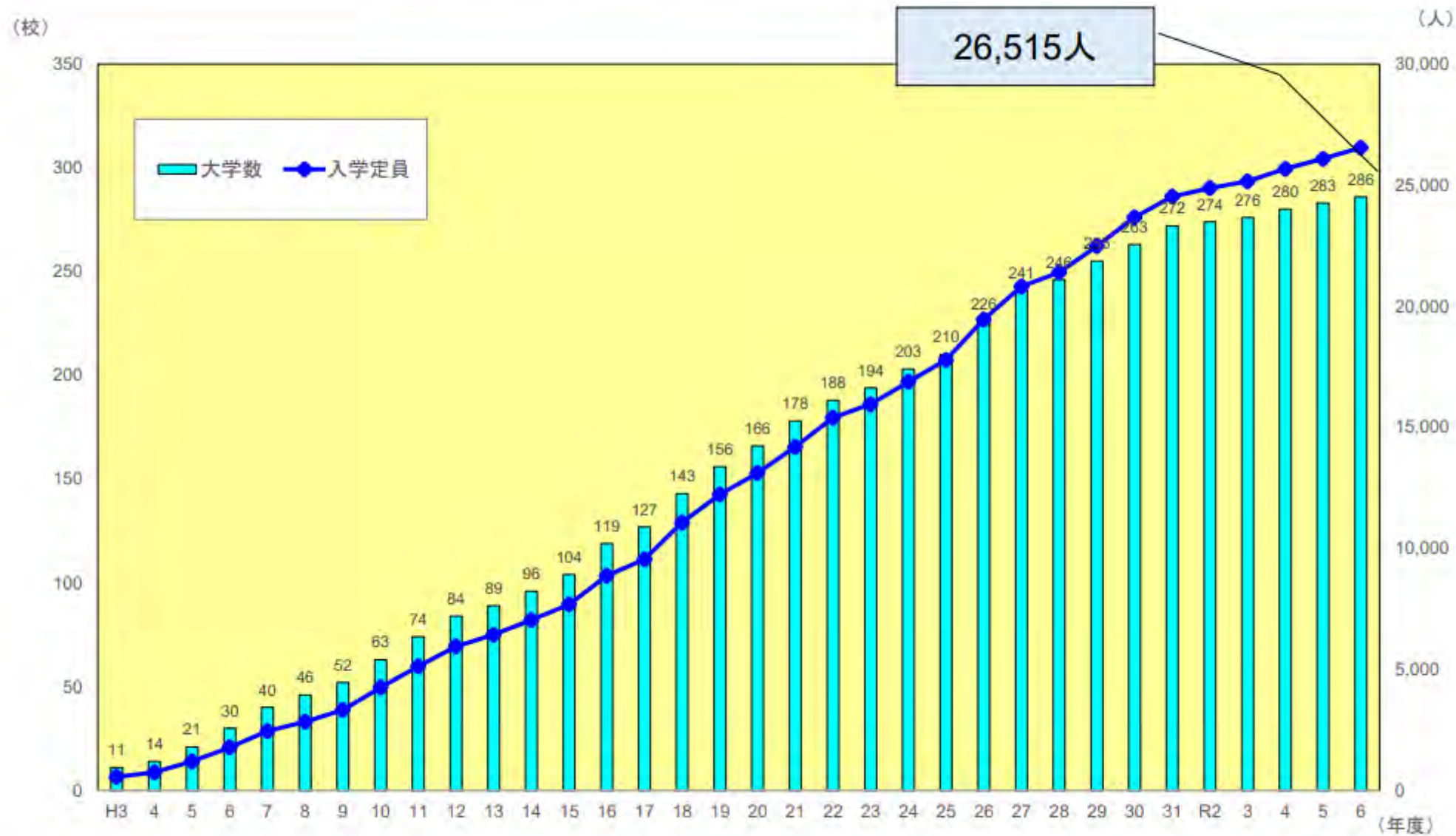
- 看護教育界の取り組み

①看護学部長等による全国協議組織の発足（Japan Association of Nursing Program in University）

②看護研究学会、看護科学学会等の学術団体の発足（Japan Association of Nursing Academies）

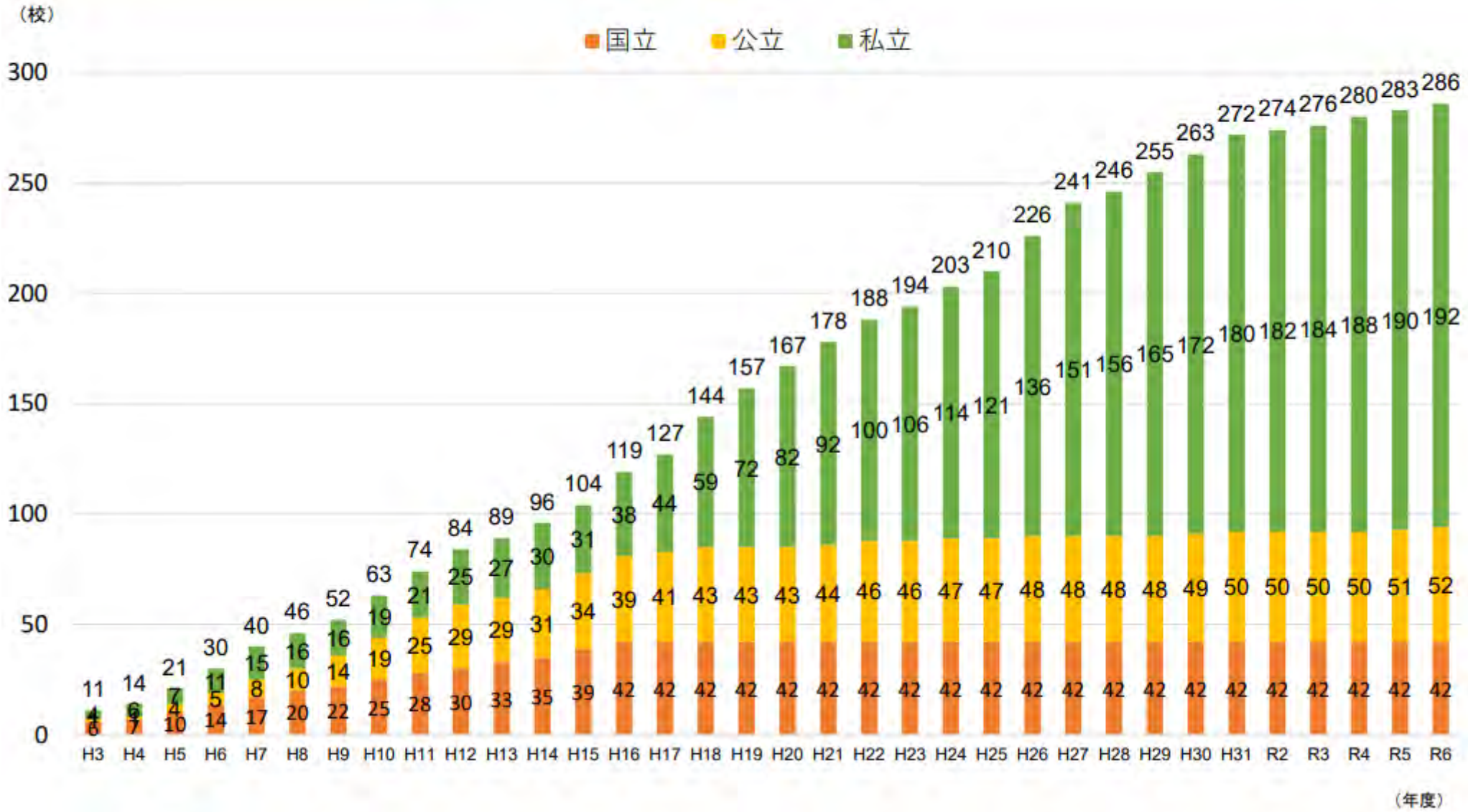
③教員の努力：大学院進学者の増加

看護系大学数及び入学定員の推移

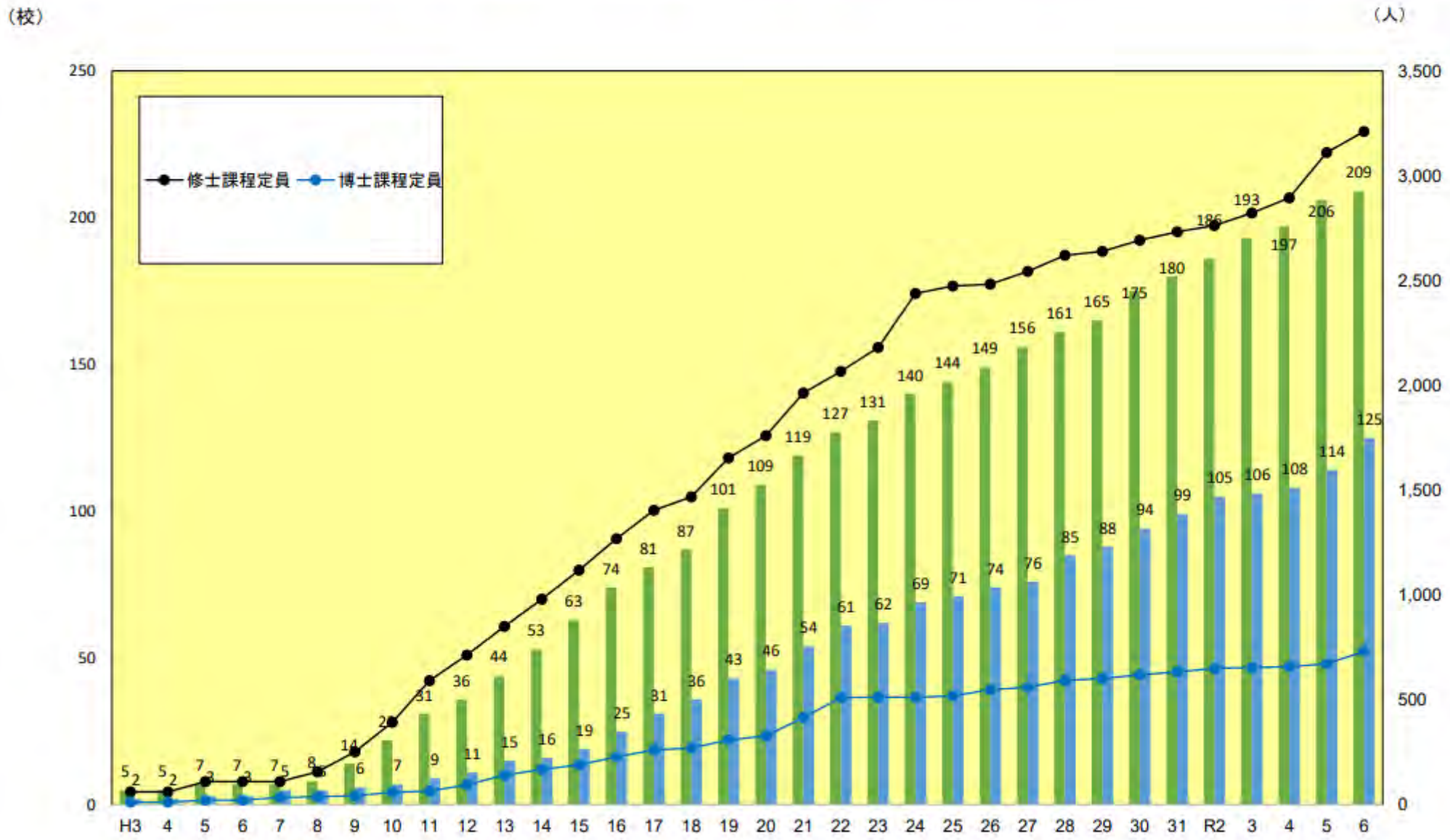


令和6年度の教育課程数は286大学、304課程（1大学で複数の教育課程を有する大学がある）

国公私立別看護系大学推移数



看護系大学院数及び入学定員の推移



看護教育内容の充実

- 保健師助産師看護師法に基づき、看護教育は国家試験受験資格を付与できる大学（文部大臣指定）、養成所（都道府県知事指定）で行われる。
- 教育内容や教育施設、教員体制に関する最小の基準は、保健師助産師看護師学校養成所指定規則に規定。
- この規則は人口構造や疾病構造、社会の在り方などの変化を踏まえ、教育関係者の熟議の下、過去5回改正。

  1967年　看護学は基礎看護学、成人看護学、小児看護学、母性看護学の 4 領域

  1989年　老人看護学を新設

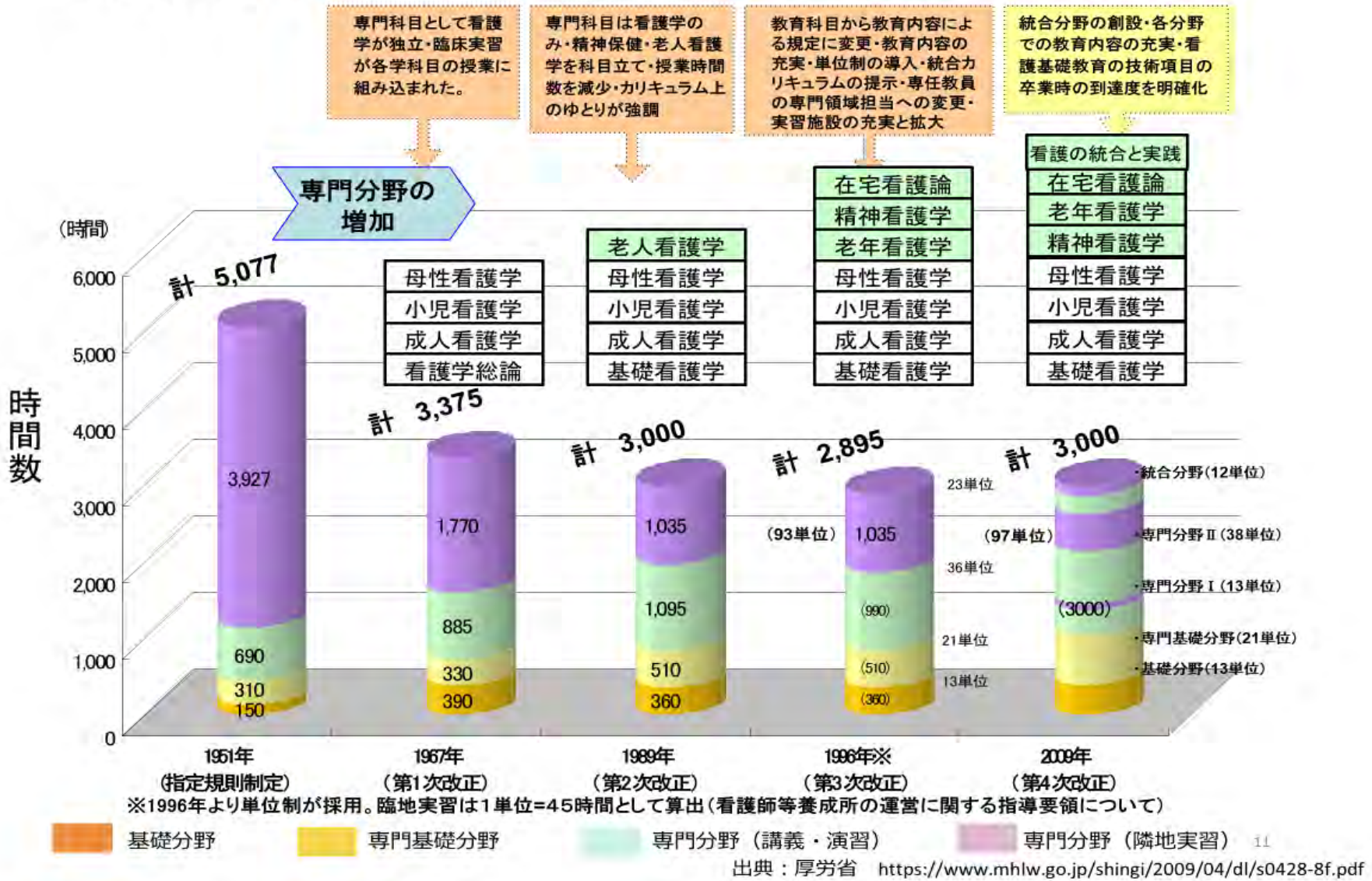
  1996年　精神看護学、在宅看護論を新設

  2009年　統合分野を新設

  2022年　在宅看護論を含めた地域看護学を新設

- 大学では設置目的や教育理念等に基づき、規則以上の教育内容が提供されている。

看護教育内容の変遷



出典：厚労省　https://www.mhlw.go.jp/shingi/2009/04/dl/s0428-8f.pdf

看護に対する国民の理解の促進

- 1991年、厚生省は「看護の日制定委員会」の提言を受けて、
  5月12日を「看護の日」、その週を「看護週間」として制定
  合言葉は「看護の心を、みんなの心に」

- 毎年、国・都道府県、看護協会、医師会、病院協会、社会福祉団体、著名人・タレント等の協力により、看護について理解を深める事業を展開

- 内容：講演会、対話集会、ポスター・チラシ、広報グッズ、新聞広告、テレビ・ラジオ、作文・ビデオ等の公募と表彰、病院等での1日看護体験、健康相談・看護相談、看護の知識・技術の普及など

まとめと議論　1

- 看護師不足により、1992年「看護師等の人材確保の促進に関する法律」制定、それに伴う「人材確保の基本指針」により大学教育化が急速に進展。それとともに国民の看護への理解を促進するための全国的取り組み、「看護の日」制定と啓発活動の幅広い展開・継続があった。
- 1980年代までに開設された大学の学部長たちは、看護系大学の連合体や学術団体発足に貢献。
- 厚生省・文部省は、時代の変化を受けて看護師等学校養成所指定規則を改正し、教育を充実させ質を高めた。

まとめと議論　2

- 看護大学の自主的な連合組織はありますか？
- 公立大学と私立大学との連携がある場合、どのようなことで連携できていますか？
- もし連携が不十分と考える場合、どのような可能性が考えられますか？連携が全くない場合、どのようなことで連携の可能性がありますか？
- 国家試験のないバングラデシュでは、看護教育の質をどのように保障していますか？　改善すべきと考える点がありますか？
- 看護大学と看護協会はどのような点で連携することが可能でしょうか？

Bangladesh JICA Project CBNS－ II

看護行政強化に向けた日本の経験共有研修

第３回　専門性の高い看護師育成とその制度化 および看護師のキャリアパス、格付けについて

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日本における「専門性の高い看護師」とは

- 保健師助産師看護師法に基づく制度
  特定行為研修を修了した看護師

- 日本看護協会認定の制度
  専門看護師（Certified Nurse Specialist）
  認定看護師（Certified Nurse ）
  認定看護管理者（Certified Nurse Administrator）：今回は触れない

特定行為研修制度の創設について

1. 制度創設の背景
   ① 医師不足
   ② 看護師の高等教育拡大(特に大学院修士課程の増加)
   ③ 国全体の規制緩和政策

2. 国・厚生労働省における検討
   2007　閣議決定で「NP導入の検討をすべき」
   2009　「チーム医療推進に関する検討会」を開催
   2010～2013　「チーム医療推進会議」下で、業務実態調査、モデル事業を実施し制度を検討
   2014　保助看法改正により、特定行為研修制度成立
   2015　制度施行

特定行為研修制度に対する団体の当初の反応

{**賛成**}

- 日本看護協会　　：看護の役割拡大
- 日本NP教育機関協議会　：卒業生の活躍の場拡大
- 日本救急医学会　　：救急医の業務負担軽減

{**反対**}

- 日本医師会：医師が行ってきた医行為を看護師が行うことになれば、医療安全が脅かされる

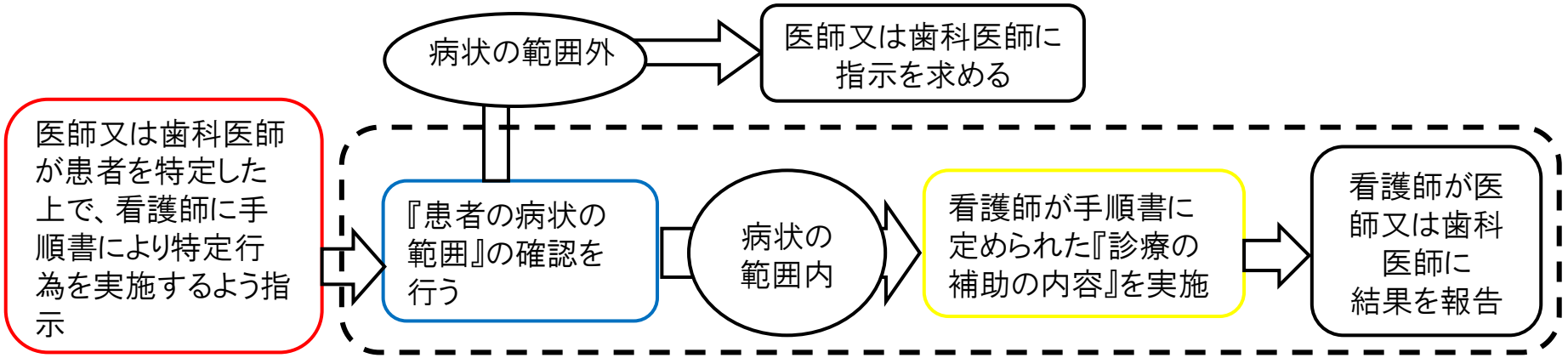
- 日本看護系大学協議会：看護師不足の中で医行為を従来以上に担えば、看護が不十分になる
  医行為を個別に認めるのではなく、NPを目指すべきである

保健師助産師看護師法(抄)

(昭和23年法律第203号)(平成27年10月1日施行)

第三十七条の二

特定行為を手順書により行う 看護師は、指定研修機関において、当該特定行為の特定行為区分に係る特定行為研修を受けなければならない。



特定行為及び特定行為区分

特定行為

特定行為は診療の補助であって、看護師が手順書により行う場合には、実践的な理解力、思考力及び判断力並びに高度かつ専門的な知識及び技能が特に必要とされるものとして別紙に掲げる３８行為であること。

（改正後の法第３７条の２第２項第１号、特定行為研修省令第２条及び別表第１関係）

特定行為区分

特定行為区分は特定行為の区分であって、別紙のとおり２１区分であること。

（改正後の法第３７条の２第２項第３号、特定行為研修省令第４条及び別表第２関係）

特定行為区分と特定行為の例

呼吸器関連	気管カニューレの交換
循環器関連	一時的ペースメーカーの操作及び管理
	経皮的心肺補助装置の操作及び管理
胸腔ドレーン関連	胸腔ドレーンの抜去
栄養に係るカテーテル管理	中心静脈カテーテルの抜去
動脈血液ガス関連	直接動脈穿刺法による採血
血糖コントロール関連	インスリン投与量の調節
循環動態に係る薬剤投与関連	持続点滴中のカテコラミン投与量の調節
	持続点滴中の降圧剤投与量の調節
精神及び神経症状に係る薬剤投与関連	抗不安薬の臨時の投与

専門看護師（Certified Nurse Specialist)

{経緯}

- 1987年　厚生省「看護制度検討会」提言
- 1994年　日本看護協会総会「専門看護師資格認定制度に関する検討について」を可決

{1990年代半ばの日本の看護界の状況}

- CNS教育の世界標準は修士課程。しかし、日本には７校のみで、多人数を輩出することが困難
- 日本の専門医認定制度は学会認定。看護系学会はあるが、認定制度を運営できるだけの人的・経済的基盤がない。
- 制度を作り、継続的に運営できる組織的基盤があるのは日本看護協会との判断



- 専門看護領域の認定・専門看護師個人の認定と更新：日本看護協会（JNA）
- 専門看護師教育課程の認定（各領域とも38単位以上）：日本看護系大学協議会（JANPU）

CNSに求められる能力・役割

（1）実践：個人、家族及び集団に対する卓越した看護を実践する。
（2）相談：看護職を含むケア提供者に対するコンサルテーションを行う。
（3）コーディネーション：必要なケアが円滑に行われるための、保健医療福祉に携わる人々の間の調整を行う。
（4）倫理調整：個人、家族及び集団の権利を守るための、倫理的な問題や葛藤の解決を図る。
（5）教育：ケアを向上させるため、看護師等に対する研修、研究指導及び講演会等での活動を含む多様な教育的機能を果たす。
（6）研究：専門知識及び技術の向上並びに開発をはかるための実践の場における研究活動を行う。

CNSの領域と資格取得者

- 1996年　認定開始
- 専門領域：１４領域（2025）

　精神看護、がん看護、地域看護、老人看護、小児看護、母性看護、慢性疾患看護、急性・重症患者看護、感染症看護、家族支援看護、在宅看護、遺伝看護、災害看護、放射線看護

- 受験資格要件：上記専門領域の教育機関としてJANPUが指定した大学院修士課程において、36単位以上の学修を終えた者
- 資格取得者数　3,473人（Dec.2024）
- 質保証のため、5年ごとに資格更新審査
- 課題

30年の歴史があり、大学院のCNS教育コースは全国に330あるが、CNS資格を有する人が少ない

｛理由｝大学院のカリキュラムが過密でリタイアする

CNS資格が不要な部署へ配属、更新基準を満たせない等の理由で資格を更新しない

看護管理者がCNSの能力を十分に活用できないとの指摘もある　など

認定看護師（Certified Nurse）

- 背景：人工肛門ケアや褥瘡などに関して、高水準の知識・技術を有し、臨床で活躍する専門学校卒の優秀な看護師が多数存在。彼らの活動を評価、推進する必要性が高い
- 専門看護師CNSは大学院修了が前提のため、CNSとは異なる「認定看護師」の制度を構築する必要があるとの認識

- 1995年　JNA総会「認定看護師制度試案について」可決
- 1997年　認定開始

CNの役割、領域、資格取得者

- 看護実践上の役割：１．高い臨床推論力、病態判断力に基づき専門性の高い看護実践
  ２．実践を通じて、看護師への専門知識・技術の指導
  ３．現場での問題や疑問への相談
- CNの種類：19分野（2026年以降）

  感染管理、がん放射線療法看護、がん薬物療法看護、緩和ケア、
  クリティカルケア、呼吸器疾患看護、在宅ケア、手術看護、小児プライマリケア、
  新生児集中ケア看護、心不全看護、腎不全看護、生殖看護、摂食嚥下障害看護、
  糖尿病看護、乳がん看護、脳卒中看護、認知症看護、皮膚・排泄ケア看護
- 日本看護協会が指定する教育機関で研修（800時間程度）終了後、受験資格が与えられる。
- 認定者数　24,974人（Dec.2024）
- 5年ごとに資格更新審査
- 2026年から、特定行為研修と組み合わせて認定看護師各コースの研修を実施予定
  特定認定看護師（Certified Nurse Pertaining to Specified Medical Acts）と呼ぶ

看護師の多様なキャリアパス

キャリアパス	必要な知識・技術	業務の概要	所有が望ましい資格
看護スタッフ	基本的看護技術 コミュニケーション力	病棟、外来、手術室等での患者ケア 保健福祉施設での看護ケア	専門看護師、認定看護師 特定行為研修修了
看護管理者(師長、部長、 訪問看護ステーション管理者)	リーダーシップ、成人教育や組織運営 に関する知識・技術	組織運営、経営管理、教育指導	認定看護管理者
訪問看護師	訪問看護の基礎知識、地域理解 多職種連携の知識・技術	在宅医療の一員として患者の自宅での 看護ケア	在宅看護CNS、在宅ケアCN 特定行為研修修了
産業保健師・産業看護師	産業保健の知識 保健相談・指導の技術	企業の社員・家族の健康管理	保健師免許
学校看護師(養護教諭)	小児保健、養護に関する知識・技術	健康観察　救急処置　感染予防 学校教員との連携	養護教諭免許
教育・研究職	教育研究の知識と技術	看護大学や専門学校での教育研究活動 講演など社会貢献活動	学位（修士・博士）

看護職者のキャリアと給与

事例）ある国家公務員看護師のキャリアと適用された給与体系

- 22歳　大学医学部　技官　　行政職
- 28歳　大学病院　看護師長　　医療職
- 31歳　大学教員　講師、准教授　　教育職
  （40歳～45歳　大学院学生）
- 45歳　厚生省看護課　課長補佐　　行政職
- 49歳　厚生省看護研修研究センター長　同上
- 50歳　厚生省看護課　課長　　同上
- 57歳　国立看護大学校長　　指定職
- 65歳　定年の延長　　同上
- 68歳　定年退職　　同上

{職務の変化に伴う給与}

- 職務の内容により適用される俸給表が異なる
- 看護師であっても、看護ケアの提供に従事していなければ、医療職㈢は適用されない
- 異なる俸給表が適用される職務に異動した場合は、その職務に最初から在職していたものとみなして給与が計算される
- 教育職は給与が比較的高いため、行政職や医療職に異動した場合、給与が下がることもある
- 指定職の給与は固定

給与：国家公務員医療職（三）の概要

（人事院規則九－二）
医療職俸給表(三)は，病院，療養所，診療所等の医療施設，刑務所，拘置所等の矯正施設，検疫所及び学校等に勤務し，保健指導又は看護等に従事する保健師，助産師，看護師及び准看護師である職員に適用されます．ただし，教育職俸給表の適用を受ける者を除きます．

{職務の級と標準的な職務}

1級	准看護師の職務
2級	1　看護師の職務
	2　保健師又は助産師の職務
3級	1　医療機関の副看護師長の職務
	2　特に高度の知識経験に基づき困難な業務を処理する看護師の職務
4級	医療機関の相当困難な業務を処理する看護師長の職務
5級	医療機関の総看護師長若しくは看護部長 又は困難な業務を処理する副総看護師長若しくは副看護部長の職務
6級	特に規模の大きい医療機関の総看護師長又は看護部長の職務
7級	極めて規模の大きい医療機関の看護部長の職務

青字はCOVID-19を契機に2022年改正で新たに規定された職務

まとめと議論 1

- 専門性の高い看護師には、国の制度として「特定行為研修修了者」、日本看護協会の制度として「専門看護師CNS」、「認定看護師CN」「認定看護管理者（CNA)」がある。
- 日本の看護師の就業の在り方は多様で、自身の関心やLife Event、年代によって自由に職場を変えることが可能。
- 看護サービスを提供する国家公務員看護師の給与体系は、人事院が定める医療職（三）に基づく。地方公務員には準用される。教育に携わる看護師は、教育職俸給表が適用される。
- 医療職（三）表はCOVID-19を契機に見直され、専門的な看護ケアの提供を評価するものになった。

まとめと議論 2

- バングラデシュの看護師数は極めて少なく、病院看護に従事することが優先されている。そのためキャリアパスの開発は不十分。

　バングラデシュ国内で看護を必要としている人々は病院以外に、どこにいますか？　その人々はどのような看護を必要としているでしょうか？

- 国の制度を動かすには、看護団体が協力し意思統一する必要がありますが、バングラデシュの看護団体が協力し合う関係を持つには、どのような機会や取組が考えられますか？

- バングラデシュの行政は、看護団体の力を活用できていますか？　どのような機会に看護団体の意見を求めることが有用でしょうか？

添付資料　（人間 JR26061 看護人材育成 05）

添付資料 10： マスタートレーナー（MT）研修モジュール、臨地実習強化のためのナビゲーションガイド

添付資料 10-1：マスタートレーナー（MT）研修モジュール

Module of Master Trainer (MT) Training for Nurses working in Bangladesh 2026



Directorate General of Nursing and Midwifery (DGNM), Bangladesh

Module of Master Trainer (MT) Training for Nurses working in Bangladesh

The Project for Capacity Building of Nursing Services Phase 2 (CBNS-II)

Directorate General of Nursing and Midwifery (DGNM), Bangladesh

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Mohakhali, Dhaka-1212



Md. Anwar Hossain Akand
(Joint Secretary)
Director General (Additional Charge)
Directorate of Nursing & Midwifery

Preface

It is with great pleasure that the Directorate General of Nursing and Midwifery (DGNM) presents this Master Trainer (MT) Training Module. This module represents a vital and deliberate step in our ongoing national strategy to strengthen the nursing workforce and ensure the sustainability of Continuing Professional Development (CPD) throughout Bangladesh. This initiative is central to the DGNM's mission: to elevate healthcare standards for all citizens through enhanced quality in nursing education and services.

The MT Training Module has been meticulously designed to cultivate a cadre of highly skilled Master Trainers. These professionals will be empowered to lead and facilitate crucial in-service training programs tailored to the specific needs of their respective institutions, whether they are nursing colleges or clinical hospitals. Master Trainers will be key leaders, responsible for identifying local priorities and implementing context-specific programs—such as faculty development and clinical nurse training—that directly enhance both the quality of nursing education and patient care outcomes.

In an era defined by rapid advancements in health science and dynamic population health needs, continuous professional development for nurses is not merely important but essential. Nurses must be equipped with the most up-to-date knowledge and skills to provide safe, person-centered, and effective care. Thus, the development of Master Trainers is a critical investment in building nurses' leadership capacity, promoting a culture of lifelong learning, and ensuring our health system remains responsive to the evolving healthcare landscape.

The DGNM extends its sincere appreciation to the many dedicated individuals and groups involved in the development of this module, including the Technical Working Group, experienced Master Trainers, Nursing Faculty, and Clinical Nurses. Their collaborative expertise has been fundamental in translating this vision into a tangible and actionable resource.

Finally, we strongly encourage every participant to utilize this module as a foundation for becoming a leader and changemaker within your workplace and the wider community. Together, we can build a more competent, compassionate, and future-ready nursing workforce for Bangladesh.

Director General
(Additional Charge)
Directorate of Nursing & Midwifery



Ms. Yoshie Mizogami
Chief Adviser
The Project for Capacity Building of Nursing Services (CBNS-II), JICA, Bangladesh

Acknowledgement

It is with great pride that we, the Project for Capacity Building of Nursing Services Phase 2 (CBNS-II), present this Master Trainer (MT) Training Module, developed in close collaboration with the Directorate General of Nursing and Midwifery (DGNM) and the Technical Working Group (TWG). This module marks a significant milestone in our joint efforts to strengthen the professional development of nurses and improve the quality of nursing education and services in Bangladesh.

The MT training was first introduced during Phase 1 of the project. Building on this foundation, CBNS-II has revised and refined the module to enhance its usability, relevance, and alignment with the broader concept of Continuing Professional Development. Through participatory workshops and feedback from training implementation, the TWG, comprising nursing educators, clinical nurses, and institutional leaders, has ensured the module is grounded in local needs and priorities.

A total of 64 Master Trainers from eight nursing colleges and eight affiliated hospitals have been certified through two training batches under CBNS-II. These MTs are already leading Faculty Development training, Clinical Nurse Teacher training, and in-service training at their respective institutions. Collaboration between MTs from academic and clinical settings has also grown, along with peer exchange and networking across regions.

Looking ahead, we hope this module will support the ongoing development of Master Trainers in Bangladesh. While the CBNS-II Project concludes in 2026, we believe the knowledge, skills, and leadership nurtured through this initiative will continue to make an impact at the institutional level.

We are hopeful that, in time, Master Trainers will be recognized within a structured career path. We trust that this shared vision will be further strengthened through continued dialogue and collaboration.

Finally, we extend our sincere appreciation to the Ministry of Health and Family Welfare, DGNM, BNMC, the TWG, and all Master Trainers who have made this possible.

Together, we build capacity. Together, we build the future of nursing in Bangladesh.

溝上芳恵

Chief Adviser
CBNS-II, JICA, Bangladesh



Md. Mahbub Alam
Additional Secretary (Admin Wing)
Medical Education & Family Welfare Division
Ministry of Health & Family Welfare

Message

The health of the people of Bangladesh lies at the heart of our nation's socio-economic transformation. With a population of 171 million in 2023, projected to grow to 215 million by 2050, thus, the importance of investing in health has never been greater.

In 2022, per capita health expenditure in Bangladesh was approximately $61. Of this, only $4 came from government funds, accounting for just 6.5% of total expenditure. While it's hoped that an additional 12.6 million people will receive necessary healthcare without financial hardship by 2025 compared to 2018, we still face many challenges. Achieving the goal of Universal Health Coverage (UHC) for all by 2030 may be difficult unless the quality and accessibility of healthcare are significantly improved. The good health of every Bangladeshi is not merely a personal matter; it's crucial for our nation's future development.

We still have a long road ahead. Strengthening our ability to respond to public health emergencies-whether pandemics, non-communicable diseases, or maternal and child health-is essential.

In this regard, nursing and midwifery services are the heart of healthcare system, especially crucial for patient care quality. Thus, their continuous professional development is vital, ensuring they have the latest skills to deliver quality, evidence-based care, adapt to new health challenges, and utilize emerging technologies.

This module is more than just a reference. It's a source of inspiration, support, and practical guidance for nursing college lecturers and general nurses across the country. If we work together, continuously strive to improve the quality of services, and act with knowledge and compassion, we can truly make a significant difference.

Together, we heal. Together, we grow. Together, we thrive.



Additional Secretary
Admin Wing, MEFWD
Ministry of Health & Family Welfare.



Mohammad Abdus Salam Khan
Additional Secretary (Development Wing)
MEFWD, Ministry of Health & Family Welfare

Message

It is with immense pleasure and profound gratitude that I acknowledge the collective efforts culminating in the successful development and presentation of this Master Trainer (MT) Training Module. This vital initiative represents a cornerstone of our commitment to enhance public health outcomes in Bangladesh by strategically strengthening our national nursing workforce and set a culture of Continuing Professional Development (CPD).

I extend my heartfelt appreciation to the Directorate General of Nursing and Midwifery (DGNM) for their decisive leadership in championing this crucial module. It directly supports their mission to elevate the standards of healthcare and ensure the long-term sustainability of quality nursing practices across all institutions.

The launch of this module, a core deliverable of the Project for Capacity Building of Nursing Services, Phase 2 (CBNS-II), and implemented in partnership with the Japan International Cooperation Agency (JICA) Bangladesh, is a fundamental and timely step. Given the significant and well-documented nursing shortage, coupled with the imperative for improved training facilities nationwide, this strategic investment in Master Trainer Development is highly essential and welcome.

This module is meticulously designed to cultivate a cadre of highly skilled Master Trainers. These leaders will be empowered not only to identify local priorities but also to conceptualize and implement high-impact, context-specific programs, including rigorous faculty development and advanced clinical nurse training. The investment in these Master Trainers and Clinical Nurse Teachers (CNT) is a critical step towards strengthening clinical leadership, ensuring excellence in hands-on practice, and promoting lifelong learning, which are indispensable for quality patient care and nursing education.

I am confident that the successful implementation of this module will serve as a definitive cornerstone for improving the overall quality of nursing services and education. Ultimately, this will contribute directly to achieving better health indicators for the citizens of Bangladesh.

Finally, I acknowledge the tireless collaboration of all professionals involved in the development of this module, including the esteemed Technical Working Group, our dedicated Nursing Faculties, Clinical Nurses, and, most importantly, the committed Master Trainers.

Additional Secretary
Development Wing, MEFWD
Ministry of Health & Family Welfare.



Halima Akhter

Registrar

Bangladesh Nursing & Midwifery Council

Message

The Master Trainer (MT) Training Module, developed under the Project for Capacity Building of Nursing Services Phase 2 (CBNS-II), is the result of dedicated effort and strategic collaboration. We extend our sincerest gratitude to the many institutions, leaders, and professionals whose commitment made this significant resource possible.

We proudly recognize the unwavering guidance and partnership of the Directorate General of Nursing and Midwifery (DGNM)**.** Their vision and leadership were fundamental in developing and refining this module to strengthen professional nursing development in Bangladesh.

Special recognition is reserved for the members of the Technical Working Group (TWG). This group, composed of highly dedicated nursing educators, clinical nurses, and institutional leaders, provided the essential expertise and practical feedback necessary to revise the module. Their tireless work, drawing from the foundation of Phase 1 and incorporating lessons learned from implementation workshops, ensured the module's high standard of quality, relevance, and alignment with Continuing Professional Development (CPD)**.**

We express our deep appreciation to the Ministry of Health and Family Welfare and the Bangladesh Nursing and Midwifery Council (BNMC) for their institutional support, which provides the enabling environment for the capacity building of nursing services nationwide.

Finally, we extend our profound thanks to all certified Master Trainers & Clinical Nurse Teachers from the eight nursing colleges and eight affiliated hospitals who have embraced this initiative. Their dedication to leading Faculty Development, Clinical Nurse Teacher training, and in-service programs, along with their growing peer collaboration and networking, is already creating a tangible and lasting impact at the institutional level.

We believe the success captured in this module is evidence to what can be achieved through shared vision and collective dedication to build the future of nursing in Bangladesh.

Registrar

Bangladesh Nursing & Midwifery Council



Tomohide Ichiguchi
Chief Representative
JICA Bangladesh Office

Message

Human resources development in the health sector has long been a cornerstone of Japan International Cooperation Agency (JICA)'s cooperation with Government of Bangladesh. Recognizing the essential role of nurses in achieving Universal Health Coverage (UHC), JICA has consistently supported the improvement of nursing quality through a series of technical cooperation and loan projects.

Although the number of registered nurses in Bangladesh has increased, there remains room for further improvement in areas such as workforce distribution, training quality, and career path development. In response, JICA's support focuses on strengthening both the academic and clinical competencies of nurses to help them effectively respond to the evolving health needs of Bangladesh.

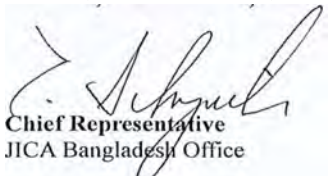
The CBNS-II is a key initiative under JICA's health sector cooperation. Building on the achievements of Phase 1, the JICA expert team of CBNS-II works closely with the DGNM, the BNMC, and the MOHFW to institutionalize nursing capacity development across the country.

A central component of this project is the development of Master Trainers (MTs) who play leading roles in faculty development, clinical practice for nursing students, clinical nurse training, and in-service training. These MTs are already producing visible results within their institutions, contributing to the advancement of nursing education and clinical practice.

The MT training module developed under CBNS-II serves as a strategic tool for transforming nursing education and practice in Bangladesh. It enables MTs to design and implement context-based, effective training programs tailored to local needs. By enhancing leadership and teaching skills are to fundamental nursing care. Hence, the module will contribute directly to improve patient outcomes and stronger institutions for nurses.

JICA expects this module to act as a catalyst for sustainable transformation in the nursing sector and hopes that MTs will be recognized within a structured career path. As CBNS-II moves toward completion in 2026, JICA is confident that the knowledge, skills, and leadership fostered through this initiative will continue to grow.

JICA remains committed to supporting Bangladesh in developing a resilient and skilled nursing workforce capable of leading the nation's health system into the future. We extend our sincere appreciation to DGNM, BNMC, MOHFW, the Technical Working Group, the JICA expert team, and all dedicated nursing faculty members, clinical nurses, and MTs who have contributed to this important endeavor.



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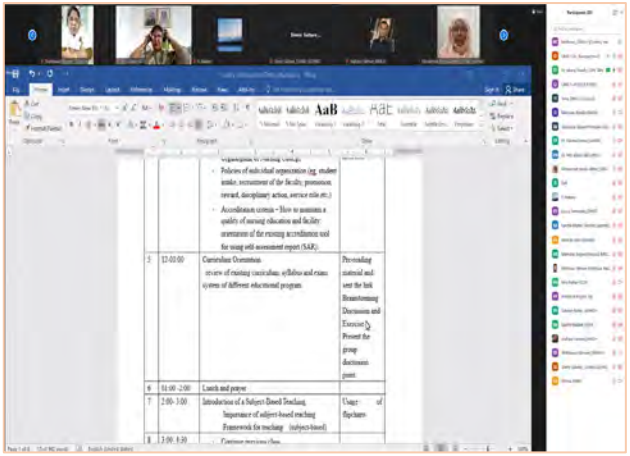
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Abbreviations

APA	American Psychological Association
B.Sc	Bachelor of Science
BCC	Behavior Change Communication
BLS	Basic Life Support
BNMC	Bangladesh Nursing and Midwifery Council
CC	Coordination Committee
CN(s)	Clinical Nurse(s)
CNT(s)	Clinical Nurse Teacher(s)
CPD	Continual Professional Development
DGNM	Directorate General of Nursing and Midwifery
EBN	Evidence Based Nursing
FD	Faculty Development
ICN	International Council of Nurses
ICT, IT	Information and Communication Technology, Information Technology
IM	Intramuscular
IPC	Infection Prevention Control/ Inter-professional Communication
IV	Intervein
JICA CBNS2	Japan International Cooperation Agency Capacity Building of Nurses phase2
MT(s)	Master Trainer(s)
NG	Nasal gastric
OB	Organizational Behaviors
PCC	Patient-Centered Communication
PDCA	Plan – Do – Check - Act
PPT	Power Point Presentation
SC	Subcutaneous
SDG	Sustainable Development Goals
SOP	Standard Operational Procedure
TC	Therapeutic Communication
TOR	Terms of References
TWG	Technical Working Group
WHO	World Health Organization

Technical Working Group Participants of Phase -1 Photos





First TWG Meeting on CPD in Nursing (Online)





Second TWG Meeting on CPD in Nursing at DGNM





Second TWG Meeting on CPD in Nursing at DGNM





Second TWG Meeting on CPD in Nursing at DGNM

Working Group Committee (WGC) Workshop on CPD in Nursing





First WGC Workshop





First WGC Workshop





Second WGC Workshop





Second WGC Workshop





Third WGC Workshop





Third WGC Workshop





Fourth WGC Workshop





Fourth WGC Workshop

First Batch Master Trainer (MT) Training




First Batch MT Training




First Batch MT Training




First Batch MT Training




First Batch MT Training

Second Batch Master Trainer Training





Second Batch MT Training





Second Batch MT Training





Second Batch MT Training





Second Batch MT Training

MT Training Module Stakeholder Workshop at CIRDAP

















Different Event's Photos

















Contributors

No.	Name	Designation	Organization
1	Md. Anwar Hossain Akand	Director General	DGNM
2	Md. Rashidul Mannaf Kabir	Director-Education	DGNM
3	Md. Momin Uddin	Director (Admin)	DGNM
4	Mosammat Manju Akhter	Deputy Director (Admin)	DGNM
5	Ms. Sherin Sultana	Deputy Director, PMIS	DGNM
6	Ms. Nilufar Yasmin	Deputy Registrar	BNMC
7	Ms. Taslima Begum	Director	NIANER
8	Most. Rizia Khatun	Principal	RpNC, Rangpur
9	Ms. Shirina Akhter	Principal	DNC, Dhaka
10	Ms. Rehena Khanom	Principal	DNC, Dhaka
11	Most. Shahinoor Begum	Principal	CONSBN, Dhaka
12	Ms. Mamotaz Begum	Principal	MNC, Mymensingh
13	Ms. Tahmina Begum	Principal	BNC, Barisal
14	Ms. Mossamat Salina Akter	Principal	CNC, Chattogram
15	Ms. Shahina Begum	Principal	SNC, Sylhet
16	Most. Sufia Begum	Nursing Instructor/ Principal	RpNC, Rangpur
17	Dr. Md. Foyejur Rahman	Principal	RNC, Rajshahi
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19	Ms. Shahana Abedin	Nursing Superintendent	DMCH, Dhaka
20	Ms. Shahida Khatun	Nursing Superintendent	ShSMCH, Dhaka
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22	Ms. Niva Rani Chanda	Nursing Superintendent	MMCH, Mymensingh
23	Ms. Khadiza Begum	Nursing Superintendent	MMCH, Mymensingh
24	Ms. Sufia Begum	Nursing Superintendent	SBMCH, Barisal
25	Ms. Shahida Khanam	Nursing Superintendent	SBMCH, Barisal
26	Ms. Basanti Rani Roy	Nursing Superintendent	CMCH, Chattogram
27	Ms. Sufia Khatun	Nursing Superintendent	RMCH, Rajshahi
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29	Most. Shirina Akther	Nursing Superintendent	RpMCH, Rangpur
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45	Mr. Ali Azgar	Nursing Instructor (MT)	BNC, Barisal
46	Mr. Mohammad Belal Uddin	Nursing Instructor (MT)	CNC, Chattogram
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48	Ms. Mahbuba Khanam	Nursing Instructor (MT)	RNC, Rajshahi
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50	Ms. Afroza Sultana	Nursing Instructor (MT)	ShTANC, Gazipur
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54	Md. Saiful Islam	Senior Staff Nurse (MT)	CMCH, Chattogram
55	Ms. Zannatun Ferdose	Senior Staff Nurse (MT)	RMCH, Rajshahi
56	Ms. Tania Akter	Senior Staff Nurse (MT)	ShTAMCH, Gazipur
57	Mst. Asma Akter Khanam	Senior Staff Nurse (MT)	SMAGOMCH, Sylhet
58	Prof. Niru Shamsun Nahar	Principal	GCCON, Dhaka
59	Ms. Saleha Khatun	Mentor	GCCON, Dhaka
60	Representative	Representative	WHO, Bangladesh
61	Representative	Representative	ProNurse Project
62	Representatives	Japanese Experts	JICA CBNS-II Project

Master Trainer Training Module

Introduction

With the global advancement of health science and health care delivery system, Bangladesh also advancing and walking on the track to achieve SDG by expanding and improving various initiatives to promote health of population. Despite newly emerging diseases, Bangladesh has increased its people's life expectancy through strengthening health issues including health personnel's working capability and competency.

Medical science is dynamic and ever-changing discipline that needs continual professional developments (CPD) among all its areas especially for nursing professionals those are vital workforce in health care delivery system and directly involving with patient care. Bangladesh government has taken initiatives for promoting nursing education, research, services, and management along with the contribution of donor agencies. Every professional nurse should be aware of the need to update and expand his or her knowledge and skills. CPD in healthcare is fundamental for enabling practitioners to acquire and apply skills relevant for sustaining person-centred, safe and effective care (Manley, Martin, Jackson, & Wright, 2018).

To establish the CPD framework, we need to develop human resources which we call, Mater Trainer (MT) those who will be able to take a necessary role in this system. The success of the training process depends on the availability of a clear and accurate concept of training among the parties involved in the training process, including trainers, trainees, and training supervisors, and following modern methods in the training process that meet the needs of human resources working in each health facilities and develop their knowledge and skills (Alharbi and Aloyumi, 2023). We believe that the development of the MT will be a key component for the start of the long lasting continual professional development system in Bangladesh.

Needs of staff development for nursing professionals

There are clear needs of the staff development in nursing in Bangladesh. Ajithakumari (2016) describes needs of staff development for nursing professionals as follows.

- Staff development activities include training and education needed because social change and scientific advancement cause rapid nursing knowledge and skills.
- Purpose of staff development program for nurses is to provide the opportunity for nurses to continuity acquire and implement the knowledge skill, attitudes ideals and valued essential for maintenance of high quality of nursing care.
- Education should be transmitted to bring cultural change.
- Staff education includes all planned education activity recognized by a health care agency as directed towards meeting the job-related learning needs of the nurse continuing education and in-service education.

Purpose of this Module

This module has been focused on the development of the Master Trainer (MT) to conduct several activities for nurses working in various field of nursing in Bangladesh. Also, MT training is designed to be led by a government to cover the participants from all the nursing facilities across the country include nursing colleges,

medical and district hospitals, or community in the future. The aim of developing a MT is that MTs can go back and take a lead to establish necessary activity, for example, an in-service training at their workplace according to the needs of each facility. The interest will be different at each facility so MTs should identify a needs and priority then plan the best future activities to improve nursing care in Bangladesh, starting from their own workplace.

As we said, the main aim of Master Trainer is to conduct an activity such as in-service training at their facility.

Examples include:

- **Faculty Development (FD) training** at nursing colleges to enhance instructional quality.
- **Training for Clinical Nurses**—particularly those supervising nursing students during clinical placements—under the framework of **Clinical Nurse Teachers (CNTs).**

CNTs can train clinical nurses (CNs) at their own ward to provide quality care to the patients and families and also, to support non-CNT nurses on how to guide a nursing student during their clinical practice placement. Advantages of in-service training will be

- Improve quality of patient and family care.
- Enhance guidance and supervision of nursing students during clinical placements.
- Peer support among non-CNT nurses to build instructional capacity at the bedside.

Development of the Module of the Master Trainer Training for Nurses

Bangladesh is a very rare country which has a smaller number of nurses than doctors par population (Alex, 2014). Also historically, nursing was reserved for women belonging to the lowest castes (Hinduism) or causing a limitation in care due to Muslim women to not touch and nurse male patients and remain on night-long shifts (Taufique, 2021). For this reason, it was extremely difficult for the nurses to raise their voice and speak out their own needs, for example, importance of CPD for nurses in the past.

With JICA CBNS2 project support, Bangladesh government started looking for a way forward on the capacity building of nursing. To start, there have been working group conducted with participants from nursing colleges and affiliated hospitals from each region to express the current, real situation and needs. For example, there are orientation programme for newly qualified nurses once they deployed by the governmental hospital although not many opportunities after that for future carrier development except some donor programme. Similar for the college lectures, recently there is a training programme started for those promoted as a lecture in nursing college although there is no space for those already working as a lecture at nursing college for long time which causing a knowledge gap between the lectures.

After careful discussion, the member of the working group agreed for a development of the Master Trainer and started considering about the necessary components for their training. Finally, there were 10 components chosen and the module par each topic has been developed by the working group members then consolidated by Technical Working Group (TWG). The details of the modules will follow the introduction part.

Role of the Master Trainer

Here is an expected role and responsibilities of the Master Trainer.

Roles

- Clinical trainer/educator
- Clinical supervisor/Mentor/Counselor of faculties, CNTs, and CNs at their own facility
- Leader (Communicator, Role model, Problem solver, Decision maker, Critical thinker, Team builder, Change agent) at their own facility

Responsibilities

- To exhibit leadership qualities and nursing professional behaviours
- To promote coordination and cooperation among nurses, other health care providers, and faculty members
- To run committee meetings to enhance the activities at their own facility
- To plan and conduct effective in-service training together with their colleagues
- To create effective learning environment for faculties, nursing professions, and nursing students
- To monitor and supervise faculties, CNTs, CNs, and nursing students during clinical practice placement
- To encourage socializing, sharing, and problem-solving among faculties, CNTs, CNs, and nursing students
- To coordinate with DGNM regularly to comply the way forward of nursing future in Bangladesh

Master Trainer (MT) here is referred to nursing personnel who is authorized to mainly train other nursing personnel. Candidate could be a lecture or clinical nurses; depends on the facility they based and must reach the criteria. Here are the criteria used for the 1st and 2nd Master Trainer Training candidates' selections.

I. Selection Criteria

Trainees must meet the following criteria.

1) hold a master's degree or expected to obtain a master's degree.
2) have at least 5 years of tenure from 2024*[1] to retirement.
3) Have at least 4 years of teaching experience at college or 10 years of service experience in a clinical setting. (However, since the hospital side has few opportunities for capacity building and there are no suitable candidates with this standard year of experience, young nurses recommended for the hospital which will only be included in the first training in 2024*[2].)
4) No complain / offence record

In addition, those who have demonstrated a positive attitude towards the following will be highly considered.

1) Have Completed Training as a Resource Person
2) Have a research background
3) Have a record of outstanding achievements and awards
4) Considered by the workplace to have good behaviour attitude, and motivational skills toward others
5) Considered by the workplace to have demonstration/presentation skills.

[1] Need to be modified according to the year when the training will be conducted.

[2] Same as above

Planning of the Master Trainer Training

The planning of the Master Trainer (MT) Training was guided by five key questions recommended by the World Health Organization (WHO) for an effective training design:

1. Who is the person concerned and what is the context?
2. What is the development need?
3. What is the best way for this person to learn?
4. What is the most appropriate form of training?
5. Where is the information about courses?

First of all, who is the person concerned and what is the context? As it briefly explained, prior to conducting the Master Trainer training, there were working groups to discuss the way forward in the field of nursing in both colleges setting and the clinical placement. The members formed with the responsible personal from both college and hospital side and they expressed the strong need of the training to enhance the level of the faculties and the staff nurses, especially on very basic knowledge and fundamental skills and also, those dealing with the nursing students while they are taking their clinical practice placement. To start with, the development of the internal committee has been discussed, and TOR has established which shared with DGNM for an approval.

Here are the committees developed at nursing colleges and affiliated hospitals.

1. **Committees at Nursing College**
    - Quality Assurance Committee
    - Faculty Development Committee
    - Research Committee
2. **Committee at affiliated hospitals**
    - Capacity Building of Nurses Committee:
3. **Committee with both lectures and clinical nurses**
    - Coordination Committee

There were three committees including Quality Assurance, Faculty Development and Research Committee formed in the nursing college and internal committee which named Capacity Building of Nurses Committee later has been lunched in the hospital. Most importantly, both college and hospital members are facing difficulty of managing the monitoring and supervision activities of the nursing students during their clinical practice placement therefore, they have developed a Coordination Committee (CC) to discuss any issue regarding the implementation of the clinical practice placement activities.

Secondly, what is the development need? The participants for the working group have been carefully selected then the need topics of the training for faculties and hospital nurses has been discussed. There were several numbers of topics raised which include a very basic knowledge to the advanced level. However, advance level training had been already planned under other government scheme therefore, this Master Trainer training contents has been focused on the very basic which aimed for a quick bottom up of the faculties and hospital nurses' capacity and skills. In the end, ten contents have been selected which forms this module. Here is the topics of the chosen ten modules.

The agenda of MT training has been developed including all these 10 modules.

Module 1: CPD Training in Nursing
Module 2: Leadership and Management
Module 3: Nursing Ethics
Module 4: BCC, Communication and self-management
Module 5: Faculty Development
Module 6: Hospital and Ward management
Module 7: Nursing Process and Fundamental Nursing Skills
Module 8: Preparation of Clinical Practice Placement
Module 9: Research in Nursing
Module 10: ICT in Nursing

The agenda of the second Master Trainer Training has been attached to this module for your references (Appendix 1).

Third point is that what is the best way for the candidates to learn. The traditional training in Bangladesh is the lesson style, so the lecture will be the only presenter, and the participants will get the information from them. As the target is a faculty member and senior staff nurses, the team has prepared for an adult learning method such as group work, scenario-based role play, case study, presentation, and more. Also, we have ordered lecture to plan for 15 – 20 minutes short presentation and combine suitable adult learning methods to make the participants engaged with the training. This was the new challenges so at first, the lectures were struggling to compile their presentation in such a short time although they have been used to it in the second batch already and this method was very much accepted by the participants.

The fourth point is the most appropriate form of the training. The aim of the training was to spread the method to whole over the country therefore, there will be needs of the Master Trainers at each facility. In this concept, Master Trainer Training has been planned and conducted in Dhaka, calling all the participants to join for 12 days training. In this way, we can cover the participants from every facility. Also, there were fundamental nursing skill training included in the topics therefore, lots of videos has been used for an updated procedure then the checklist has been developed for a fair and equal evaluation of each skill.

Finally, the fifth point is that where is the information of the courses. The Master Trainer training is recommended to be held at DGNM level. That is why this module has been taken account to be approved by DGNM. The information should be shared, and the candidates will be selected according to the needs par each facility by DGNM in the future.

How to use this Module

To effectively utilise this module, it is better to understand the structure.

- Module 1 is an introduction of CPD training for nurses
- The remaining Module 2 to 10 covers the core contents which should have covered for several type of CPD training for nurses.

It is recommended to include all 10 modules for MT training program. Once trained, MTs can selectively apply the relevant content to design and implement in-service training based on the specific needs of their facility. For example:

- In nursing colleges, MTs may use the content to conduct Faculty Development (FD) training.
- In hospital settings, they may implement Clinical Nurse Teacher (CNT) training to improve supervision of nursing students during clinical placements.

Adaptation and Customization

The contents and materials of each module should be adapted according to a local needs assessment conducted at each facility. The goal is to ensure that training activities are context-specific and practically applicable.

Role of Internal Committees

The internal committees established at each institution (e.g., Faculty Development Committee, Capacity Building Committee, Coordination Committee) should play a central role in:

- Organizing and implementing training programs
- Supporting MTs and CNTs
- Ensuring follow-up and evaluation

Future Outlook and Career Pathway

MTs and CNTs will take on significant responsibilities in leading and sustaining CPD efforts. In recognition of their contributions, it is strongly encouraged that a clear and fair career pathway be developed for these roles. Formal promotion opportunities and institutional recognition will be essential to motivate and retain qualified MTs and CNTs, and to ensure the long-term sustainability of the CPD system.

Preparing and Conducting the Master Trainer Training

The criteria of the MT training resource

The recommended criteria of MT training resources are as below.

- Highly experienced and knowledgeable in specialized area (e.g., Nursing officers of DGNM, Head of BNMC or equivalent knowledge holder (especially for Nursing Ethics), Nursing College Principals or equivalent knowledge and skill holder (ITC for example), Hospital Nursing Superintendents or equivalent knowledge and specific skill holder (BLS or IPC for example) at clinical placement)
- Experienced in Interactive teaching
- For specific topics: clinical experts and nursing administrative work experts
- Has good communication skills and IT Skills.

Preparation of the presentations by resources

The resources can utilise this module when they are preparing for their presentation. Some tips for preparing the presentations as bellow.

- ✓ Understanding the topic deeply
- ✓ Information should be research based, relevant and up to date
- ✓ The PPT slides should be developed according to the duration of the lecture time which been given. (Maximum 1-2 slide par 1 mins is recommended), clear and concise

- ✓ Practice to deliver lecture through experience, explanation of keywords not just reading slides
- ✓ Utilize standardised referencing style
- ✓ Should practice time management for not to spend too much time on talking by yourself. Practice on interactive lecture style highly recommended.
- ✓ Always combine with adult learning methods such as discussion, group work, presentation or role play, for example.

Web conference rehearsal with the resources

Web conference rehearsal with the resources prior training can be helpful for perfect conduction of the training. Sharing teaching material with the resources facilitate for their better preparation.

Firstly, web conference with the resources helps to get clear perception about the training agenda like lecture duration, group activities and duration. Secondly, through discussing lecture contents resources can identify their gap and study deeply for their better preparation. Thirdly, the giving prior idea about group activities and instructions through web conference will be supportive for the resources to guide the participants accurately during training. Lastly, resources can boost confidence for the future training.

When the MT training will be conducted by government, these activities should be led by DGNM or equivalent institution.

Pre and Post-test trial with the participants

For the pre and post-test of MT training, IT used for easiness and accurate data collection. Although as most of the participants are not oriented about this type of pre-post-test (it was google- form-based questionnaire which has been used for MT training), trial test before actual prep-test would be highly effective. During trial test, participants can identify their shortcomings and get opportunity to solve them. Thus, participants can enhance their confidence and complete the pre & post-test easily. However, participants are not always able to comply with these IT based test, keeping ready a hard copy of the questionnaire is recommended to manage any technical or other problem.

Venue and equipment preparation

Here are the tips of selecting the venue and equipment.

- ✓ Following tips should be considered while selecting the venue; the number of the participants, accessibility for the participants and resources, number of rooms we can use, and canteen and accommodation facilities
- ✓ When preparing an equipment, we should discuss with resources; what is needed par each of their lecture or skill practices, any extra documents require for their session, and if the venue are suitable for their session
- ✓ Regarding venue preparation, it should be selected where all necessary facility equipment's (e.g. projectors, audio system and microphone, suitable lab classrooms with necessary equipment and mannequin, and comfortable classrooms) are available.
- ✓ Venue preparation recommended at least one-two days prior to the training. The setting up of the venue (such as table setting, distribution of the necessary documentation) should be completed and all technical supports (computer, projector and sound system) should be ensured working well.

Regarding equipment preparation, day wise topic-based preparation of the equipment for Fundamental Nursing skills is the convenient way to display and utilize for the practical sessions. Organizing equipment one day before on each topic reduce the burden of workload for the facilitators as well. In addition, participants can collect the instruments easily and time can be managed evenly.

Roles to take during the training

Each facilitator should take some roles during the MT training. Examples as below.

- ✓ Communication with the resources and participants is the first role. Facilitator should communicate with all the resources those has lesson next to confirm their arrival (at least an hour before the lecture recommended).
- ✓ Computer operation for slide show, time keeping and voice recording also vital roles for the facilitators
- ✓ Cooperation with the resources during lecture and group activities if needed to give a support
- ✓ Observation of the participants and motivating them according to their needs and also to ensure the maximum engagement during lecture, group activities and practice
- ✓ Instant management of other resources in case of unavailability of allocated lecture
- ✓ Support participants during pre & post-test, analyse the result and arrange rescue test if needed.
- ✓ Facilitate equipment for the group practice and organize for next use. Food and snacks management and distribution
- ✓ Conduct a debriefing session each day after training for new learning and areas of improvement
- ✓ Finally, should work as a team, not focus individual success

Evaluation of the performance

For the first and second MT trainings, participants' performance evaluation has been conducted by using checklists par each topic, for example, daily performance (group work, role play, presentation) participants evaluation checklist by resources, or post-test results. These mentioned checklist and post-tests can be recommended as evidence for final evaluation. Additionally, MT training pre-test and post-test exams can be segmented by module (10 topics) rather than creating a test par each session.

Debriefing

Areas of discussion: facilitators can discuss on

- New learnings from the training
- Limitations of the training and finding ways for possible solution

Effectiveness of the debriefing:

The usefulness of the debriefing session is quite evident for this time of the trainings. It opens the floor for self-assessment and evaluation. Moreover, it teaches facilitators how to do constructive feedback and grow positive attitude to accept that feedback. Furthermore, through discussion, team members can share their opinions and take decisions collectively to solve the limitations. Lastly, it creates the pathway to improve the overall training outcome day by day.

Reporting

The training co-ordinator should write the report. Although, information and opinion can be taken from other facilitators to add in the report before finalising it.

The following contents should be included in the report:

- General information of the training such as title, date and duration, venue, reporter name, number of participants, selection criteria, teaching aids
- Summary of the report
- Details of the Training
  - Preparation before the training
    - Participant and Resource Selection
    - Communication with participant and resources
    - Agenda preparation
    - PPTs and Supportive documents preparation
    - Rehearsal with resources
    - Trial-test with participants
    - Venue Preparation
  - During training:
    - Introduction
    - Pre-test
    - Teaching skills of the lecturers
    - Quality of the group work and skill practice
    - Result
  - After training
    - Debriefing Session
    - Recommendations

Note: attaching photo would be advantage to visualize the training for the readers.

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Module 1

Continuous Professional Development (CPD) in Nursing

MODULE 1

Continuing Continuous Professional Development (CPD) in Nursing

Module Overview

Nurses are called upon to take responsibility of personal and professional development. They are required to pledge to lifelong learning of specific skills or broad enhanced career development by enrolling in formal or informal continuing education program. Continuing professional development (CPD) in healthcare is fundamental for making sure frontline nursing professionals to practice safely and effectively. This requires each practitioner to update knowledge and skills regularly to match the changing complexity of healthcare needs. Nurses' commitment to professional development enables them to deliver safe, effective, and quality health care (Cooper, 2009).

Goal of the Module

The goal of this module is to have in-depth knowledge and understanding on CPD Training in Nursing and acquire the ability to explain its purpose, role of trainers, how to prepare this training and its evaluation system which would strengthen nurses' professional quality in order to promote patient's wellbeing.

Learning Objectives

The objective of this module is to:

1. Clear understanding on CPD training and it's need in Nursing
2. Deepen a knowledge of the purpose and principles of CPD
3. Learn about the framework of CPD training in Nursing
4. Be able to plan and conduct CPD training in the future

Learning Outcome

By the end of the training, participants will be able to:

1. Introduce and define CPD training in Nursing.
2. Explain the purpose of CPD
3. Describe the principles of CPD
4. Explain the framework of CPD training in Nursing
5. Describe and explain on how to prepare CPD Training (based on 5W1H approach)
6. Explain the evaluation of CPD Training in Nursing

Core Modules 1.1: Introduction of CPD Training in Nursing (45 mins)

I. Contents

1. Goal and Objectives
2. Learning Outcomes
3. Definition, Purpose, Principal and Benefit of CPD Training in Nursing
4. Examples of CPD Activities for Nurses
5. Tips for Engaging in CPD Activities

Core Module 1.2: Framework of CPD Training in Nursing (30 mins)

I. Contents

1. CPD Training framework
2. CPD cycle

Core Module 1.3: Preparation of CPD Training (90 mins)

I. Contents

1. Role of Master Trainer
2. Training and implementation methods
3. Preparation using a 5W1H approach
4. What are the 5W and 1H question

Core Module 1.4: Evaluation of CPD Training (60 mins)

I. Contents

1. Evaluation of CPD training
2. Learning Evaluation Criteria
3. Performance Evaluation Criteria

Common Practical Tips (*These Tips is Applicable for All the Modules)*

II. Teaching / Learning Methodology

1. Presentation (e.g., PPT)
2. Group discussion
3. Small Group Discussion
4. Brainstorming
5. Demonstration
6. Case Study
7. Scenario-Based Learning
8. Flipped Classroom

III. Teaching Materials / Media

1. Multimedia
2. Overhead Projector
3. Audio-visual aid
4. Flip chart
5. White board / Electronic Whiteboard
6. Poster paper
7. Marker
8. Sticky Notes
9. E-Learning, Pre-reading materials
10. Mobile Learning (M-Learning)

Core Module Evaluation:

Learning Evaluation Criteria:

1. Evaluation Criteria: Overall passing score: over 80%
2. Pre-test/Post-test: allotment of marks: 80%-Overall evaluation

Participant evaluation:

- allotment of marks: 20%-Session evaluation by the participant by using checklist.
- Trainee feedback

Performance evaluation criteria:

- Performs one active teaching and learning session with a small group
- Question Construction

References

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Module 2
Nursing Leadership and Management

Module 2
Nursing Leadership and Management

Module overview

This module aims to enhance the development of effective nursing processes by examining and assimilating high-performance best practices in clinical settings.

Goal of the Module

This module is crucial for nurses to ensure efficient and effective patient care, maintain a healthy work-life balance, and enhance overall job satisfaction.

Learning Objectives

The objective of this module is to:

1. Explore and critique leadership theories, styles, and decision-making processes**.**
2. Aware to develop, implement, and evaluate employee recruitment, orientation, and development strategies.
3. understands the importance of time management and how to apply it to practice.

Learning Outcome

Objective 1: By the end of the Nursing Leadership session, participants will be able to:

1. Define Leader and Types of leaders.
2. Understand the roles of leader.
3. Identify the Qualities of good leader and leadership.
4. Describe Charismatic leadership and characteristics of charismatic leadership.
5. Distinguish between Manager and Leader.

Objective 2: By the end of the Nursing Management session, participants will be able to:

1. Understand the concept of Team building.
2. Effects of Nursing Leadership.
3. Recognize the Types of Nursing management, the roles and importance of Nursing management.
4. Understand the level of Nursing management and leadership.
5. Enabled the Management skills.

Objective 3: By the end of the Time Management session, participants will be able to:

1. Define and introduce with time management.
2. Understands importance of the time management and how to apply it to the practice.
3. Discuss the basic principles/steps or process.
4. Find out the barriers in utilizing effective and productive time management.
5. Practice the Time Management Matrix.

Core Module 2.1: Nursing Leadership

I. Contents

1. Definition of Leader and Types of leaders

2. The roles of leader
3. Qualities of good leader and leadership
4. Qualities of a Nurse leader
5. Clinical nursing leadership skills
6. Difference between Leader and Manager
7. Theory of leadership
8. Charismatic leadership
9. Quality of charismatics leader
10. Characteristics of charismatic leadership
11. Definition of Team and Team building
12. Importance of Team building
13. Disadvantages of Teamwork
14. Process of Team building
15. Negotiation Skill and conflict management

Core Module 2.2: Nursing Management

I. Contents

1. Definition of Manager and Management
2. Definition of Nursing management and its five (5) major functions (Technical skill, Conceptual skill, Interpersonal & communication skill, Decision making skill, Diagnostic & Analytical skill).
3. Level of Nursing management and role of them (Top level, Middle level, First level managers).
4. Principles of management
5. Leadership and Management skill

Core Module 2.3: Time Management

I. Contents:

1. Aim of Time management
2. Importance of Time management
3. Principles/steps or process of Time management
4. Barriers of using effective time management
5. Components of Time Management

Common Practical Tips

II. Teaching / Learning Methodology

1. Classroom lecture (core module 2.1, 2.2)
2. Group discussion (core module 2.1, 2.2)
3. Power point presentation (core module 2.3)
4. Group Work (Eisenhower Decision Matrix) and presentation (core module 2.3)

III. Teaching Materials/Media

1. Power point presentation
2. White board

3. Pster paper
4. Marker

Core Module Evaluation:

Learning Evaluation Criteria: Overall passing score: over 80%

1. Pre-test/Post-test: allotment of marks: 80%-Overall evaluation
2. Participant evaluation: allotment of marks: 20%

- Session evaluation by participant by using check list.
- Trainers' feedback.

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Core module 2.3 Time Management

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Module 3
Nursing Ethics

Module 3
Nursing Ethics

Module Overview

This module aims to enhance the development of effective nursing processes by examining and assimilating high-performance best practices in clinical settings.

Goal of the Module

- Perform their academic and clinical activities following ethical guidelines
- Be aware of the ethical aspect in professional activities.
- Learn how to avoid all unethical (misconduct) dealings in professional activities.

Learning Objectives

The objective of this module is to acquire knowledge of':

1. Definition of Nursing Ethics and laws
2. Bangladesh Nursing and Midwifery Council (BNMC) Act-2016, Ethical Behaviour
3. Nursing Standards
4. Patient rights and Ethical Decision Making

Learning Outcome

By the end of the Nursing Ethics session, participants will be able to:

1. Introduce and state the concept and types of ethics
2. Discuss the principles of nursing ethics
3. Perform their academic and clinical activities following ethical guidelines.
4. know the role and Act of Bangladesh Nursing & Midwifery Council (BNMC) which will help in practicing ethical conduct.
5. follow and practice the standard of nursing procedure in their clinical setting (e.g., handwashing by following WHO steps, administering medication, infection control measure etc).
6. Discuss and explain the principal elements of the ICN Code of Ethics of the profession around the seven primary values that are central to ethical nursing practice

Core Module1-1.: Nursing Ethics

I. Contents

1. Understanding the concepts of ethics and laws
2. Evaluation Overview of Nursing Ethics and Laws (Bangladesh Nursing and Midwifery Council (BNMC) Act-2016, Ethical Behaviour)
3. Legal and ethical dimensions of clinical instructing
4. Conflict management & ethical decision making
5. Academic misconduct and unethical behaviours
6. Conflict resolution strategies
7. Ethical dilemma and decision making
8. Practice of ethical dilemmas

9. Differentiate between ethical and unethical behaviour

Core Module 3-2.: Nursing Standard and Professionalism

I. Contents

1. Unique body of knowledge
2. Competent application of knowledge
3. Responsibility and accountability
4. Professional etiquette & dignity
5. Patients' rights and professional responsibilities

Common Practical Tips

II. Teaching / Learning Methodology

1. PowerPoint presentation
2. Group Discussion and Presentation
3. Role play & Scenario-Based Practice
4. Group practice
5. Fish Bone/ mind map analysis (core module 3-1)
6. Pre-reading materials

III. Teaching Materials / Media

1. Multimedia
2. Overhead Projector
3. Audio-visual aid
4. Flip chart
5. White board / Electronic Whiteboard
6. Poster paper
7. Marker
8. Sticky Notes

Core Module Evaluation:

Evaluation Criteria: Overall passing score: over 80%

1. **Pre-test/Post-test:** allotment of marks: 80%
2. Participant evaluation: allotment of marks: 20%
3. Session evaluation by the participant by using a checklist.
4. Trainee feedback

Performance evaluation criteria:

- Session evaluation by participant by using a checklist.
- Trainers' feedback

References

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4. College of Registered Nurses of Prince Edward Island. (2018). Standard for Nursing Practice.
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9. Simões, Â., & Sapeta, P. (2019). The concept of dignity in nursing care: A theoretical analysis of the ethics of care. Revista Bioética, 27, 244-25

Module 4
BCC, Communication and Self-Management

Module 4

BCC, Communication and Self-Management

Module Overview:

This module aims to practice Behavior Change Communication (BCC) for nurses and nursing students to explore patients' beliefs and assess their level of motivation for change in order to intervene to elicit behavior change through continuous nursing care.

Goals of the Module:

- Increase participants' knowledge and attitudes about BCC, communication, and self-development.
- Strengthen the capacity for BCC and communication interventions among all nurses in the clinical setting.

Learning Objectives:

The objectives of this module are to:

1. understand organizational behavior in a clinical setting.
2. explain motivation & counselling and understand the way to apply to the practice.
3. conduct health promotion activities using appropriate BCC methods and messages.
4. understand organizational self-management in a clinical setting.
5. understands effective communication methods.

Learning Outcomes:

By the end of Behavior Change Communication (BCC) session, participants will be able to:

1. define BCC and its evolution and related terminologies
2. define objectives, process and importance of BCC
3. describe the criteria, steps and stage for developing BCC messages
4. explain BCC strategies in providing health care through conducting a scenario-based exercise on BCC

By the end of the Communication session, participants will be facilitated to discuss and practice communications focusing on:

1. Definition
2. Process
3. Components
4. Barriers to Effective Communication
5. Therapeutic Communication
6. Interpersonal Communication
7. Patient Centered Communication
8. Public Speaking

By the end of Attitude, Personality & Value session, participants will be able to:

1. define Attitude, personality, values and its types
2. state the components of attitude
3. mention the traits of personality

4. explain characteristics and difference between attitude and behavior

By the end of Organizational Behaviors (OB) session, participants will be able to:

1. describe the field of organizational behavior and discuss its relevance to the workplace
2. describe the relationship between general group and team management with various structures and techniques
3. explain the Importance of Organizational Behavior.

By the end of the Counseling & Motivation session, participants will be able to:

1. understand counseling, professional counseling & motivation.
2. discuss the importance & benefits of counseling for nurse & patient.
3. apply the process and approach of while counseling the patients or clients.
4. develop important attributes to being a good nurse counselor.
5. demonstrate the process and approaches of motivation teaching hospital nurses and academic institutions.

By the end of the Health Education & Mental Health session, participants will be able to:

1. understand the importance of Health Education.
2. describe the importance of Health Education.
3. understand Mental Hygiene Approach.
4. understand characteristics of mentally healthy people and warning signals of poor mental health.
5. describe essentials of good mental health for student nurses.
6. understand cycle of mental health (Thought (belief) - Feelings(emotions)-Behavior(actions) - Consequences (given by others)).
7. describe common mental education challenges for nursing students.

Core Module - 4.1: Behavior Change Communication (BCC)

I. Contents:

1. Learning outcomes of the session
2. Introduction to BCC: What is behavior change communication - BNMC code of conduct
3. Evolution of term “behavior change communication”
4. Terminologies related to BCC (Behavior, Change, Behavior change, Communication, Communication strategy)
5. Importance of BCC
6. Factors Influence the BCC of Healthcare Professionals
7. Process of BCC
8. Factors Influencing BCC in healthcare
9. Criteria for developing BCC messages
10. Strategies While Developing BCC Messages
11. The 7 Cs of Communication
12. Steps of Developing message: Conceptual Examples of BCC activities
13. Steps in developing BCC: Developing BCC messages

Core Module: 4.2 Communications

I. Contents:

1. Learning objectives of the session.
2. Definition of Communication.
3. Process of Communication.
4. Components of Communication: Eight Essential Components of Communication
5. Barriers to Effective Communication.
6. Types of Communication
7. Model of Communication.
8. Interpersonal Relationships: Concept, Definition, Characteristics of IPC, Importance of IPC, Problems in IPC, Development of IPC.
9. Therapeutic Communication (TC): Concept, Definition, Importance of TC, Techniques of TC, Tips for Effective TC, Common barriers
10. Inter-professional Communication: Concept, Definition, General Barriers in Inter-professional communication and collaboration, Communication Strategies.
11. Patient-Centered Communication Skills (PCC): Concept, Definition, Benefits of PCC, Techniques of PCC, Importance of good Nurse-Patient communication, Basic skills of PCC
12. Components to the nurse-client relationship
13. Nursing Theories Focused on Nurse-Patient Relationship
14. Warning signs of crossing a boundary

Core Module: 4.3 Attitude, Personality & Value

I. Contents:

1. Learning outcomes of the session
2. Attitude: Definition, Types, Components
3. Difference between attitude and behavior
4. Personality: Concept, Definition, Traits, Characteristics
5. Value: Definition, Characteristics of Values

Core Module: 4.4 Organizational Behaviors (OB)

I. Contents:

1. Learning outcomes of the session
2. Definition of organizational Behavior
3. Benefits of improvement
4. Challenges and opportunity
5. Improving organizational behavior

Core Module: 4.5 Counseling & Motivation

I. Contents:

1. Learning Objectives

2. Counseling: Introduction, Definition, Professional Counseling, Importance of counselling, Benefit of Counseling, Counselling process & approaches
3. Important Attributes to being a good nurse Counsellor
4. Motivation: Introduction, Definition, Type & Characteristics of Motivation, Techniques of motivation in the workplace, Role model Nurses from the world (e.g. Florence Nightingale, Mother Teresa)

Core Module: 4.6 Health Education & Mental Health

I. Contents:

A. Health Education:

1. Learning Objectives
2. Introduction
3. Definition of Health, Health Education, Nursing Health Education
4. Aims of Health Education
5. Scope of Health Education
6. Importance of patient education in Nursing
7. Importance of Health Education for student Nurses
8. Principles of Health Education
9. Areas of Health Education
10. Practice/Methods of Health Education

B. Mental Health:

1. Learning Objectives
2. Introduction
3. Definition of Mental Health, Mental Illness, Mental Hygiene
4. Mental Hygiene Approach
5. Characteristics of Mentally Healthy Person
6. Warning Signals of poor mental health
7. Essentials of good mental health for student Nurses
8. Cycle of Mental Health
9. Common Mental education challenges for nursing students
10. Importance of self-care and managing symptoms

Core Module: 4.7 Self-Management

I. Contents:

1. Learning Objectives
2. Definition of Self-Management
3. Self-care: Type of self-care, Importance of self-care,
4. Definition of Self- management
5. Self-management skills
6. Self-management model
7. Stress: Mitigating stress associated with nursing and improving individual nurse health

8. Importance of Self-Management
9. Improving Self-Management
10. SMART approach

Common Practical Tips

II. Teaching Learning Strategies:

1. Classroom lecture
2. Role Play (core module 4-1, 4-2, 4-4)
3. Group discussion (Scenario based learning) (core module 4-2, 4-3)
4. Demonstration (core module 4-5)
5. Inquiry based learning (Ex. Common Mendal education challenges for nursing student)
6. Inquiry based learning (Ex. Common Mendal education challenges for nursing student) (core module 4-6)
7. Group Exercises (SMART approach) (core module 4-7)

III. Teaching Materials/Media:

1. Power point presentation
2. Role plays scenario (core module 4-1, 4-4)
3. Scenario for group discussion (core module 4-2, 4-3)
4. Case example for demonstration (core module 4-5)
5. Case example for Inquiry based learning (core module 4-6)
6. SMART approach format (core module 4-7)

Core Module Evaluation:

Evaluation Criteria: Overall passing score: over 80%

1. Pre-test/Post-test: allotment of marks: 80%

- Overall evaluation

2. Participant evaluation: allotment of marks: 20%

- Session evaluation by participant by using check list.
- Trainers' feedback

References:

Core Module 4.1 Behavior Change Communication (BCC)

1. S. Nancy and Amol R. Dongre (2021). *Behavior Change Communication: Past, Present, and Future.* Indian Journal of community medicine, 46(2): 186–190
2. Ministry of Health and Family Welfare (2016). Comprehensive Social and behavior change communication strategy.

Core Module: 4.2 Communications

1. Daniel, M., & Rosenstein, A. H. (2011). Professional communication and team collaboration. In: Hughes R.G. (Ed.). *Patient safety and quality: An evidence-based handbook for nurses*-2008 Rockville, MD: AHRQ Publication; PP271-284

2. Weller Jennifer, Boyd Matt, Cumin David (March 2014). *Teams, tribes and patient safety: Overcoming barriers to effective teamwork in healthcare.* Postgraduate Medical Journal, Volume 90, Issue 1061. PP 149–154

Core Module 4.3 Attitude, Personality & Value & 4.4 Organizational Behaviors (OB)

1. Robbins P Stephen, Judge A Timothy (2021). *Organizational Behavior updated 18th Edition*. Pearson Education Ltd
2. Icek Ajzen (2005). *Attitudes, Personality and Behavior (2nd Edition) 2nd Edition.* Open University Press

Core Module: 4.5 Counseling & Motivation

1. William R. Miller, Stephen Rollnick, Christopher C. Butler (2022). Motivational Interviewing in Health Care: Helping Patients Change Behavior 2nd edition. The Guilford Press

Core Module: 4.6 Health Education & Mental Health

1. Buthelezi, N. D., & Shopo, K. D. (2023). Challenges experienced by nurse educators developing postgraduate nursing diploma curriculum programmes, Gauteng. *Curationis*, *46*(1). https://doi.org/10.4102/curationis.v46i1.2447
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3. Cranage, K., & Foster, K. (2022). Mental health nurses' experience of challenging workplace situations: A qualitative descriptive study. *International Journal of Mental Health Nursing*, *31*(3), 665–676. https://doi.org/10.1111/inm.12986
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9. World Health Organization: WHO. (2022, June 8). Mental disorders. Retrieved from https://www.who.int/news-room/fact-sheets/detail/mental-disorders

Core Module: 4.7 Self-Management

1. Cranage, K., & Foster, K. (2022). Mental health nurses' experience of challenging workplace situations: A qualitative descriptive study. *International Journal of Mental Health Nursing*, *31*(3), 665–676. https://doi.org/10.1111/inm.12986

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3. Grady, P. A., & Gough, L. L. (2014). Self-Management: a comprehensive approach to management of chronic conditions. *American Journal of Public Health*, *104*(8), e25–e31. https://doi.org/10.2105/ajph.2014.302041
4. Martínez, N., Connelly, C. D., Pérez, A., & Calero, P. (2021). Self-care: A concept analysis. *International Journal of Nursing Sciences*, *8*(4), 418–425. https://doi.org/10.1016/j.ijnss.2021.08.007
5. Sajeevanie, T. L. (2020). Importance of self-management and future research thoughts: a critical review perspective. *Researchgate*. Retrieved from https://www.Researchgate.Net/publication/343384450_Importance_of_self-management_and_future_research_thoughts_a_critical_review_perspective
6. Tremblay, G., Rodrigues, N. C., & Gulati, S. (2021). Mental Hygiene: what it is, implications, and future directions. *Journal of Prevention and Health Promotion*, *2*(1), 3–31. https://doi.org/10.1177/26320770211000376

Module 5
Faculty Development (FD)

Module 5
Faculty Development (FD)

Module Overview

This module aims to enhance the development of effective nursing processes by examining and assimilating high-performance best practices in clinical settings.

Goals of the Module:

This module is crucial for nurses to develop educators' knowledge, skills and confidence in delivering advanced and innovative (active learning) teaching methods to enhance student learning. And facilitate clinical learning by utilizing evidence-based practice to improve the students' learning experience.

Learning Objectives:

The objectives of this module are to:

1. Explore the concept of Faculty Development
2. Describe the role and responsibilities of a teacher
3. Demonstrate the characteristics of an effective teacher
4. Explain the nursing teacher's competence

Learning Outcomes:

By the end of the session, participants will be able to:

1. Foster the faculty's knowledge, skills, and professional competence
2. Explain the theoretical foundation of teaching & learning.
3. Describe the teaching approaches and modalities of Learning.
4. Describe various teaching materials, strategies, and effective learning methodologies used in nursing education
5. Understand the importance of the development of the academic calendar, (lab) lesson plan, assessment and evaluation of learning outcomes, and Lab Practice skills
6. Understand Curriculum vs Syllabus and explain the importance of curriculum orientation and development
7. Develop knowledge of existing B.Sc. Nursing course, curriculum, syllabus, and exam system delivery process
8. Deepen knowledge of existing educational programs for nursing students and plan effective support during the clinical practice placement
9. Justify the rationality for choosing teaching methods for different topics/contents.
10. Demonstrate and clarify an active teaching role.

Core Module 5-1.: Introduction of Faculty Development

I. Contents:

1. Introduction of faculty development
2. Role and responsibilities of a teacher
3. Characteristics of an effective teacher

4. Nurse educators' competence
5. Orientation of Nursing Theory
6. Curriculum Orientation
7. Teaching-learning plan
8. Development of Academic calendar: The best rotation and monitoring, supervision model for teachers
9. Training on lesson plan development: Enhancement of theory lessons. How to develop a lesson plan
10. Training on Lab lesson plan development: Enhancement of laboratory practice. How to develop a lab lesson plan
11. How to construct Test Items

Core Module 5-2.: Organizational Management

I. Contents

1. Organogram of Nursing College
2. Policies of individual organization (SOP)
3. Accreditation Criteria

Core Module 5-3.: Theoretical foundation of Teaching & Learning

I. Contents

1. Theoretical foundation of Teaching & Learning
2. Teaching approached, modalities and active learning
3. Application of effective teaching strategies and instructional materials: Audio-Visual Aids, Flip chart, Electronic White Board, M-Learning, E-Learning

Core Module 5-4.: Introduction of a Subject Based Teaching

I. Contents

1. Concept of subject based teaching
2. Importance of subject-based teaching
3. Framework for subject-based teaching

Core Module 5-5.: Assessment and Evaluation of Education Program

I. Contents

1. Introduction
2. Types
3. Difference between assessment and evaluation
4. Formative evaluation
5. Summative evaluation

Core Module 5-6.: Assessment of Lab Practice Skills

I. Contents

1. Methods of Assessment of practical skills and knowledge

2. Student management / student information system

Core Module 5-7.: Evaluate learning outcomes

I. Contents

1. Strategy to evaluate learning outcomes
2. Learning evaluation criteria
3. Performance evaluation criteria

Common Practical Tips

II. Teaching-Learning Strategies:

1. Power point presentation
2. Group discussion
3. Role play
4. Lecture, discussion, practice and (group) presentation
5. Discussion and participants' presentation
6. Provide pre-reading material (core module 5-1, 5-2, 5-3, 5-4, 5-5)
7. Brainstorming (core module 5-1, 5-2, 5-3, 5-4, 5-5)
8. Mind map (core module 5-1)
9. PBL & Scenario based learning (core module 5-1)

III. Teaching Materials/Media (Effective Teaching Strategies):

1. Multimedia
2. Projector
3. Audio-visual aid
4. Flip chart
5. Whiteboard
6. Poster paper
7. Marker

Core Module Evaluation:

Learning Evaluation Criteria:

1. Evaluation Criteria: Overall passing score: over 80%
2. Pre-test/Post-test: allotment of marks: 80%-Overall evaluation

Participant evaluation:

- allotment of marks: 20%-Session evaluation by the participant by using checklist.
- Trainee feedback

Performance evaluation criteria:

- Performs one active teaching and learning session with a small group
- Develop Faculty Development plan
- Question Construction

References:

1. Puranik S Innovative Teaching Methods in Higher Education (2020) BSSS Journal of Education. 4(1) https://doi.org/10.51767/je0907
2. Burgess A.et al. (2019) A longitudinal faculty development program: supporting a culture of teaching. BMC Medical Education. 19:400 https://doi.org/10.1186/s12909-019-1832-3
3. Kohan M et al. (2023) A systematic review of faculty development programs based on the Harden teacher's role framework model. BMC Medical Education 23:910 https://doi.org/10.1186/s12909-023-04863-4

Module 6
Hospital and Ward management

Module 6

Hospital and Ward management

Module Overview:

This module aims to help hospital ward management by equipping trainee nurses with the necessary skills to efficiently manage hospital wards, maintain nursing documents, manage medical waste, prevent infections, and improve the quality of nursing care.

Goals of the Module:

- Increase knowledge about Hospital Ward Management.
- Develop skills to manage hospital wards efficiently.
- Maintain nursing documents and manage medical waste effectively.
- Demonstrating proficiency in maintaining nursing documents, records, and reports to enhance the overall quality of nursing care.
- Prevent and control infections in hospital settings.
- Improve the overall quality of nursing care.
- Facilitate Continuing professional development.

Learning Objectives:

1. Manage hospital wards effectively.
2. Oversee healthcare management
3. Provide comprehensive patient care.
4. Implement medical waste management practices.
5. Maintain nursing documents, records, and reports.
6. Prevent and control infections in hospital settings.
7. Enhance the quality of nursing care.

Learning Outcomes:

The objectives of this module are to:

1. Understand the effective Hospital Ward Management by utilizing adequate resources to execute infection prevention and control measures within a hospital setting.
2. Proficiently Managing Healthcare and Patient Care: Demonstrate proficiency in maintaining nursing documents, records, and reports to enhance the overall quality of nursing care.
3. Understand and apply medical waste management principles including segregation and disposal patterns
4. Demonstrate proficiency in maintaining nursing documentation to support quality care.
5. Demonstrate effective infection prevention and control measures.
6. Describe how to improve nursing care quality through continuous improvement strategies.

Core Module 6.1: Ward Management

1. Contents:

1. Learning outcomes
2. Definition of Ward Management
3. Factors contributing to effective ward management: Golden rules for good ward Management
4. Purpose and core elements of ward management
5. Nurses' roles and responsibilities in material management.
6. Duty roster and job description of senior staff nurses.
7. Staffing and Task management

Core Module 6.2: Healthcare Management

I. Contents:

1. Learning outcomes
2. Aim and Objectives of Health Care Management
3. How to manage healthcare service center.
4. How to improve Health Care Service Center's reputation and customer satisfaction.
5. How to Enhance Service Providers' Satisfaction and develop skills & attitude
6. Role and essential requirements in healthcare management.
7. Skills needed for healthcare managers.
8. Patient care management.

Core Module 6.3: Waste Management

II. Contents:

1. Learning outcomes
2. Define and differentiate waste and medical waste.
3. Understand waste and medical waste management: Segregation and Patterns of medical waste management

Core Module 6.4: Nursing Documentation, Record, and Reporting

I. Contents:

1. Learning outcomes
2. Concept of nursing documentation.
3. Defining nursing records and reports.
4. Principles of good record-keeping.
5. Types of nursing reports.
6. Characteristics of an effective report.

Core Module 6.5: Infection Prevention and Control (IPC)

I. Contents:

1. Learning outcomes
2. Definitions of infection and Hospital-Acquired Infection (HAI).
3. Communicable diseases and chain of infections
4. Principles of infection prevention and control.

Core Module 6.6: Quality Improvement

I. Contents:

1. Learning Outcome
2. Defining quality improvement.
3. Definition and models (IHI, PDCA): The Institute for Healthcare Improvement (IHI) Model for Improvement
4. Continuous quality improvement in nursing.
5. Nursing quality improvement project. -Ideas and guides.
6. Nurses' role in healthcare quality improvement.

Common practical tips

1. Teaching-Learning Strategies:

1. Classroom lecture
2. Group work and presentation (core module 6-1, 6-4 Development of the charts for improvement of daily nursing care, 6-7 case study using PDCA cycle)
3. Group work: Case study and presentation (core module 6-2, 6-3 classification of medical wastes,
4. Demonstration (core module 6-5
5. Role play (core module 6-6

2. Teaching Materials/Media (Effective Teaching Strategies):

1. Power point presentation
2. Group work materials (case study scenario: 6-2, 6-6)
3. Marker
4. Poster Paper
5. Sticky Notes
6. Materials for case study (General waste, Liquid waste, Inflectional wastes, Plastic wastes, Sharp wastes, Wastes bins (Black, Blue, Yellow, Green, and Red) (core module 6-3), Charts for nursing documentation (core module 6-4),
7. Materials for demonstration and role play (gowns, N95 Mask, Goggles, Face shield, gloves, sterile gloves etc.) (core module 6-5)
8. Hand wash practical guide (core module 6-5)

Core Module Evaluation:

Evaluation Criteria: Overall passing score: over 80%

1. Pre-test/Post-test: allotment of marks: 80%

- Overall evaluation

2. Participant evaluation: allotment of marks: 20%

- Session evaluation by participant by using check list.
- Trainers’ feedback

Reference:

Core Module 6.1: Ward Management

1. Manjubala Dash (2015). Ward Management & Administration for Nurses 1st Edition. Jaypee Brothers Medical Publishers Pvt. Ltd

Core Module 6.2: Healthcare Management

1. Patrice Path (2009). *Introduction to healthcare quality management*. Health Administration Press, Chicago, Illinois : AUPHA Press

Core Module 6.3: Waste Management

1. BMC Public Health, Figure3, https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-8-36/figures/3
2. S*afe management of wastes from health-care activities: a summary*. Geneva:World Health Organization; 2017 (WHO/FWC/WSH/17.05).
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Core Module 6.4: Nursing Documentation, Record, and Reporting

1. Training Manual on Orientation Program for New Nurses-Nov-2018.
2. Clinical Nurse Training Module-2020

Core Module 6.5: Infection Prevention and Control (IPC)

1. *WASH FIT A practical guide for improving quality of care through water, sanitation and hygiene in health care facilities 2nd edition*. World Health Organization
2. Christine Mcguire-Wolfe (2017). *Foundations of Infection Control and Prevention Illustrated Edition.* Jones & Bartlett Learning; Illustrated edition
3. Edward Purssell, Dinah Gould (2023). *Infection prevention and control in healthcare settings* West Sussex, UK: John Wiley & Sons Ltd.

Core Module 6.6: Quality Improvement

1. Douglas Johnson (2024). Hospital quality, implementing, managing, and sustaining an effective quality management system. New York: Routledge

Module 7
Nursing Process and Fundamental Nursing Skills

Module 7

Nursing Process and Fundamental Nursing Skills

Module Overview

This module aims to enhance the development of effective nursing processes by examining and assimilating high-performance best practices in clinical settings.

Goal of the module

This module aimed to strengthen nurses' knowledge and practice on nursing process, and fundamental nursing skills so that they could provide nursing care based on nursing process and maintain fundamental nursing skills including nursing documentation, observations and practice on fundamental nursing skills such as hand washing, wearing gloves; sterilization, disinfection; wound care; vital signs; mouth care; patient positioning; medication (Oral, IM, SC, IV); urinary catheterization and so on to promote quality of patients care.

Learning objectives

Learning objectives for fundamental nursing skills include demonstrating safe and competent basic nursing skills, understanding the nursing process and its relation to clinical judgment, and applying these skills in various healthcare settings. Key areas of focus are patient assessment, communication, ethical principles, and technical skills related to patient care

Learning outcome

By the end of the training, participants will be able to:

1. Introduce and explain nursing process including its definition, benefits and steps.
2. Develop scenarios of patient care for implementing nursing process on it.
3. Explain case study and nursing process cycle.
4. Understand and develop a nursing care plan based on the nursing process.
5. Introduce and explain the fundamental nursing skills including nursing documentation, practice and observations.
6. Strengthen understanding about hand washing, wearing gloves and teaching others to perform it.
7. Demonstrate on how to perform hand washing and wear surgical gloves to prevent infection/contamination.
8. Explain and demonstrate how to evaluate participant's performance using checklists and/or observations.
9. Demonstrate how to provide fundamental skills practice on taking vital signs, bed making /comfort measures, patient positioning and transferring
10. Demonstrate how to provide fundamental skills practice on mouth care, back care, wound care, care
11. Strengthen understanding and demonstrate on sterilization and disinfection.
12. Explain and demonstrate Medication (Oral, IM, SC, IV); blood transfusion; nasogastric tube feeding and urinary catheterization.
13. Demonstrate how to perform Basic Life Support.

Core Module 7-1 Nursing Process and Critical Thinking (90 mins)

I. Contents

1. Objectives
2. Nursing Process and critical thinking
3. Definition
4. Purpose
5. Steps of the Nursing Process

Core Module 7-2 Introduction to Fundamental Nursing Skills (600 mins)

I. Contents

1. Hand washing, Donning and Removing groves.
    - Hand washing, Doming and Removing groves
2. Vital sign
    - Normal range, sites for each vital sign measured in all age group
    - Measurement's techniques of vital signs
3. Safety and comfort measures underlying bed making techniques
4. Patients positioning & transferring.
5. Mouth care, back care, & head wash
6. Medication administrations
    - Training and implementation methods of Oral, I/M, I/V routes
    - Training and implementation methods of Oxygen therapy, Nebulization and Suctioning
7. Blood Transfusion & its hazards
    - Who needs a blood transfusion?
    - Preparation prior to giving blood
    - Checking system for blood transfusion
8. Sterilization and Disinfection
    - Training and implementation methods of Wound care and Bandaging
9. Nasal Gastric (NG) Tube feeding
    - Training on NG Tube insertion and care
10. Urinary catheterization
    - Training on Urinary Catheterization and care
11. Basic Life Support (BLS)
    - Training on BLS.

Common Practical Tips

II. Teaching / Learning / Training Methodology

1. Multimedia
2. Overhead Projector
3. Audio-visual aid

4. Flip chart
5. White board / Electronic Whiteboard
6. Poster paper
7. Marker
8. Sticky Notes
9. E-Learning, Pre-reading materials
10. Mobile Learning (M-Learning)

III. Teaching Aids / Materials

1. Multimedia
2. Overhead Projector
3. Audio-visual aid
4. Flip chart
5. White board / Electronic Whiteboard
6. Poster paper
7. Marker
8. Sticky Notes
9. E-Learning, Pre-reading materials
10. Mobile Learning (M-Learning)
11. Materials for Fundamental Nursing Skill training (Equipment should be updated according to the current practice. Simulator recommended using although not mandatory.)

Core Module Evaluation:

Learning Evaluation Criteria:

1. Evaluation Criteria: Overall passing score: over 80%
2. Pre-test/Post-test: allotment of marks: 80%-Overall evaluation

Participant evaluation:

- allotment of marks: 20%-Session evaluation by the participant by using checklist.
- Trainee feedback

Performance evaluation criteria:

- Performance checklist[3] used to evaluate the performance of each fundamental nursing skills
- Development of nursing care plan par scenario to reflect
- Question Construction

[3] Each fundamental nursing skills checked by performance checklist.

References:

1. Ruth Craven, Constance Hirnle, Christine M. Henshaw (2017), Fundamentals of Nursing: Human Health and Function 8th Edition, Wolters Kluwer
2. Robert H. Kieserman (2022), Reasonable Expectations: The Patient Side of Patient-Centered Care, Independently Published
3. Betty J. Ackley, Gail B. Ladwig, Mary Beth Flynn Makic, Marina Reyna Martinez-Kratz, Melody Zanotti (2019) Nursing Diagnosis Handbook: An Evidence-Based Guide to Planning Care 12th Edition, Mosby
4. Sara Lister, Justine Hofland, Hayley Grafton (2021), The Royal Marsden Manual of Clinical Nursing Procedures, Student Edition (Royal Marsden Manual Series), Originally Published
5. Judith Wilkinson (2011), Nursing Process and Critical Thinking 5th Edition, Pearson
6. Patricia A. Potter, Anne G. Perry, Patricia A. Stockert, Amy Hall (2019), Essentials of Basic Nursing Procedures, Elsevier Masson
7. Adrianne Dill Linton, Mary Ann Matteson (2022), Medical-surgical nursing, Elsevier
8. Lexicomp, Drug information handbook 22nd Edition, Lexi-Comp Inc

[Example of the Checklist for Fundamental Nursing Session]

Day 10_7 Sterilization and Disinfection

[Sterilization and disinfection: Wound care and Bandaging]

Name of Student: _____ COURSE: _____ YEAR: _____

Goal: The transfer is accomplished without injury to the patient or nurse and the patient remains free of any complications of immobility.

Sl. No	Tasks	Excellent	Good	Fair	Not performed
	Basic knowledge	3	2	1	0
1.	Understand the proper procedure (right orders)				
2.	Understand how to perform sterilize technique patient (right ways)				
3.	Maintain the privacy and procedure				
4.	Explain the nursing observation points during wound care				
	Procedure				
1.	Introduce yourself to the patient.				
2.	Confirm patient ID using two patient identifiers (e.g., name and date of birth).				
3.	Assess ABCs/suction/oxygen/safety.				
4.	Ensure patient's privacy and dignity.				
5.	Perform **hand hygiene, put groves on, and take a vital sign.**				
6.	Check the operation site if there are no abnormal sign.				
7.	Gather necessary supplies: sterile gloves, sterile dressing pack, sterile saline solution or wound cleanser, sterile gauze pads, adhesive bandage or tape, and waste disposal bag.				
8.	Explain what will happen during the transfer and how the patient can help.				
9.	Assist the patient into a comfortable position, either sitting or lying down with the affected heel exposed.				
10.	Inspect the ulcer in patient's heel for any signs of infection, discharge, or inflammation.				
11.	Note the size, depth, and any surrounding tissue changes.				

Sl. No	Tasks	Excellent	Good	Fair	Not performed
12.	Put on sterile gloves.				
13.	Clean the ulcer and surrounding skin with sterile saline solution or wound cleanser, using gentle irrigation or swabbing.				
14.	Pat the area dry with sterile gauze pads, being careful not to introduce any contaminants.				
15.	If there are any prescribed medications or ointments, apply them to the ulcer per the healthcare provider's instructions.				
16.	Open the sterile dressing pack and lay out the contents on a clean surface.				
17.	Carefully apply the sterile gauze pads over the ulcer, ensuring full coverage and padding.				
18.	Secure the dressing in place with adhesive bandage or tape, ensuring it is snug but not too tight to impede circulation.				
19.	If necessary, apply additional layers of bandage or padding for added protection and comfort.				
20.	Dispose of used materials properly in a waste disposal bag.				
21.	Wash hands thoroughly again.				
22.	Provide Mr. Simon with instructions on wound care, including any precautions or signs of infection to watch for.				
23.	Schedule a follow-up appointment with the healthcare provider as needed.				
24.	Cover with a blanket, if needed. Make sure the call bell and other necessary items are within easy reach.				
25.	Document the procedure, including wound assessment findings, interventions performed, and patient education provided, in patient's medical record.				

Time: **Marks**

Date:

Signature of Observer …… / 100%

Module 8

Preparation of Clinical Practice Placement

Module 8

Preparation of Clinical Practice Placement

Module Overview

Clinical practice is defined as a model of practice that involves those activities with and on behalf of clients, especially those activities completed in the client's presence and with the client's collaboration. This module has been developed to cover the contents of the necessary training that supervisors from both nursing colleges and clinical placement will require.

Goal of the Module

Guiding the supervisors to provide student support while they exposure to nursing practice, the healthcare environment, and the opportunity to apply their classroom learning to clinical practice.

Learning Objectives

1. Deepen knowledge of existing educational programs for nursing students
2. Learn the roles and responsibilities of lecturers and clinical nurses during clinical practice of nursing students
3. Learn the students' responsibilities during the clinical practice placement
4. Learn about the clinical practice cycle and deepen knowledge and implementation of daily activities and care
5. Experience a mini conference to be able to teach and apply at their own settings
6. Deepen a knowledge of supervision and monitoring
7. Learn more about mentorship and coaching skills
8. Deepen a knowledge of how to evaluate student's performance during the clinical practice placement
9. Understands the documentation related to clinical practice placement of nursing students

Learning Outcomes

By the end of the training, participants will be able to:

1. plan and prepare effective support during the clinical practice placement.
2. understands the students' responsibilities during the clinical practice placement and be able to support them
3. apply the clinical practice cycle and implement the daily activities and care
4. conduct the mini conference to support student's learning during the clinical practice placement
5. develop an effective supervision and monitoring plan for their own practice area.
6. teach and apply mentorship and coaching skills while supervising nursing students
7. assess and evaluate student's performance during the clinical practice placement.
8. contribute / teach the focal person regarding the documentation related to nursing student during the clinical practice at their own practice area

Core Module 8-1 Preparation of Clinical Practice Placement (90 mins)

I. Contents

1. Definition
2. Objectives
3. Purpose, learning outcomes, and benefits
4. Responsibility and role in clinical practice
5. Role of the preceptor /mentor as clinician and educator
6. Identify responsibilities of students
7. Understand students' safety and decision-making skills

Core Module 8-2 Daily activities and care during clinical practice (135 mins)

I. Contents

1. Learn daily clinical teaching (attendance, morning sessions, and mini conference)
2. Clinical placement cycle
3. Holistic Nursing care
4. What is holistic nursing
5. Importance of holistic nursing care
6. Advantages of holistic nursing care
7. Critical reflection thinking
8. Stages of critical reflection
9. Importance of reflection

Core Module 8-3 Supportive documentation for clinical practice (60 mins)

I. Contents

1. Placement Documentation
2. Purpose of the Logbook
3. Maintain Logbook and Checklist

Core Module 8-4 Supervision and monitoring (60 mins)

I. Contents

1. Execute Monitoring and Supervision of the Student
2. Definition, Purpose, and Techniques

Core Module 8-5 Assessment and Evaluation (60mins)

I. Contents

1. Knowledge about Assignment system of students
2. Perform Assessment and evaluation of the students in the clinical area

Core Module 8-6 Mentorship and Coaching (150 mins)

I. Contents

1. Definition, Types, and Benefits of Mentorship
2. Importance of Coaching in the clinical area
3. Process of coaching
4. Skills in coaching.

Common Practical Tips

II. Teaching / Learning / Training Methodology

1. Presentation (e.g., PPT)
2. Group discussion
3. Small Group Discussion
4. Brainstorming
5. Demonstration
6. Role play (e.g. mini conferencing: core module 8-1)
7. Case Study (specially for core module 8-2)
8. Inquiry-Based Learning
9. Scenario-Based Learning
10. Flipped Classroom

III. Teaching Aids / Materials

1. Multimedia
2. Overhead Projector
3. Audio-visual aid
4. Flip chart
5. White board / Electronic Whiteboard
6. Poster paper
7. Marker
8. Sticky Notes
9. E-Learning, Pre-reading materials
10. Mobile Learning (M-Learning)

Core Module Evaluation:

Learning Evaluation Criteria:

1. Evaluation Criteria: Overall passing score: over 80%
2. Pre-test/Post-test: allotment of marks: 80%-Overall evaluation

Participant evaluation:

- Allotment of marks: 20%-Session evaluation by the participant by using checklist.
- Trainee feedback

Performance evaluation criteria:

- Performance checklist used to evaluate the performance of each presentation / role play

References

1. K.E. Lee (2018) Effects of team-based learning on the core competencies of nursing students: A quasi-experimental study Journal of Nursing Research, 26 (2) (2018), pp. 88-96
2. J. Kim (2019) Core competencies of university students and nursing competencies: Literature review Journal of Comprehensive Nursing Research and Care, 4 (2019), p. 136
3. Namadi et all (2019) The effects of nursing ethics education through case-based learning on moral reasoning among nursing students Nursing and Midwifery Studies, 8 (2019), pp. 85-90
4. Torabizadeh et al. 2019. Professional capability in nursing International Journal of Pharmaceutical Research, 11 (1) (2019), pp. 556-566.
5. Sherri Melrose, Beth Perry (2022), Clinical Teaching in Canadian Nursing Textbook, [Canadian Publisher] Practice Education in Nursing
6. Practice Education in Nursing, Registered Nurses' Association of Ontario, 2016
7. PRACTICE GUIDELINE Supporting Leaners, College of Nursing in Ontario, 2017

Module 9
Research in Nursing

Module 9

Research in Nursing

Module Overview:

This module would have the participants understand the concepts and elements of designing a research question; appreciate approaches to research in nursing with emphasis on deductive empirical research; enhance knowledge of methods of collecting, measuring and analyzing, quantitative and qualitative data; and be familiar with designing and administering clinical research, case study, and action-based approaches to research.

Goals of the Module:

- Enhancing knowledge and skills among participants about nursing research
- Strengthen the capacity for conducting nursing research among nursing students, nurses and nursing educators based on evidence-based practice.

Learning Objectives:

The objectives of this module are to:

1. Overview of research & Evidence Based Nursing (EBN)
2. Steps / Process of Nursing Research
3. Data analysis and interpretation
4. Critiquing quantitative and qualitative research
5. Documenting research plan and proposal (planning future clinical research at a hospital)

Learning Outcomes:

By the end of the session, participants will be able to:

1. Gain knowledge of the research in nursing & EBN
2. Identify research problems, background and research implications
3. Formulate the research question and select the appropriate research design & methodology
4. Understand ethical issues related to research
5. Search and review literature related research questions
6. Describe the concept of data analysis
7. Understand data cleaning, organization and processing
8. Demonstrate data analysis including univariate, bivariate, and multivariate analysis
9. Describe distribution and organization of data using descriptive statistics
10. Summarize research findings, describe the result and discussion
11. Prepare research report to disseminate research results
12. Identify the steps, guidelines, and critique involved in the quantitative and qualitative research.
13. Deepen a knowledge of research proposals and planning future clinical research

Core Module 9-1: Overview of Nursing Research

I. Contents:

1. Overview of research & EBN
2. Steps / Process of Nursing Research
3. Concept of research and nursing research, power of research for nursing professionals at clinical settings
4. Type of nursing research
5. Evidence based practice and nursing research
6. Critiquing quantitative and qualitative research
7. Component of research proposal
8. Document research plan and proposal (planning future clinical research at a hospital)

Core Module 9-2: Steps / Process of Nursing Research

I. Contents:

1. Literature review and sources of literature
2. Formulation of research hypotheses and research questions
3. Research title, objectives, background
4. Research design and framework, Def. of variables
5. Data collection and ethical consideration

Core Module 9-3: Data analysis and interpretation

I. Contents:

1. Data cleaning, organization, and processing
2. Data analyses (e.g. descriptive and inferential statistical)
3. Interpretations
4. Research results and discussion
5. Plagiarism and paraphrasing citation and references (APA style).

Common practical tips

II. Teaching Learning Strategies:

1. Provide pre-reading material
2. Searching and retrieving research articles
3. Discussion and Exercise
4. Discussion and participants' (group) presentation
5. Brainstorming
6. Participants' Group Presentation

   Individual /group Assignment & Presentation

III. Teaching Materials/Media (Effective Teaching Strategies):

1. Multimedia
2. Projector
3. Audio-visual aid

4. Flip chart
5. Whiteboard
6. Poster paper
7. Marker

Core Module Evaluation:

Evaluation Criteria: Overall passing score: over 80%

1. Pre-test/Post-test: allotment of marks: 80%
2. Participant evaluation: allotment of marks: 20%
3. Session evaluation by the participant by using check list.
4. Trainee feedback

Performance evaluation criteria:

- Session evaluation by the participant by using checklist.
- Trainers' feedback
- Formulate a proposal of clinical nursing research

References:

1. Polit, D. F., & Beck, C. T. (2012). Nursing research: Generating and assessing evidence for nursing practice. Lippincott Williams & Wilkins.
2. Susan, K., Grove, G., & Jennifer, R. (2022). Understanding Nursing Research: Building an Evidence-Based Practice. Elsevier-Health Science.
3. Melnyk, B. M., & Fineout-Overholt, E. (2022). Evidence-based practice in nursing & healthcare: A guide to best practice. Lippincott Williams & Wilkins. Equator-Network. (2023). Reporting guidelines for main study types. https://www.equator-network.org/

Module 10

Information and Communication Technology (ICT) in Nursing

Module 10

Information and Communication Technology (ICT) in Nursing

Module Overview:

This module aims to enhance the necessary ICT skills of nurses which helps the implementation of better nursing education, research, services, or management by understanding and learning the basic knowledge and functions of several common software through hands-on training.

Goals of the Module:

- Understand the risk of internet viruses, the necessity of antivirus software, and the risk of personal information leaking.
- Understand the basic knowledge and operations of Microsoft Word, Excel, PowerPoint Presentation (PPT), Web conference, and cloud storage services.

Learning Outcomes:

By the end of the ICT in Nursing session, participants will be able to:

1. Explain the risk of internet viruses and take the necessary action for prevention.
2. Explain the risk of personal information leaking and take the necessary action for prevention.
3. Understand basic knowledge and operation of Microsoft Word, Microsoft Excel, and Microsoft PowerPoint, and operate them.
4. Understand the tips for effective presentation and create an effective presentation (i.e. keep the text simple and minimize the amount of the text on the slides/ use art, charts, and graphs to help convey the message/ not use the animations too much etc.)
5. Understand basic knowledge and operation of Web Conference and Cloud Storage Service and use them.

Core Module 10-1: Basic Knowledge for ICT in Nursing (30 min)

I. Contents:

1. Risk of internet virus and antivirus software
2. Risk of personal information leaking

Core Module 10-2: Microsoft Word (30 minutes)

I. Contents:

1. Learning Outcomes
2. Basic operations (making documents, creating tables, inserting figures, bullet or numbered list, making a table of contents using ‘Style’ etc.).
3. Hands-on training.

Core Module 10-3: Microsoft Excel (60 minutes)

I. Contents:

1. Learning Outcomes
2. Basic operations (data entry, table creation and calculation, resizing the rows and columns, etc.)

3. Using formula and functions (i.e., SUM, SUMIF, COUNT, COUNTIF, ROUND, ROUNDUP, ROUNDDOWN, AVERAGE, MIN, MAX.）
4. Filter a range of data and sort the data from A to Z, Z to A, or select the data.
5. Fill data automatically in a worksheet (copy data or continuous data).
6. Hands-on training

Core Module 10-4: Microsoft Power Point Presentation (PPT) (30 minutes)

I. Contents:

1. Learning Outcomes
2. Basic operations (setting themes, inserting figures/SmartArt, basic slide creation skills, inserting and editing tables/graphs/charts/pictures, insert and play video, etc)
3. Hands-on training

Core Module: 10.5 Web conference (Ex. Zoom, Teams, WebEx) (45 minutes)

I. Contents:

1. Learning Outcomes
2. Basic knowledge and operations
3. Join a web meeting (using web camera and audio, setting up audio and camera for the meeting)
4. Schedule and host a meeting, screen sharing, recording a meeting
5. Hands-on training

Core Module : 10.6 Cloud storage service (Ex. Dropbox) (30 minutes)

I. Contents:

1. Learning Outcomes
2. Basic knowledge and operations (Understand and explain the general information of cloud storage service, sharing the files with others. Collaborate on files)
3. Hands-on training

Common Practical Tips

I. Teaching Learning Strategies:

1. Lecture
2. Case study (core module 10-1)
3. Small Group Discussion (core module 10-1)
4. Demonstration (core module 10-1, 10-2, 10-3, 10-4, 10-5, 1-6)
5. Hands-on training (Practice) using examples. (Core module 10-2, 10-3, 10-4, 10-5, 10-6)
6. Question and Answer session (core module 10-2, 10-3, 10-4, 10-5, 10-6)

II. Teaching Materials/Media (Effective Teaching Strategies):

1. PowerPoint Slides
2. Projector
3. Electronic Whiteboard
4. Computer with Microsoft Office (per trainee) (core module 10-2, 10-3, 10-4, 10-5, 10-6)

5. Example document（word file for Hands-on training: core module 10-2, work sheet with example data: 10-3, 10-4, practice using web conference tool (e.g. Zoom): 10-5, practice using cloud storage service (e.g. Dropbox): 10-6)

Core Module Evaluation:

Evaluation Criteria: Overall passing score: over 80%

1. Pre-/Post-test for core module of Basic Knowledge for ICT in Nursing
2. Post-hands-on training materials of each trainee (for core modules of Microsoft Word, Microsoft Excel, and Microsoft PowerPoint)
3. Trainee feedback

Performance evaluation criteria:

- Session evaluation by the participant by using checklist.
- Trainer's feedback

Reference:

1. "Add and format text". https://support.microsoft.com/en-gb/office/add-and-format-text-2e76a31b-a6d6-4b4e-95c2-fb780e3ac8d3
2. "Insert a table". https://support.microsoft.com/en-us/office/insert-a-table-a138f745-73ef-4879-b99a-2f3d38be612a?wt.mc_id=fsn_word_pictures_and_tables#
3. "Insert pictures". https://support.microsoft.com/en-us/office/insert-pictures-3c51edf4-22e1-460a-b372-9329a8724344
4. "Create a bulleted or numbered list". https://support.microsoft.com/en-gb/office/create-a-bulleted-or-numbered-list-9ff81241-58a8-4d88-8d8c-acab3006a23e
5. "Apply Styles". https://support.microsoft.com/en-gb/office/apply-styles-f8b96097-4d25-4fac-8200-6139c8093109
6. "Create a workbook in excel". https://support.microsoft.com/en-us/office/create-a-workbook-in-excel-94b00f50-5896-479c-b0c5-ff74603b35a3
7. "Create and format tables". https://support.microsoft.com/en-us/office/create-and-format-tables-e81aa349-b006-4f8a-9806-5af9df0ac664?wt.mc_id=otc_excel#
8. "Format an excel table". https://support.microsoft.com/en-gb/office/format-an-excel-table-6789619f-c889-495c-99c2-2f971c0e2370
9. "Formulas and Functions". https://support.microsoft.com/en-gb/office/formulas-and-functions-294d9486-b332-48ed-b489-abe7d0f9eda9
10. Microsoft. "Filter data in a range of data or table". https://support.microsoft.com/en-us/office/filter-data-in-a-range-or-table-7fbe34f4-8382-431d-942e-41e9a88f6a96
11. "Create a charts from start to finish". https://support.microsoft.com/en-gb/office/create-a-chart-from-start-to-finish-0baf399e-dd61-4e18-8a73-b3fd5d5680c2
12. "Fill data automatically in worksheet cells". https://support.microsoft.com/en-gb/office/fill-data-automatically-in-worksheet-cells-74e31bdd-d993-45da-aa82-35a236c5b5db

13. “Create a presentation in PowerPoint”. https://support.microsoft.com/en-gb/office/create-a-presentation-in-powerpoint-422250f8-5721-4cea-92cc-202fa7b89617
14. “Tips for creating and delivering an effective presentation”. https://support.microsoft.com/en-us/office/tips-for-creating-and-delivering-an-effective-presentation-f43156b0-20d2-4c51-8345-0c337cefb88b
15. “Insert a table”. https://support.microsoft.com/en-us/office/insert-a-table-a138f745-73ef-4879-b99a-2f3d38be612a
16. “Insert a picture in Powerpoint”. https://support.microsoft.com/en-gb/office/insert-a-picture-in-powerpoint-5f7368d2-ee94-4b94-a6f2-a663646a07e1
17. “Insert and play video file from your computer”. https://support.microsoft.com/en-gb/office/insert-and-play-a-video-file-from-your-computer-f3fcbd3e-5f86-4320-8aea-31bff480ed02Microsoft. “Use charts and graphs in your presentation”. https://support.microsoft.com/en-us/office/use-charts-and-graphs-in-your-presentation-c74616f1-a5b2-4a37-8695-fbcc043bf526
18. “Getting started with Zoom meetings (Participants)”.https://support.zoom.com/hc/en/getting-started-with-meetings?id=zoom_meetings_guide
19. “Getting started with Zoom meetings (Hosts/Co-hosts)”. https://support.zoom.com/hc/en/getting-started-with-meetings?id=zoom_meetings_guide
20. “Zoom learning center (Videos)”. https://learn-zoom.us/show-me
21. “Use Microsoft Teams on the web”. https://support.microsoft.com/en-gb/office/use-microsoft-teams-on-the-web-33f84aa9-2e8b-47ac-8676-02033454e385
22. “Webex help center”. https://help.webex.com/en-us
23. https://help.dropbox.com/?fallback=true

Appendix 1

Agenda of 2nd Batch Master Trainer Training

Master Trainer Training (TOT) for CPD Training in Nursing

Day 1 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Saturday 16th November 2024**

Time: **8:30-16:30**

Chairperson: **Director General of DGNM**

Participants: **The candidates of the MT training from target nursing colleges and related hospitals**

The objectives of the day are participants to:

1. introduce and define CPD training in Nursing.
2. explain / describe the purpose and principles of CPD.
3. explain the framework of CPD training in Nursing.
4. understands their academic and clinical activities following ethical guidelines.
5. introduce the concept of ethics and nursing ethics.
6. know the role and Act of BNMC which will help in practicing ethical conduct.
7. explain Behavior Change Communication (BCC).
8. describe the stages of behavior change and how they are utilized in BCC messages.
9. construct BCC messages following good principles.
10. plan a BCC process effectively.
11. understands attitude, personality & value and how to apply to the practice.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Introduction of Participants		CBNS-II Project team Dr. Shampa Sengupta Mid-career Consultant, Nursing Education / Clinical Practice
2	8:40-8:50		Opening address		Director General of DGNM

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
3	8:50-9:00		Explanation of the agenda and purpose of the day.		Dr. Shampa Sengupta
4	9:00-9:30		Pretest (Module 1,3,4)	Module 1: CPD in Nursing M3: Nursing Ethics M4: BCC 10 mins per module	Dr. Shampa Sengupta Mid-career Consultant, Nursing Education / Clinical Practice
5	9:30-10:30	CPD Training in Nursing	***Introduction of CPD Training in Nursing*** - Concept of CPD - Goals and Objectives of CPD - Principles of CPD - CPD Cycle - Tips of CPD	Lecture 30 min 60mins for Group Work Group Discussion of a given Article Preparation: 20 min Discussion findings presentation: 10x3= 30 min Overall feedback: 10min	Dr. Fahima Khatun, Faculty, NIANER Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka Dr. Abdul Latif, Senior Consultant, Nursing Administration
6	10:30-10:45		Tea Break -15 mins		
7	10:45-11:15	CPD Training in Nursing	***Introduction of CPD Training in Nursing…. Cont.*** -		Dr. Fahima Khatun, Faculty, NIANER Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka Dr. Abdul Latif, Senior Consultant, Nursing Administration
8	11:15-12:15	Nursing Ethics	***Overview of Nursing Ethics and Laws***	Lecture 20 mins	Dr. Nurul Anowar - NIANER

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Understanding the concepts of ethics & laws -BNMC acts (2016) and ethical behaviors -Legal and ethical dimensions of clinical instruction	Large group discussion: 3 groups Total-40 min Preparation-08 min Discussion presentaion-08minx3=24 min Feedback-8min	Ms. Nilufa Yasmin Deputy Registrar BNMC CBNSII Supporter Ms. Nasima Sultana Mid-career Consultant, Nursing Education / Clinical Practice
9	12:15-13:15	BCC, Communication, and self-management	***Behaviour Change Communication (BCC)*** - Concept and Evolution of BCC -Importance of behaviour change in nursing and health care -Factors influencing the BCC of health care practice (Nursing) - Tips for developing BCC and overcome the negative factors ***Attitude, Personality & Value*** -Attitude: Types of Attitudes, Components of Attitude -Personality: Concept, Definition, Personality Traits -Value: Definition, Characteristics of Values	Lecture BCC 15 mins Lecture Attitude, Personality & value 15 mins Role Play 60mins. Scenario based Total Group 4 Preparation-10min Presentation 10x4=40 min Feedback- 10min Group A- BCC Group B-Attitude Group C-Personality Group D- Value	Dr. Nurul Anowar - NIANER Dr. Khaleda Akter, Faculty, NIANER Dr. Shampa Sengupta, Mid-career Consultant, Nursing Education / Clinical Practice

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Difference between Attitude and Behaviour		
10	13:15-14:15		Lunch & prayer time– 60 mins		
	14:15-15:00	BCC, Communication, and self-management	***Behaviour Change Communication (BCC), Attitude, Personality & Value*** ***…. Cont.*** -		Dr. Nurul Anowar - NIANER Dr. Khaleda Akter, Faculty, NIANER Dr. Shampa Sengupta, Mid-career Consultant, Nursing Education / Clinical Practice
11	15:00-16:00	Nursing Ethics	***Nursing Ethics*** - Concept of nursing standard - Nightingale's standard of nursing care	Lecture 20 mins Discussion 40 mins -An interactive discussion session	Ms. Dipali Rani Mallick, Faculty, NIANER Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Classification / Dimension of nursing standard - Concept of professionalism and related terms -Core components of professionalism ● Responsibility and accountability ● Professional etiquettes & dignity ● Patients' rights ● Nurses right and professional responsibilities	about the topic the lecturer chose	CBNS-II Supporter Ms. Satu Mondal, Junior Consultant, Nursing Education / Clinical Practice
12	16:00-16:15		Tea Break -15mins		
13	16:15-16:30		Reflection, Evaluation and agenda of the next day		Dr. Shampa Sengupta Mid-career Consultant, Nursing Education / Clinical Practice

Master Trainer Training (TOT) for CPD Training in Nursing

Day 2 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Sunday 17th November 2024**

Time: **8:30-16:30**

The objectives of the day are participants to:

1. explore and critique leadership theories, styles, and decision-making processes.
2. identify and resolve team issues utilizing effective interpersonal and problem-solving skills.
3. develop, implement, and evaluate employee recruitment, orientation, and development strategies.
4. justify decisions, plans, and concepts utilizing ethical principles.
5. understands the importance of time management and how to apply it to practise.
6. understand organizational behaviour in a clinical setting.
7. demonstrates compliance with the Code of Ethics of the profession around the seven primary values that are central to ethical nursing practice.
8. understands healthcare management and how to reflect on practice.
9. explain motivation & counselling and understand the way to apply to the practice.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Ms. Nasima Sultana Mid-career Consultant, Nursing Education / Clinical Practice
2	8:40-9:00		Review of the Previous day and Pretest (Module2,3)	Module 2: Leadership & Management M3: Nursing Ethics 10 mins per module	Ms. Nasima Sultana Mid-career Consultant, Nursing Education / Clinical Practice
3	9:00-10:30	Leadership and Management	***Nursing Leadership*** -Definition and types of leaders -Role of leaders	Lecture 20 mins Lecture 20 mins	Ms. Taslima Begum, Director, NIANER Ms. Ava Adhikari

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Qualities of a good leader and leadership style -Effects of Nursing Leadership -Concept of Team building -Difference between Leader and Manager ***Nursing Management*** -Define Manager -Types, roles, and importance of Nursing Management -Level of Nursing Management -Leadership & Management skills	Experience Sharing as a nurse leader and nurse manager Group Discussion 50mins Total Group- 4 Preparation- 10 min Presentation- 8x4=32min Feedback-08 min	Ex Principal -SSNC, Midford Ms. Nasima Sultana Mid-career Consultant, Nursing Education / Clinical Practice
4	10:30-10:45		Tea Break -15 mins		
5	10:45-11:30	Leadership and Management	***Time Management*** -Concepts of Time management -Importance of Time Management -Principles and Basic steps -Barriers in utilizing effective Time management -Coveys time management Matrix and key tips	Lecture 15mins Group Work 30mins. 4 Groups Preparation: 05 min Presentation:05 x4= 20min Feedback: 05 min	Ms. Shahinoor Begum, Principal, CONSBN Ms. Mamotaj Begum, Principal, MNC, Mymensingh CBNSII Supporters Ms. Satu Mondal Junior Consultant Nursing Education / Clinical Practice
6	11:30-12:45	BCC, Communication, and self-management	***Organisational Behaviours (OB)*** -Conception of OB -Benefits Of OB	Lecture 15 mins Lecture 15 mins	Ms. Ava Adhikari Ex Principal, SSNC

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Improvement of OB -Significance of OB ***Counselling & Motivation*** *Counselling* -Concept and its types -Professional Counselling, -Importance and benefits of Counselling -Qualities of a counsellor *Motivation:* -Concept -Types and Characteristics -Motivation Techniques	Role Play -3 groups- 45mins Preparation- 10 min Presentation- 10x3= 30min Feedback- 05min Gr A: Motivation Gr B: Counselling Gr C: Organizational Behaviour	Ms. Shahinoor Begum, Principal, CONSBN CBNSII Supporters Dr. Shampa Sengupta
7	12:45-13:00	Hospital and Ward Management	***Healthcare Management*** -Role of healthcare management. -Essential requirements in healthcare management. -Skills needed for healthcare managers. -Patient care management.	Lecture 15 mins	Ms. Hamida Begum, Nursing superintendent, MMCH, Mymensingh Ms. Mamotaj Begum, Principal, MNC, Mymensingh CBNSII Supporters Dr. Shampa Sengupta
8	13:00-14:00		Lunch & prayer time– 60 mins		
9	14:00-14:30	Hospital and Ward Management	***Healthcare Management cont…***	Case Study 30mins Total groups - 4	Ms. Hamida Begum, Nursing superintendent, MMCH, Mymensingh

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Total time- 30 min Preparation -5 min Presentation- 5x4=20min Feedback- 5 min Group A- Case study 1 Group B- Case study 2 Group C- Case study 3 Group D- Case study 4	Ms. Mamotaj Begum, Principal, MNC, Mymensingh CBNSII Supporters Dr. Shampa Sengupta
10	14:30-15:00	Nursing Ethics	***Conflict management & ethical decision making*** - Conflicts and common sources of ethical conflicts - Academic misconduct and unethical behaviors - Conflict resolution strategies - Ethical dilemma & decision making	Lecture 30 mins	Ms. Mamotaj Begum, Principal, MNC, Mymensingh Ms. Hamida Begum, Nursing superintendent, MMCH, Mymensingh CBNSII Supporter Ms. Satu Mondal
11	15:00-15:15		Tea Break -15 mins		
12	15:15-16:15	Nursing Ethics	***Conflict management & ethical decision making (Cont.)***	Role Play & Scenario-Based Practice 60mins Groups 4	Ms. Mamotaj Begum, Principal, MNC, Mymensingh

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			- Practice of ethical dilemmas - Ethical decision-making - Conflict management	Preparation-10min Presentation-10x4=40min Feedback-10 min	Ms. Hamida Begum, Nursing superintendent, MMCH, Mymensingh CBNS II Supporter Ms. Satu Mondal
13	16:15-16:30		Reflection, Evaluation and agenda of the next day		Ms. Nasima Sultana Mid-career Consultant, Nursing Education / Clinical Practice

Master Trainer Training (TOT) for CPD Training in Nursing

Day 3 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Monday 18th November 2024**

Time: **8:30-16:30**

The objectives of the day are participants to:

1. describe various teaching strategies used in nursing education.
2. justify the rational for choosing teaching methods for different topics/contents.
3. demonstrate the active teaching role.
4. conduct health promotion activities using appropriate BCC methods and messages.
5. understand organizational self-management in a clinical setting.
6. understands effective communication methods.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Ms. Satu Mondal
2	8:40-9:00		Review of previous day and Pre-test (Module 5)	Module 5: Faculty Development 10 mins per module	
3	9:00-11:00	[Faculty Development] Teaching and learning Methodology.	***Theoretical foundation of Teaching & Learning.*** -Theoretical foundation of Teaching & Learning -Teaching approached, modalities and active learning	Lecture & discussion 15+15= 30mins Scenario based learning 90mins. -Using Problem Based Learning (PBL) approach	Ms. Taslima Begum, Director, NIANER Namita Rani Biswas Faculty NIANER
4		[Faculty Development]	***Application of effective teaching strategies***		CBNSII Supporter Ms. Nasima Sultana

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
		Teaching Materials / Media	***and instructional materials*** -Application of effective teaching strategies and instructional materials: -Audio-Visual Aids - Flip chart. - Electronic White Board - M-Learning - E-Learning	Total 3 groups - same scenario Preparation - 30 min Presentation- 3x15= 45 min Feedback- 15	
5	11:00-11:15		Tea Break -15 mins		
6	11:15-12:15	BCC, Communication, and self-management	***Health Education & Mental Health*** -Introduction -Definition -Importance of health education -Practice/Methods of Health Education -Characteristics of Mentally Healthy Person -Warning Signals of poor mental health -Essentials of good mental health for student nurses	Lecture 15mins Inquiry based learning -Total Groups - 4 Total time - 45 min Preparation- 15 min Presentation- 5x4=20min Feedback- 10min Group A & C- Nsg College - Common Mental health challenges for nursing students Group B & D- Hospital- Common	Dr. Khaleda Akter, Faculty, NIANER Jinnat Rehena Faculty NIANER CBNSII Supporters Ms. Satu Mondal

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Mental health challenges for SSNs	
7	12:15-13:00	BCC, Communication, and self-management	***Self-Management*** -Mitigating stress associated with nursing and improving individual nurse health. -Importance of Self-Management -Improving Self-Management -SMART Approach	Lecture 20mins Individual exercise by using SMART approach Preparation- 10 min Random sharing by participants - selection by resource with feedback - 15min	Dr. Khaleda Akter, Faculty, NIANER Jinnat Rehena Faculty NIANER CBNSII Supporters Dr. Shampa Sengupta,
8	13:00-14:00		Lunch & prayer time– 60 mins		
9	14:00-15:00	BCC, Communication, and self-management	***Communications*** -Definition -Process -Components -Barriers to Effective Communication -Therapeutic Communication -Interpersonal Communication -Patient Centred Communication	Lecture 30mins Role Play on Communication barriers Total time - 90mins. Total Groups- 6 Preparation-15 min	Dr. Nurul Anowar - Faculty, NIANER Ms. Taslima Begum, Director, NIANER CBNSII Supporters Ms. Shampa Sengupta

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Role play presentation-10x6=60min Feedback-15 min Group A-Physical barrier	
10	15:00-15:15		Tea Break -15mins		
11	15:15-16:15	BCC, Communication, and self-management	***Communications (Cont.)***	Group B-Psychological barrier Group C-Emotional barrier Group D-technological barrier Group E-Linguistic barrier Group F-Attitude barrier	Dr. Nurul Anowar - Faculty, NIANER Ms. Taslima Begum, Director, NIANER CBNSII Supporters Dr. Shampa Sengupta
12	16:15-16:30		Reflection, Evaluation and agenda of the next day		Ms. Satu Mondal

Master Trainer Training (TOT) for CPD Training in Nursing

Day 4 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Tuesday 19th November, 2024**

Time: **8:30-16:30**

The objectives of the day are participants to:

1. deepen a knowledge of supervision and monitoring and be able to develop an effective supervision and monitoring plan for their own practice area.
2. gain more knowledge of mentorship and coaching skills to be able to teach and apply it at their own practice area.
3. be able to assess and evaluate student's performance during the clinical practice placement.
4. understands the documentation related to clinical practice placement of nursing students and be able to contribute / teach the focal person at their own practice area.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Dr. Shampa Sengupta
2	8:40-9:40		Review and Q&A session through Day1 to 3, Pre-test (Module8) and Post-test (Module 2,3,4)	Module 8: Preparation of Clinical Practice Placement M2: Leadership & Management M3: Nursing Ethics M4: BCC Review and Q&A: 20 mins Pre-test 10 mins Post-test: 30mins 60mins in total	Dr. Shampa Sengupta

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
3	9:40-10:40	Preparation of Clinical Practice Placement	***Supervision and monitoring*** -Execute Monitoring and Supervision of the Student -Definition, Purpose, and Techniques	Lecture & Demonstration 15mins Group Exercises 30mins. -Development of supervision & monitoring plan Preparation 10 min Presentation 5x3= 15mins Feedback 05 min	Ms. Dr. Khaleda Akter, Faculty, NIANER Ms. Sandra Rumi Madhu Vice Principal, Grameen Caledonian College of Nursing CBNSII Supporters Ms. Satu Mondal
4	10:40-11:10		***Mentorship and Coaching*** -Definition, Types, and Benefits of Mentorship	Lecture & Brainstorming 30mins -Benefits of Mentorship for Mentee, and organization	Ms. Sandra Rumi Madhu Vice Principal, Grameen Caledonian College of Nursing Ms. Dr. Khaleda Akter, Faculty, NIANER CBNSII Supporters Ms. Satu Mondal
5	11:10-11:20		Tea Break -10 mins		
6	11:20-11:50	Preparation of Clinical Practice Placement	***Mentorship and Coaching (Cont.)***	Group work on Case study presentation 30mins -How to start Mentorship and what is the challenges	Ms. Sandra Rumi Madhu Vice Principal, Grameen Caledonian College of Nursing Ms. Dr. Khaleda Akter, Faculty, NIANER

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Preparation- 05 min Presentation and feedback-25 min	CBNSII Supporters Dr. Shampa Sengupta
7	11:50-13:20	Preparation of Clinical Practice Placement	***Conduct Coaching in the Clinical Area*** -Importance of Coaching in the clinical area -Process of coaching -Skills for coaching	Lecture - 30mins - Scenario Based Role Play 60mins. Preparation- 10 min Presentation 10x4=40 min Feedback-10min	Ms. Saleha Khatun, Mentor, Grameen Caledonian College of Nursing Ms. Karima Khatun, Ex- Nursing Superintendent, DMCH, Dhaka CBNSII Supporters Ms. Nasima Sultana
8	13:20-14:10		Lunch & prayer time– 50 mins		
9	14:10-15:10	Preparation of Clinical Practice Placement	***Assessment and Evaluation*** -Knowledge about Assignment system of students -Perform Assessment and evaluation of the students in the clinical area	Lecture & Demonstration 20mins Group=04 Total time- 40 min Preparation…….10mim Presentation & Feedback……10x3=30 Group 1.>> Assessment Tools Group 2.>> Clinical Evaluation Process	Ms. Karima Khatun, Ex-Nursing Superintendent, DMCH, Dhaka Ms. Saleha Khatun, Mentor, GCCN CBNSII Supporters Ms. Nasima Sultana

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Group 3.>> Evaluation Tools	
10	15:10-15:20		Tea Break -15mins		
11	15:20-16:20	Preparation of Clinical Practice Placement	***Supportive documentation for clinical practice*** - Placement Documentation -Purpose of the Logbook -Maintain Logbook and Checklist	Lecture 30 mins Group discussion 30mins 1. Logbook Check list- How to maintain & what benefits- share each group 2. Practicum schedule- Discuss about benefit and share each group (15 minutes discussion & 15 minutes presentation)	Ms. Dipali Rani Mallick, Faculty, NIANER Ms. Saleha Khatun, Mentor, GCCN CBNSII Supporters Ms. Satu Mondal
12	16:20-16:30		Reflection, Evaluation and agenda of the next day		Dr. Shampa Sengupta

Master Trainer Training (TOT) for CPD Training in Nursing

Day 5 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Wednesday 20th November 2024**

Time: **8:30-16:30**

The objectives of the day are participants to:

1. deepen knowledge of existing educational programs for nursing students and plan effective support during the clinical practice placement.
2. understands the roles and responsibilities of lecturer and clinical nurse to prepare and support nursing students during the clinical practice placement.
3. Understands the students' responsibilities during the clinical practice placement and how to support them.
4. learn about the clinical practice cycle and deepen knowledge and implementation of daily activities and care during the clinical practice placement of nursing students.
5. experience a mini conference to be able to teach and apply at their own settings.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Ms. Nasima Sultana
2	8:40-9:00		Review of previous day		Ms. Nasima Sultana
3	9:00-10:00	[Faculty Development] Curriculum Orientation	***Overview of existing of educational program*** - Curriculum - Syllabus - Exam system	Lecture 15mins Total time- 45 min Total Group - 3 groups (mixed group Hospital + College) Preparation- 25 min Group- A -- Critiquing existing B.Sc. nursing	Ms. Sherin Sultana, Deputy Director PMIS DGNM Ms. Shamsun Nahar Principal STANC, Gazipur CBNSII Supporter Ms. Nasima Sultana

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				curriculum - 4th year Group- B-- Syllabus (How to support the students during the clinical practice placement)- B.Sc. 1st year Group- C -- Exam system - Over all Formative and summative assessment and mark distribution After group work Present/share each group - 5x3=15 min Feedback - 05 min	
4	10:00-10:15	Preparation of Clinical Practice Placement	***Preparation of Clinical Practice Placement*** -Definition -Objectives -Purpose, learning outcomes, and benefits -Responsibility and role in the clinical practice -Role of the preceptor / mentor as clinician and educator	Lecture 15 mins	Ms. Shamsun Nahar Principal, STANC, Gazipur Ms. Sherin Sultana, Deputy Director PMIS DGNM CBNSII Supporters Dr. Shampa Sengupta
5	10:15-10:30		Tea Break -15 mins		

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
6	10:30-11:45		***Preparation of Clinical Practice Placement (Cont.)***	Group Discussion Total groups -3 Total time - 75 min Preparation 35 min Group A - Clinical practice Rotation Plan (All Years) Group B- Challenge in existing system of clinical placement and solution of challenges Group C- Coordination Committee roles for clinical placement Presentation 10x3=30mins Feedback 10 min	Ms. Shamsun Nahar Principal, STANC, Gazipur Ms. Sherin Sultana, Deputy Director PMIS DGNM CBNSII Supporters Dr. Shampa Sengupta
7	11:45-13:15	Preparation of Clinical Practice Placement	***Preparation of the students for clinical practice*** -Identify responsibilities of students -Understand students' safety and decision-making skills	Lecture 20 mins Group work; Please discuss with your group members following topics and prepare role play. Total time-70mins	Ms. Sherin Sultana, Deputy Director PMIS DGNM Ms. Mst. Nazma Akther, Master Trainer, Dhaka Medical College Hospital CBNSII Supporters Ms.Nasima Sultana

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Total groups - 4 Preparation 20 min Presentation- 10x4=40 min Feedback- 10mins Group A- Patient's file - Reading, Understanding, nursing care and diagnosis Group B- Patient's treatment Plan and medication Group C - Punctuality and ethical consideration Group D - Patient and service provider relationship	
8	13:15-14:15		Lunch & prayer time– 60 mins		
9	14:15-15:30	Preparation of Clinical Practice Placement	***Daily activities and care during the clinical practice*** - Learn daily clinical teaching (attendance, morning sessions, and mini conference) -Clinical placement cycle	Lecture 30mins Group work - 75min Total group - 4 Group Discussion by using Flip chart Preparation 20 min	Ms. Mst. Nazma Akther, Master Trainer, Dhaka Medical College Hospital Ms. Shamsun Nahar Principal STANC, Gazipur

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Presentation- 10x4=40 min Feedback- 15mins	CBNSII Supporters Ms. Satu Mondal
10	15:30-15:45		Tea Break -15 mins		
	15:45-16:15		***Daily activities and care during the clinical practice…. cont.***	Group A & B- What is the purpose of conducting mini-conferences? Discuss problems in daily nursing and find some solutions. Group C & D- What is the purpose of conducting Morning Session? How to conduct daily morning session. Planning of activities and task	Ms. Mst. Nazma Akther, Master Trainer, Dhaka Medical College Hospital Ms. Shamsun Nahar Principal STANC, Gazipur CBNSII Supporters Ms. Satu Mondal
11	16:00-16:30		Reflection, Evaluation and agenda of the next day		Ms.Nasima Sultana

Master Trainer Training (TOT) for CPD Training in Nursing

Day 6 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Friday 22nd November 2024**

Time: **8:30-16:30**

The objectives of the day are participants to:

1. introduce and explain the nursing process including its definition, benefits, and steps.
2. develop scenarios of patient care for implement a nursing process on it.
3. understand and develop a nursing care plan based on the nursing process.
4. gain a knowledge about critical reflection and importance of it
5. able to explain the stages of critical reflection and apply to the practice
6. understand and explain about the holistic care nursing
7. deepen a knowledge and importance of the holistic care nursing
8. understand the risk of internet virus, needs of antivirus software, and personal information leaking.
9. understand the basic knowledge and operations of Microsoft Word, Excel, and PowerPoint presentation (PPT).

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Ms. Satu Mondal
2	8:40-9:00		Review of the previous day and Pre-test (Module 7,10)	Module 7: Nursing Process and Fundamental Nursing Skills Module 10: ICT in Nursing 10 mins per module	Ms. Satu Mondal
3	9:00-10:15	Nursing Process and Fundamental Nursing Skills	***Nursing Process*** -Objectives -Nursing Process and critical thinking -Definition -Purpose	Lecture 30 mins Group work 75mins -Develop Nursing Care Plan and	Mosammat Monju Akhter, Deputy Director Admin, DGNM Ms. Sherin Sultana,

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Steps of the Nursing Process	Health assessment per scenario Total Group- 4 Preparation- 25min Presentation - 10x4=40 Feedback- 10 min	Deputy Director PMIS, DGNM Dr. Shariful Islam, Faculty, NIANER CBNSII Supporters Dr. Shampa Sengupta
4	10:15-10:30		Tea Break -15 mins		
5	10:30-11:00	Nursing Process and Fundamental Nursing Skills	***Nursing Process (Cont.)***		Mosammot Monju Akhter, Deputy Director Admin, DGNM Ms. Sherin Sultana, Deputy Director PMIS, DGNM Dr. Shariful Islam NIANER CBNSII Supporters Dr. Shampa Sengupta
6	11:00-12:30	Preparation of Clinical Practice Placement	***Daily activities and care during the clinical practice*** -Holistic Nursing care -What is holistic nursing -Importance of holistic nursing care -Advantages of holistic nursing care ***Daily activities and care during the clinical practice*** - Critical reflection thinking	Lecture 20mins Discussion on holistic care and Role play on How to support a student to reflect on their performance	Ms. Dipali Rani Mallick, Faculty, NIANER Mr. Sazzad Hossain Faculty – NIANER

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			- Stages of critical reflection -Importance of reflection	Total time - 50mins Total Groups- 4 Preparation- 10 min Presentation 8x4=32 min Feedback - 8 min Group A & B - Based on pre reading material (holistic care) Group A- Managing end-of-life care discussions Group B- Supporting patients with chronic or terminal illnesses Group C& D Role Play - based on Critical reflection thinking	Mr. Sazzad Hossain Faculty - NIANER Ms. Dipali Rani Mallick, Faculty, NIANER CBNSII Supporters Ms. Satu Mondal
9	12:30-13:30		Lunch & prayer time–60mins		
10	13:30-14:45	ICT in Nursing	***Basic knowledge for ICT in Nursing*** -Risk of internet virus and antivirus soft	Lecture: 30 mins -As TOT, please give a tip how to train other nurses/students	Mr. Sakib Khan, Guest Lecturer Mr. Golam Rahman, Guest lecturer

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Risk of personal information leaking		CBNSII Local consultants
			Microsoft Word -Basic operations (making documents, creating tables, inserting figures etc.)	Lecture & Discussion: 45 mins -As TOT, please give a tip how to train other nurses/students	
11	14:45-16:30	ICT in Nursing	***Excel*** -Basic operations (data entry, table creation and calculation etc.) -Basic functions	Lecture & hands on training: 40 mins -As TOT, please give a tip how to train other nurses/students	Mr. Sakib Khan, Guest Lecturer Mr. Golam Rahman, Guest lecturer CBNSII Local consultants
			PowerPoint Presentation (PPT) -Basic operations (setting themes, inserting figures/figures/Smart Art, basic slide creation skills, inserting and editing tables/graphs)	Lecture & hands on training: 35 mins	
12	16:30-16:45		Tea Break and Reflection, Evaluation and agenda of the next day		Ms. Satu Mondal

Master Trainer Training (TOT) for CPD Training in Nursing

Day 7 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Saturday 23rd November 2024**

Time: **8:30-16:30**

The objectives of the day are participants to:

10. understand the basic knowledge and operations of Web conference and Cloud Storage Service.
11. [College MT] foster the faculty's knowledge, skills, and professional competence.
12. [College MT] understands the importance of Accreditation and plans the journey to achieve it.
13. [College MT] plan a framework of subject-based nursing for Bangladesh nursing colleges.
14. [Hospital MT] deepen an understanding of hospital and ward management and effectively managing hospital wards.
15. [Hospital MT] effectively conducts and teaches waste management.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Dr. Shampa Sengupta
2	8:40-9:10		Review and Q&A session through Day4 to 6, and Post-test (Module 8)	Module 8: Preparation of Clinical Practice Placement Review and Q&A: 20 mins Post-test: 10mins 30mins in total	Dr. Shampa Sengupta
3	9:10-10:40	ICT in Nursing	***Web conference (Ex. Zoom, Teams, Webex)*** -Learning Outcomes -Basic knowledge and operations	Lecture & hands on training total 90mins -Web conference: 30mins	Mr. Sakib Khan, Guest Lecturer Mr. Golam Rahman, Guest lecturer

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Cloud storage service (Ex. Dropbox) -Learning Outcomes -Basic knowledge and operations ***Email Usage guide*** -Orientation of Inbox, Spam, Draft, Sent, Trash -Reply and Forwarding -Meaning of To, Cc, Bcc -Subject writing -File attachment -Other useful information	-Cloud storage service: 30mins -Email usage guide: 35mins	CBNSII Local consultants
4	10:45-11:00		Tea Break -15 mins		
5	11:00-12:00	ICT in Nursing	***Research techniques for professional nurses*** -Application of multiple search engines -Searching databases -Identifying valid information -Use of google forms -other useful information ***ICT in Nursing*** -Common mistakes & Extra Hands-on training	-Lecture: 30 mins Total 30 mins -Ask participants which subject requires to be repeated	Mr. Sakib Khan, Guest Lecturer Mr. Golam Rahman, Guest lecturer CBNSII Local consultants

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				-Extra Hands-on-Training for common mistakes	
6a	12:00- 13:00	Hospital and Ward Management	***Ward Management*** -Define ward management -Explore core elements of ward management -Factor contributing to effective ward management -Nurses' duty roster -Job description of senior staff nurses	Lecture 30 mins Group work 75mins (Total Groups - 4 Preparation- 15 min Presentation - 4x10=40 mins Feedback- 20min) G A- management of client care G B: management of personnel G C- management of supplies and equipment G D- management of environment	Ms. Karima Khatun, Ex- Nursing Superintendent, DMCH, Dhaka Ms. Ms. Akhtari Banu Deputy Nursing Superintendent, ShTAMCH, Gazipur CBNSII Supporters Dr. Shampa Sengupta,
6b	12:00- 13:00	Faculty Development	***Introduction of faculty development*** -Role and responsibilities of a teacher -Characteristics of an effective teacher -Nurse Educators competence -Orientation of Nursing Theory	Lecture 20 mins Assessment of existing knowledge - 5 min *Pre-reading materials to be prepared Group work 35 mins (Total Groups - 3	Dr. Shariful Islam NIANER Ms. Ava Adhikary, Principal, Midford Nursing College. CBNS-II Supporter Ms. Afroza Banu Ms. Nasima Sultana

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Preparation- 15 min Presentation - 3x5=15 mins Feedback- 5min)	
7	13:00-14:00		Lunch Break-60 mins		
	14:00-14:45	Hospital and Ward Management	***Ward Management….Cont.*** -Define ward management -Explore core elements of ward management -Factor contributing to effective ward management -Nurses' duty roster -Job description of senior staff nurses	Group work-Cont. 75mins Total Groups - 4 Preparation- 15 min Presentation - 4x10=40 mins Feedback- 20min	Ms. Karima Khatun, Ex- Nursing Superintendent, DMCH, Dhaka Ms. Akhtari Banu Deputy Nursing Superintendent, ShTAMCH, Gazipur CBNS-II Supporters Dr. Shampa Sengupta,
8	14:00-14:45	Faculty Development	***Organisational Management*** -Organogram of Nursing College -Policies of individual organization (SOP) -Accreditation criteria	Lecture15mins Group work 35mins Preparation of organogram of own nursing college (Total Groups - 3 Preparation- 10 min Presentation - 3x5=15 mins Feedback- 05min)	Ms. Ava Adhikary, Principal, Midford Nursing College. Ms. Reva Mondal – NIANER CBNSII Supporter Ms. Afroza Banu Ms. Nasima Sultana

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
9a	14:45-15:15	Hospital and Ward Management	***Waste Management*** -Overview of waste and medical waste management -Patterns of medical waste management	Lecture 20 mins Group work 55min (Total Group: 4 Preparation-10min Presentation - 4x10=40mins Feedback-05min)	Ms. Nazma Akhter, SSN-MT DMCH, Ms. Karima Khatun, Ex- Nursing Superintendent, DMCH, CBNSII Supporters Ms. Satu Mondal
9b	14:45-15:15	Faculty Development	***Introduction of a Subject Based Teaching*** -Concept of subject based teaching -Importance of subject based teaching -Framework for subject based teaching	Lecture 20 mins Group work 45min until 16;15 (Total Group: 4 Preparation-10min Practice of Mind mapping / fish born Presentation - 4x10=40mins Feedback-05min) *By 15:15, preparation should be conducted. Presentation will be conducted from 15:30.	Dr. Shariful Islam NIANER Ms. Saleha Khatun, Mentor, GCCN. CBNSII Supporter Ms. Afroza Banu Ms. Nasima Sultana
10	15:15-15:30		Tea Break -15 mins		
	15:30-16:15	Hospital and Ward Management	***Waste Management…cont.*** -Overview of waste and medical waste management		Ms. Nazma Akhter, SSN-MT DMCH, Ms. Karima Khatun, Nursing

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Patterns of medical waste management		Superintendent, DMCH, CBNSII Supporters Ms. Satu Mondal
11	15:30-16:15	Faculty Development	***Introduction of a Subject Based Teaching… cont.*** -Concept of subject based teaching -Importance of subject based teaching -Framework for subject based teaching	Group work 45min …cont (Total Group: 4 Preparation-10min Practice of Mind mapping / fish bowl strategy Presentation - 4x10=40mins Feedback-05min)	Dr. Shariful Islam NIANER Ms. Saleha Khatun, Mentor, GCCN. CBNSII Supporter Ms. Afroza Banu Ms. Nasima Sultana
12	16:15-16:30		Reflection, Evaluation and agenda of the next day		Dr. Shampa Sengupta

Master Trainer Training (TOT) for CPD Training in Nursing

Day 8 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**
Date: **Sunday 24th November 2024**
Time: **8:30-16:30**

The objectives of the day are participants to:

1. [College MT] plan, organize, and evaluate teaching sessions.
2. [Hospital MT] deepen a knowledge of quality improvement and proficiently managing healthcare and patient care back in their practice area.
3. utilizing adequate resources to execute infection prevention and control measures within a hospital setting.
4. introduce and explain the fundamental nursing skills including nursing documentation, practice, and observations.
5. plan and conduct a practical session on hand washing, donning and removing groves, vital signs, safety and comfort measures underlying bed making techniques, patients positioning & transferring, mouth care, back care & head wash through scenario learning sessions to be able to teach in the same way at their own settings.
6. explain and demonstrate how to evaluate participant's fundamental skill performance using checklists and/or observations.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Ms. Nasima Sultana
2	8:40-9:00		Review of the previous day and Post-test (Module 10)	Module 10: ICT in Nursing 10 mins per module	Ms. Nasima Sultana
3a	9:00-09:45	Faculty Development	***Assessment and Evaluation of Education Program*** -Introduction -Types	Lecture 15 mins Group Discussion and Sharing on Examination	Dr. Nurul Anower, Faculty, NIANER

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Difference between assessment and evaluation -Formative evaluation -Summative evaluation	System & Distribution of Marks of the following Courses: Total time: 30min Preparation: 10 min Presentation:5x3= 15min Feedback: 5min Group A - BSc in Nursing Group B - BSc in Post-Basic Nursing Group C - Diploma in Nursing Science and Midwifery	Ms. Sherin Sultana, Deputy Director PMIS, DGNM CBNSII Supporter Ms. Nasima Sultana
4a	09:45-10:30		***Assessment of Lab Practice Skills*** -Methods of Assessment of practical skills and knowledge -Student management / student information system	Lecture 15mins Exercises & discussion Total time:30mins Total groups- 4 Please discuss in group about how you do assessment of lab practical skill and student management	Ms. Sherin Sultana, Deputy Director PMIS, DGNM Ms. Saleha Khatun, Mentor, GCCN CBNSII Supporter Ms. Nasima Sultana

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				during lab practice? Preparation: 15min Presentation: 2x4=8min Feedback: 7min	
5	10:30-10:45		Tea Break -15 mins		
6a	10:45-11:30	Faculty Development	***Evaluate learning outcomes.*** -Strategy to evaluate learning outcome -Learning evaluation criteria -Performance evaluation criteria	Lecture 15 mins Exercises & discussion Total time:30min Total group:3 Please share and present the best practice of Students' learning outcomes in your institution. e.g. Evaluation of reports using grading rubrics, etc. Preparation:10min Presentation:5x3=15min Feedback:5min	Dr. Nurul Anower, Faculty, NIANER Ms. Saleha Khatun, Mentor, GCCN CBNSII Supporter Ms. Nasima Sultana
3b	9:00-10:30	Hospital and Ward Management	***Quality Improvement*** -Defining quality improvement	Lecture 15 mins Case study by *Using PDCA	Ms. Dipali Rani Mallick, Faculty, NIANER

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Explaining the Plan-Do-Check-Act (PDCA) model -Continuous quality improvement in nursing	Total time- 120 mins Total Group-4 Preparation-90 min Presentation- 4x5= 20 mins Feedback- 10 min	Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka CBNSII Supporters Dr. Shampa Sengupta, Ms. Satu Mondal
5	10:30-10:45		Tea Break -15 mins		
3b	10:45-11:30	Hospital and Ward Management	***Quality Improvement (Cont.)*** -Nursing quality improvement project ideas and guides -Nurse's vital role in healthcare quality improvement	*See above	Ms. Dipali Rani Mallick, Faculty, NIANER Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka CBNSII Supporters Dr. Shampa Sengupta Ms. Satu Mondal
7	11:30-12:30	Hospital and Ward Management	***Infection prevention and control (IPC)*** -Definitions of infection and Hospital Acquired Infection (HAI) -Understanding communicable diseases -Exploring the chain of infection -Principles of infection prevention and control	Lecture and demonstration 20mins Group work 40 mins Total group-4 Practice-10 min Redemonstration-5x4=20min Feedback-10min Group A- Alcohol hand rub	Ms. Nazma Akter SSN-MT, DMCH CBNSII Supporters Dr. Shampa Sengupta Ms. Satu Mondal

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Group B- Gloves Donning & doffing Group C- PPE Group D - Spill management	
8	12:30-13:00	Nursing Process and Fundamental Nursing Skills	***Introduction to Fundamental Nursing Skills*** -Vital sign -Safety and comfort measures underlying bed making techniques -Patients positioning & transferring -Mouth care, back care & head wash	Lecture 10 mins -Concept and importance Demonstration-30 min Skill practice-130 min Per skill -20 min Total Bed-06 Same skill will be practiced by 6 resources at the same time Screen watch - Ms. Satu Mondal Feedback-10 min	Ms. Sazia Afrin, Faculty, NIANER Ms. Nazma Akter SSN-MT, DMCH Ms. Dipali Rani Mallick, Faculty, NIANER Ms. Saleha Khatun, Mentor, GCCN Ms. Dipali Rani Mallick, Faculty, NIANER Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka CBNSII Supporters Dr. Shampa Sengupta Ms. Nasima Sultana
9	13:00-14:00		Lunch & prayer time–60 mins		
	14:00-16:20	Nursing Process and Fundamental	***Introduction to Fundamental Nursing Skills…. Cont.***	Demonstration-30 min	

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
		Nursing Skills	-	Skill practice- 130 min Per skill -20 min Total Bed-08 Same skill will be practiced by 8 resources at the same time Screen watch - Ms. Satu Mondal Feedback-10 min	
10	16:20-16:30		Tea Break and Reflection, Evaluation and agenda of the next day		Ms. Nasima Sultana

Master Trainer Training (TOT) for CPD Training in Nursing

Day 9 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Monday 25th November 2024**

Time: **8:30-16:30**

The objectives of the day are participants to:

1. [College MT] deepen an understanding and development methods of effective academic calendar, ~~lesson plan~~, and lesson plan.
2. [Hospital MT] demonstrating proficiency in maintaining nursing documents, records, and reports to enhance the overall quality of nursing care.
3. plan and conduct a practical session on medication administrations and blood transfusion through scenario learning sessions to be able to teach in the same way at their own settings.
4. explain and demonstrate how to evaluate participant's fundamental skill performance using checklists and/or observations.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Ms. Satu Mondal
2	8:40-9:00		Review of the previous day		Ms. Satu Mondal
3a	9:00-10:00	Faculty Development	***Development of Academic Calendar*** -The best rotation and monitoring, supervision model for teachers	Lecture 15 mins Group Work 45mins *Development of Academic Calendar including Committees and clinical practice activities Total Group: 3 Preparation: 15min	Ms. Dipali Rani Mallick, Faculty, NIANER Ms. Sherin Sultana, Deputy Director PMIS, DGNM CBNS-II Supporter Ms. Nasima Sultana

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Presentation & feedback: 3x10= 30 min	
4	10:00-10:15		Tea Break -15 mins		
5	10:15-11:15	Faculty Development	***Training on lesson plan development*** -Enhancement of theory lessons. How to develop a lesson plan -Let's develop a lesson plan on nursing process -Exchanging and sharing	Lecture 15 mins Group work 45 mins Total group: 03 *Development of Lesson Plan of chosen subject Preperation: 15 Presentation & Feedback:30mins	Ms. Dipali Rani Mallick, Faculty, NIANER Mosammot Monju Akhter, Deputy Director Admin, DGNM CBNS-II Supporter Ms. Nasima Sultana
6	11:15-12:15		***Training on lab lesson plan development*** -Enhancement of laboratory practice. How to develop a lab lesson plan -Let's develop a lab lesson plan	Lecture 20mins Group work 45 mins Total group: 03 *Development of Lab Lesson Plan of chosen subject Preparation: 10 Presentation & Feedback:30mins	Mosammot Monju Akhter, Deputy Director Admin, DGNM Ms. Sherin Sultana, Deputy Director PMIS, DGNM CBNS-II Supporter Ms. Nasima Sultana
3b	9:00-10:30	Hospital and Ward Management	***Nursing Documentation, Record, and Reporting*** -Concept of nursing documentation -Defining nursing records and reports -Principles of good record keeping	Lecture 30 mins Group Work 90 mins Total time: 90 min Total Groups: 4 Development of the charts for	Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka Ms. Shahana Abedin Nursing Superintendent DMCH

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			-Nursing reports used in a hospital setting -Characteristics of writing a better report	improvement of daily nursing care Preparation: 20 Presentation: 4x15=60 min Feedback: 10 min	CBNS-II Supporters Dr. Shampa Sengupta Ms. Satu Mondal
4	10:30-10:45		Tea Break -15 mins		
3b	10:45-12:15	Hospital and Ward Management	***Nursing Documentation, Record, and Reporting (Cont.)***	*see above	Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka Ms. Shahana Abedin Nursing Superintendent DMCH CBNS-II Supporters Dr. Shampa Sengupta Ms. Satu Mondal
7	12:15-13:00	Nursing Process and Fundamental Nursing Skills	***Medication administrations*** -Training and implementation methods of Oral, I/M, I/V routes -Training and implementation methods of Oxygen therapy, Nebulization and Suctioning	Lecture 25 mins - Demonstration-20min	Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka Ms. Sazia Afrin, Faculty, NIANER Mst. Nazma Akther, SSN-MT, DMCH

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
8	13:00-14:00		Lunch & prayer time– 60 mins		Ms. Shahana Abedin Nursing Superintendent DMCH CBNSII Supporters Dr. Shampa Sengupta Ms. Satu Mondal
9	14:00-14:45	Nursing Process and Fundamental Nursing Skills (Cont.)	***Medication administrations (Cont.)*** -Training and implementation methods of Oral, I/M, I/V routes -Training and implementation methods of Oxygen therapy, Nebulization and Suctioning	Practice- 45 min Total Bed: 4 Each skill will be practiced by using checklist for 10 mins all beds together. Four resource persons will be engaged with 4 beds group members. Routes of Medication Oxygen therapy Nebulization Suctioning	
10	14:45-15:00		Tea Break -15mins		
11	14:45-16:15	Nursing Process and Fundamental Nursing Skills-2	***Blood Transfusion & its Hazards*** -Who needs a blood transfusion? -Preparation prior to give blood. -Checking system for blood transfusion	Lecture 20 mins - Demonstration-15 Skill practice by using checklist 55 min Total 4 beds	Mst. Nazma Akther, Master Trainer, Dhaka Medical College Hospital Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka Ms. Shahana Abedin Nursing Superintendent DMCH

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
					Ms. Sazia Afrin, Faculty, NIANER CBNSII Supporters Ms. Nasima Sultana Ms. Satu Mondal Dr. Shampa Sengupta
12	16:15-16:30		Tea break and Reflection, Evaluation and agenda of the next day		Ms. Satu Mondal

Master Trainer Training (TOT) for CPD Training in Nursing

Day 10 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Tuesday 26th November 2024**

Time: **8:30-16:30**

The objectives of the day are participants to:

1. gain knowledge of research & Evidence-based practice (EBP)
2. understand how to identify research problems/gaps.
3. understand how to formulate research question and select appropriate research design & methodology,
4. gain knowledge of data collection and ethical issues related to research.
5. be able to search literature based on research question
6. be given a brief introduction of critiquing quantitative and qualitative research
7. plan and conduct a practical session on Nasogastric (NG) tube feeding, sterilization and disinfection, urinary catheterization, and Basic Life Support (BLS) through scenario learning sessions to be able to teach in the same way at their own settings.
8. explain and demonstrate how to evaluate participant's fundamental skill performance using checklists and/or observations.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Dr. Shampa Sengupta
2	8:40-9:00		Review of the Previous Day, Pre-test (Module 9) and Post-test (Module 6)	Module 9: Research in Nursing Module 6: Hospital and Ward Management 10 mins per module	Dr. Shampa Sengupta

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
3	9:00-9:45	Research in Nursing	***Overview of Nursing Research*** -Concept of research & nursing research, power of research for nursing profession at clinical settings -Types of Nursing Research -Evidence based practice and nursing research -Critiquing quantitative and qualitative research	Lecture - 15 min Discussion -30 min -Provide pre reading material	Dr. Abbas Uddin, Nursing Officer Research Center, DGNM CBNSII Supporter Ms. Nasima Sultana
4	9:45-10:30		***Steps/ Process of Nursing Research*** -Literature review & sources of literature -Formulation of research hypothesis & research question -Research title, objective, background -Research design and framework, Def. of variables. -Data collection & ethical consideration	Lecture -15 min Discussions- 30 min Sharing and Retrieving ideas research articles Discussion and participants' (2 groups) presentation	Dr. Md. Foyejur Rahman, Principal Rajshahi Nursing College, Rajshahi CBNS-II Supporter Ms. Nasima Sultana
5	10:30-10:45		Tea Break -15mins		
6	10:45-11:45	Nursing Process and Fundamental Nursing Skills-3	***Nasogastric (NG) Tube feeding*** -Training on NG Tube insertion and care	Lecture & demonstration 15 mins each Hands on training 45mins	Ms. Sazia Afrin, Faculty, NIANER Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				-Demonstration-10 Skill practice by using checklist 35 min Total 4 beds -Each participant must conduct a hands-on training -As TOT, please give a tip how to train other nurses/students	Ms. Sherin Sultana, Deputy Director PMIS, DGNM CBNSII Supporters Ms. Satu Mondal
7	11:45-12:45	Nursing Process and Fundamental Nursing Skills	***Sterilisation and Disinfection*** -Training and implementation methods of Wound care and Bandaging	Lecture- 20 min Group work and Scenario Based discussion Total Time: 40 min 4 Groups Preparation-10min Presentation- 05 minx4= 20min Feedback- 10min	Ms. Sandra Rumi Madhu, Vice- Principal, Grameen Caledonian College of Nursing Dr. Khaleda Akter, Faculty, NIANER Mr. Md. Shaheen Reza, DGNM CBNS-II Supporters Dr. Shampa Sengupta
8	12:45-13:45		Lunch & prayer time– 60 mins		
9	13:45-14:45	Nursing Process and Fundamental Nursing Skills	***Urinary catheterization*** -Training on Urinary catheterization and care	Lecture- 15 min Hands on training 45mins -Demonstration-10	Ms. Sherin Sultana, Deputy Director PMIS, DGNM Ms. Shahnawaz Parveen, Nursing

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
				Skill practice by using checklist 35 min Total 4 bed -Each participant must conduct a hands-on training -As TOT, please give a tip how to train other nurses/students	Superintendent, ShSMCH, Dhaka Ms. Sazia Afrin, Faculty, NIANER CBNS-II Supporters Ms. Satu Mondal Ms. Nasima Sultana Dr. Shampa Sengupta
10	14:45-15:00		Tea Break -15mins		
11	15:00-16:15	Nursing Process and Fundamental Nursing Skills	***The Basic Life Support (BLS Basic Life Support (BLS)*** -Training of BLS	Lecture - 20 min Hands on training 55mins -Participants will be divided in 3 groups. -Each participant must conduct a hands-on training -As TOT, please give a tip how to train other nurses/students	Mr. Md. Shaheen Reza, DGNM Ms. Sandra Rumi Madhu, Vice- Principal, Grameen Caledonian College of Nursing Dr. Khaleda Akter, Faculty, NIANER CBNSII Supporters Ms. Nasima Sultana Dr. Shampa Sengupta
12	16:15-16:30		Reflection, Evaluation and agenda of the next day		Dr. Shampa Sengupta

Master Trainer Training (TOT) for CPD Training in Nursing

Day 11 Agenda

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Wednesday 27th November 2024**

Time: **8:30-16:30**

The objectives of the day are for participants to:

1. gain knowledge of data analysis and data interpretation to extract research findings
2. understand how to summarize research results and discussion
3. prepare a research report and disseminate research results.
4. make an actual clinical research plan collaboratively with colleges and hospitals
5. Deepening a knowledge of research proposals and planning future clinical research at hospital setting.
6. describe and explain how to prepare CPD Training (based on the 5W1H approach).
7. develop a CPD Training plan for their own setting.
8. Explain the evaluations of CPD Training in Nursing.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Nasima Sultana
2	8:40-10:10	Research in Nursing	***Documenting research/plan and proposal*** -Components of research proposal -Planning for future clinical research at the hospital Common Problem & Solution Strategies of Writing Research Problem	Lecture- 15min Lecture-15 min Develop a research proposal (key points) Total 4 groups Preparation: 20 min	Dr. Md. Foyejur Rahman, Principal Rajshahi Nursing College, Rajshahi Mm. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka CBNSII Supporter Dr. Abdul Latif

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
				Prereading material Presentation & Feedback: 4x10= 40min	Senior- Consultant, Nursing Administration
3	10:10-11:15	Research in Nursing	***Data analysis and interpretation*** -Data cleaning, organization, and processing -Data analysis (e.g. descriptive, statistical) -Interpretations -Research results and discussions -Plagiarism & paraphrasing Citation & references (APA style)	Lecture 25 min & Group Activity 40min	Dr. Md. Foyejur Rahman, Principal Rajshahi Nursing College, Rajshahi CBNSII Supporter Dr. Abdul Latif Senior- Consultant, Nursing Administration
4	11:15-11:30		Tea Break -15 mins		
5	11:30-12:30		Review and Q&A session through Day7 to current, and Post-test (Module 5,7,9)	Module 5: Faculty Development M7: Nursing Process and Fundamental Nursing Skills M9: Research in Nursing Review and Q&A: 30 mins Post-test: 30 mins 60 in total	TBD
6	12:30-13:30		Lunch & prayer time– 60 mins		

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
7	13:30-15:10	CPD Training in Nursing	***Preparation of CPD Training*** -Training and implementation methods -Preparation using a 5W1H approach - What are the 5W and 1H question	Lecture 20mins Group work 80mins Request: Development of training schedule, agenda, candidates, timetable at their workplace	Dr. Fahima Khatun, Faculty, NIANER Ms. Shahana abedin NS, DMCH Ms. Akhtari Banu Deputy NS ShTAMCH Ms. Mamotaj Begum, Principal, MNC, Mymensingh Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka Ms. Hamida Begum, Superintendent, MMCH, Mymensingh CBNSII Supporters Dr. Abdul Latif Senior Consultant, Nursing Administration
8	15:10-15:20		Tea Break -10mins		

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
9	15:20-16:20	CPD Training in Nursing	***Evaluation of CPD Training*** -Learning Evaluation Criteria -Performance Evaluation Criteria -CPD Training and Nursing Registration in the future	Lecture 20mins Group work 20mins Request: Evaluation methods of each training planned by previous lesson No.8 Group Presentation 20mins	Dr. Fahima Khatun, Faculty, NIANER CBNS-II Supporters Dr. Abdul Latif
10	16:20-16:30		Reflection, Evaluation and agenda of the next day		Ms. Nasima Sultana

Venue: **National Institute of Advanced Nursing Education and Research (NIANER)**

Date: **Thursday, 28th November 2024**

Time: **8:30-14:00**

Chairperson **Mosammot Monju Akhter, Deputy Director Admin, DGNM**

Participants: **The candidates of the MT training from target nursing colleges and related hospitals**

The objectives of the day are participants to:

1. critically evaluate and plan a future of CPD Training in Nursing.

Timetable

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
			Registration		CBNS-II Project team
1	8:30-8:40		Explanation of the agenda and purpose of the day.		Ms. Satu Mondal
2	8:40-10:15	CPD Training in Nursing	***Preparation of the presentation*** -Read the Module -Evaluate all the sessions		CBNSII Supporters All the Members
3	10:15-10:30		Tea Break -15 mins		
4	10:30-13:00	CPD Training in Nursing	***Preparation of CPD Training*** -Overall discussion about whole agenda for development of most effective training programme in the future E.g. Is the Module containing all the necessary information to conduct the training when you go back? How	Overall review and discussion Presentation & Review - 3mins presentation by each participant	Ms. Mamotaj Begum, Principal, MNC, Mymensingh Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka Ms. Hamida Begum,

			was the training? What can we change for the next batch?		Superintendent, MMCH, Mymensingh CBNS-II Supporters All the Members
5	13:00-13:15		Short questionnaire (regarding MT Training)		
6	13:15-14:00		Closing Ceremony		Mosammat Monju Akhter, Deputy Director Admin, DGNM
7	14:00-		Lunch		

Appendix 2

Lists of the Different Committee Members

Members of the First Technical Working Group

1. Mosammat Manju Akhter, Deputy Director Admin, DGNM
2. Ms. Sherin Sultana, Deputy Director, PMIS, DGNM
3. Ms. Taslima Begum, Director, NIANER
4. Dr. Fahima Khatun, Faculty, NIANER
5. Dr. Khaleda Akter, Faculty, NIANER
6. Ms. Shirina Akhter, Principal, Dhaka Nursing College, Dhaka
7. Ms. Karima Khatu, Nursing Superintendent, Dhaka Medical College Hospital, Dhaka
8. Most. Shahinoor Begum, Principal, CONSBN, Dhaka
9. Dr. Jahura Khatun, Nursing Instructor, CONSBN, Dhaka
10. Ms. Shahnawaz Parveen, Nursing Superintendent, Sh. SMCH, Dhaka
11. Ms. Sabikun Nahar, Senior Staff Nurse, ShSMCH, Dhaka
12. Ms. Mamotaz Begum, Principal, MNC, Mymensingh
13. Mr. Nurul Islam Farazi, Nursing Instructor, MNC, Mymensingh
14. Mr. Shafiqur Rahman, Senior Staff Nurse, MMCH, Mymensingh
15. Ms. Niva Rani Chanda, Nursing Superintendent, MMCH, Mymensingh
16. Ms. Saleha Khatun, Mentor, Grameen Caledonian College of Nursing
17. Prof. Niru Shamsun Nahar, Principal, Grameen Caledonian College of Nursing
18. Representative, World Health Organization
19. Representative, The ProNurse Project
20. Representative(s), JICA CBNS-II Project

Members of the Second Technical Working Group

1. Md. Anwar Hossain Akand, Director General, DGNM
2. Md. Momin Uddin, Director (Admin), DGNM
3. Mosammat Manju Akhter, Deputy Director Admin, DGNM
4. Ms. Saleha Khatun, Mentor, Grameen Caledonian College of Nursing
5. Dr. Fahima Khatun, Faculty, NIANER
6. Dr. Khaleda Akter, Faculty, NIANER
7. Ms. Rehena Khanom, Principal, DNC, Dhaka
8. Ms. Shahana Abedin, Nursing Superintendent, DMCH, Dhaka
9. Mst. Nazma Akthar, Senior Staff Nurse (MT), DMCH, Dhaka
10. Dr. Jahura Khatun, Nursing Instructor (MT), CONSBN, Dhaka
11. Md. Abdul Karim, Nursing Instructor (MT), CONSBN, Dhaka
12. Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka
13. Ms. Sabikun Nahar, Senior Staff Nurse (MT), ShSMCH, Dhaka
14. Ms. Mamotaz Begum, Principal, MNC, Mymensingh

15. Mr. Prakash Chandra Pandit, Nursing Instructor (MT), MNC, Mymensingh
16. Ms. Khadiza Begum, Nursing Superintendent, MMCH, Mymensingh
17. Mr. Shafiqur Rahman, Senior Staff Nurse (MT), MMCH, Mymensingh
18. Representative, World Health Organization
19. Representative, The ProNurse Project
20. Representative(s), JICA CBNS-II Project

Members of the Working Group

1. Mosammat. Manju Akhter, Deputy Director Admin, DGNM
2. Ms. Sherin Sultana, Deputy Director, PMIS, DGNM
3. Md. Rashidul Mannaf Kabir, Director-Education, DGNM
4. Ms. Nilufar Yasmin, Deputy Director, BNMC
5. Ms. Taslima Begum, Director, NIANER
6. Ms. Dipali Rani Mallick, Faculty, NIANER
7. Dr. Fahima Khatun, Faculty, NIANER
8. Ms. Shirina Akhter, Principal, DNC, Dhaka
9. Ms. Karima Khatun, Nursing Superintendent, DMCH, Dhaka
10. Most. Shahinoor Begum, Principal, CONSBN, Dhaka
11. Dr. Jahura Khatun, Nursing Instructor, CONSBN, Dhaka
12. Md. Abdul Karim, Lecturer, CONSBN, Dhaka
13. Ms. Shahida Khatun, Nursing Superintendent, ShSMCH, Dhaka
14. Ms. Shahnawaz Parveen, Nursing Superintendent, ShSMCH, Dhaka
15. Ms. Sabikun Nahar, Senior Staff Nurse, ShSMCH, Dhaka
16. Ms. Mamotaz Begum, Principal, MNC, Mymensingh
17. Md. Joynal Abedien, Nursing Instructor, MNC, Mymensingh
18. Mr. Shafiqur Rahman, Senior Staff Nurse, MMCH, Mymensingh
19. Ms. Niva Rani Chanda, Nursing Superintendent, MMCH, Mymensingh
20. Ms. Tahmina Begum, Principal, BNC, Barisal
21. Mr. Ali Azgar, Nursing Instructor, BNC, Barisal
22. Ms. Sufia Begum, Nursing Superintendent, SBMCH, Barisal
23. Ms. Shahida Khanam, Nursing Superintendent, SBMCH, Barisal
24. Ms. Halima Khatun, Senior Staff Nurse, SBMCH, Barisal
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26. Mr. Mohammad Belal Uddin, Lecturer, CNC, Chattogram
27. Mr. Bishajit Barua, Nursing Instructor, CNC, Chattogram
28. Ms. Basanti Rani Roy, Nursing Superintendent, CMCH, Chattogram
29. Md. Saiful Islam, Senior Staff Nurse, CMCH, Chattogram
30. Dr. Md. Foyejur Rahman, Principal, RNC, Rajshahi
31. Ms. Momotaz Banu, Lecturer, RNC, Rajshahi
32. Ms. Mahbuba Khanam, Nursing Instructor, RNC, Rajshahi

33. Ms. Sufia Khatun, Nursing Superintendent, RMCH, Rajshahi
34. Ms. Zannatun Ferdose, Senior Staff Nurse, RMCH, Rajshahi
35. Most. Rizia Khatun, Principal, RpNC, Rangpur
36. Ms. Nargis Akhter, Nursing Instructor, RpNC, Rangpur
37. Most. Sufia Begum, Nursing Instructor, RpNC, Rangpur
38. Ms. Moslema Khatun, Nursing Superintendent, RpMCH, Rangpur
39. Most. Shirina Akther, Nursing Superintendent, RpMCH, Rangpur
40. Ms. Shamsun Nahar, Principal, ShTANC, Gazipur
41. Ms. Afroza Sultana, Lecturer, ShTANC, Gazipur
42. Ms. Rojina Khanum, Nursing Superintendent, ShTAMCH, Gazipur
43. Ms. Tania Akter, Senior Staff Nurse, ShTAMCH, Gazipur
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45. Mr. Adhikary Luke, Nursing Instructor, SNC, Sylhet
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This module was developed as part of the CBNS-II project, aiming to enhance nursing service and clinical practice through collaborative efforts and capacity building,

添付資料 10-2：臨地実習強化のためのナビゲーションガイド

NAVIGATION GUIDE FOR STRENGTHENING CLINICAL PRACTICES

The Project for Capacity Building of Nursing Services Phase 2 （CBNS-II）



2026

Navigation Guide for Strengthening Clinical Practices

The Project for Capacity Building of Nursing Services Phase 2 (CBNS-II)

Navigation guide for strengthening clinical practices

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Abbreviation and Acronyms

ACC	Academic Core Committee
BNMC	Bangladesh Nursing and Midwifery Council
CBNS-ll	The Project for Capacity Building of Nursing Services Phase ll
CC	Coordination Committee
CDC	Capacity Development Committee
CNT	Clinical Nurse Teacher
CPD	Continuing Professional Development
DGNM	Directorate General of Nursing and Midwifery
FD	Faculty Development
FDC	Faculty Development Committee
IC	Internal Committee
JICA	Japan International Cooperation Agency
MT	Master Trainer
QIC	Quality Improvement Committee
RC	Research Committee

Introduction

1.1. Purpose of the navigation guide

Clinical practice refers to a structured, supervised period of hands-on learning within real healthcare settings, where nursing students apply theoretical knowledge, develop practical skills, and gain professional competence under the guidance of clinical instructors and/or staff nurses (Rozario, M.D., 2022, Bangl Med Res Counc Bull) .

In Bangladesh, as mandated by the Bangladesh Nursing and Midwifery Council (BNMC), clinical practices are an essential part of the undergraduate nursing curriculum, involving over 3,000 hours of hands-on practice. These experiences are designed to bridge theory and practice, foster clinical judgment, and support the development of competent and compassionate nurses.

However, staffing shortages, heavy workloads, and resource gaps remain key barriers to effective clinical practice. Despite these challenges, it remains vital to strengthen supervision, monitoring, and make the best possible use of available resources to support students' learning.

Importance of academic-practice(clinical) collaboration for strengthening clinical practice

Strengthening the clinical practice system requires active collaboration between college faculty and clinical nurses. Such partnerships are vital for creating effective learning environments and for the continuous development of the knowledge and skills required to mentor nursing students effectively. Moreover, fostering strong communication and cooperation between educational institutions and clinical settings is essential for aligning educational objectives with practical experiences.



Approach of this navigation guide

This navigation guide is designed to support all nursing professionals involved in clinical practice by introducing practical approaches to enhance such academic-practice (clinical) collaboration, build strong training structures, and create supportive environment for both students and instructors. The intension is to provide a supportive resource: to guide and assist rather than dictate or prescribing fixed procedures, by offering adaptable and flexible examples to enhance the quality and effectiveness of clinical practices that can be adapted to different clinical and educational contexts. Ultimately, our goal is to help establish a sustainable and responsive system

of clinical education that meets the evolving needs of nursing in Bangladesh.

1.2. Who is this navigation guide for and how can it be used?

The activities described here were primarily implemented and promoted by Master Trainers (MTs), who were trained through MT Training conducted as CBNS-II project activities. The expected role of MT is described below. While MTs are expected to lead these initiatives continuously, this guide is intended for all nursing professionals including Clinical Nurse Teachers (CNTs), who is responsible for nursing students during clinical practices, and college faculty members.

Educator/Trainer	Supervisor/Mentor	Leader
•Conduct CNT Training and in-service training at hospital •Conduct Faculty Development training at college •Create nursing professional's learning environments	•Monitor and support faculty members, CNTs, and Clinical Nurses	•Lead the trainings •Lead committee activities •Promote nursing professionalism

Figure. 1 Intended users of the guide and expected role of Master Trainer (MT)

This navigation guide introduces four key components that institutions can adopt to improve the quality and structure of clinical education. Each section includes an overview, examples from actual practice, and practical tips for implementation. Readers are encouraged to refer to each section as needed, depending on their interests or institutional priorities.

In-house Faculty Development (FD) Training: Designed to strengthen the teaching capacity of college faculty through training on lecture planning, lab-lessons, and strategies to support students' learning.

Clinical Research: Promotes collaborative research involving nursing students, faculty, and clinical nurses to identify and address real clinical issues, fostering a research-oriented mindset, and promote evidence-based practice.

Clinical Nurse Teacher (CNT) Training: Aims to build the capacity of clinical nurses to provide effective student supervision, monitoring and guidance during clinical practice.

In-service Training at Clinical Placement: Provides practical, workplace-based training for clinical nurses to strengthen essential nursing skills, improve quality of care, and support professional development.

This guide is especially intended for nursing professionals who recognize the needs to strengthen clinical education but are unsure how to begin. It is meant to help uses generate ideas, develop and tailor training sessions, and establish collaborative systems tailored to their local contexts.

1.3. Importance of coordination between college and hospital

Strong coordination between nursing colleges and hospitals is essential for effective clinical education. One of the key structures supporting this coordination is the Coordination Committee.

This committee typically includes:

- **College faculty (include MTs)** responsible for clinical education
- **Senior Staff Nurse (include MTs and CNTs)**
  *For detailed explanation of CNT, see chapter4.
- **Hospital director** and **Nursing superintendent**
- **College principal**

The committee meets regularly to plan and manage clinical placement schedules, teaching approaches, documentation, and student assignments. These meetings serve as a platform for communication and problem-solving, helping to ensure that clinical practice aligns with educational goals.

1.4. Other committee activities for continuous improvement and standards

In addition to coordination meetings, the establishment of standing committee within colleges and/or hospitals plays a vital role in maintaining quality and sustainability. These committees can be also responsible for planning, implementing, and evaluating programs in clinical education.

Examples include:

- **Research Committees** that support student and faculty research activities
- **Faculty Development Committees** that plan and review teaching improvement initiatives
- **Quality Assurance Committees** that support continuous quality improvement in college and help ensure a safe and supportive learning environment for both students and faculty
- **Capacity Development/Internal Committees** that organize capacity building training like clinical nurse teacher training and in-service training programs in hospitals

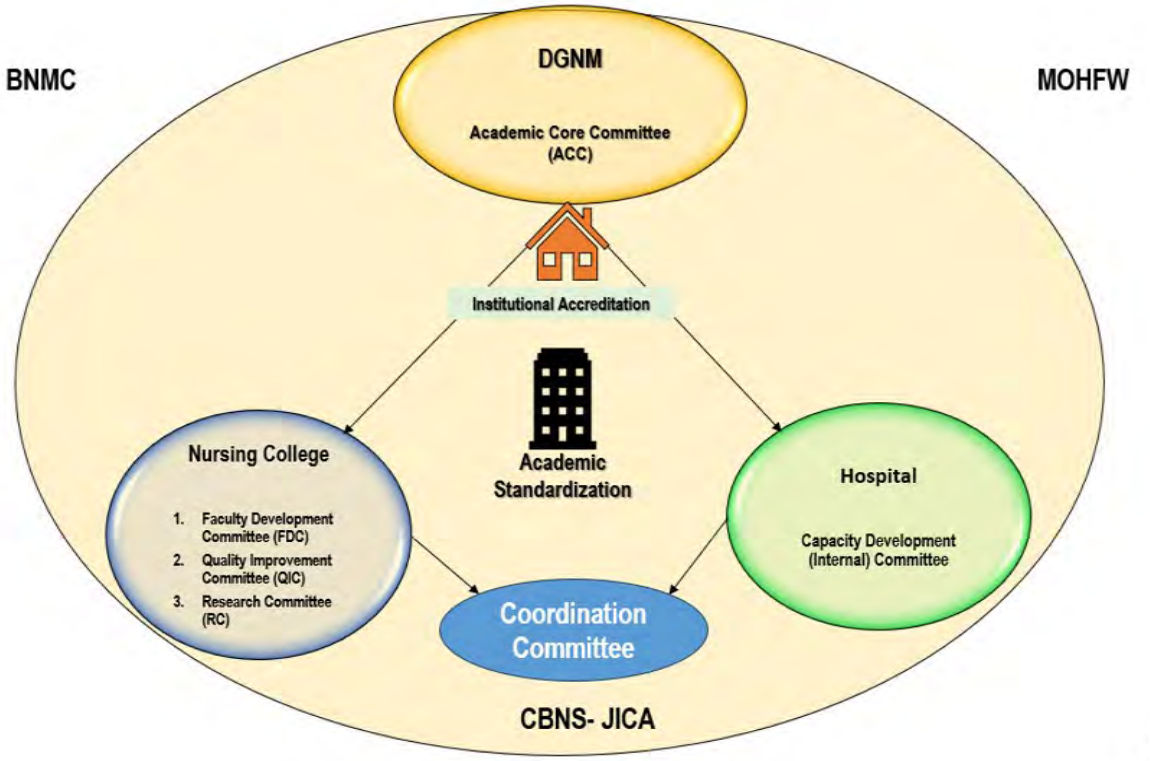


Figure. 2 Example of Committee structure (Committees for CBNS-II Activity in the Target Nursing College & Hospital)

Such committees contribute to an institutional culture of continuous improvement in nursing education. At the same time, these examples are just suggestion. The roles of such committees can vary depending on each institution's needs, resources, and changing priorities.

In-house Faculty Development (FD) Training

2.1. Overview

In-house Faculty Development (FD) training provides opportunities for faculty members to share and refine skills related to lecture and lab lesson planning, instructional material development, teaching strategies, and practical approaches for supporting students during clinical placements. It is designed to strengthen the capacity of nursing college faculty members in delivering particularly focused on high-quality teaching methodologies, lab-lessons, and clinical practice monitoring. These training sessions offer opportunities to share and refine skills related to lecture and lab planning, instructional materials, teaching strategies, and practical tips for supporting students during clinical placements.

Structure and Implementation

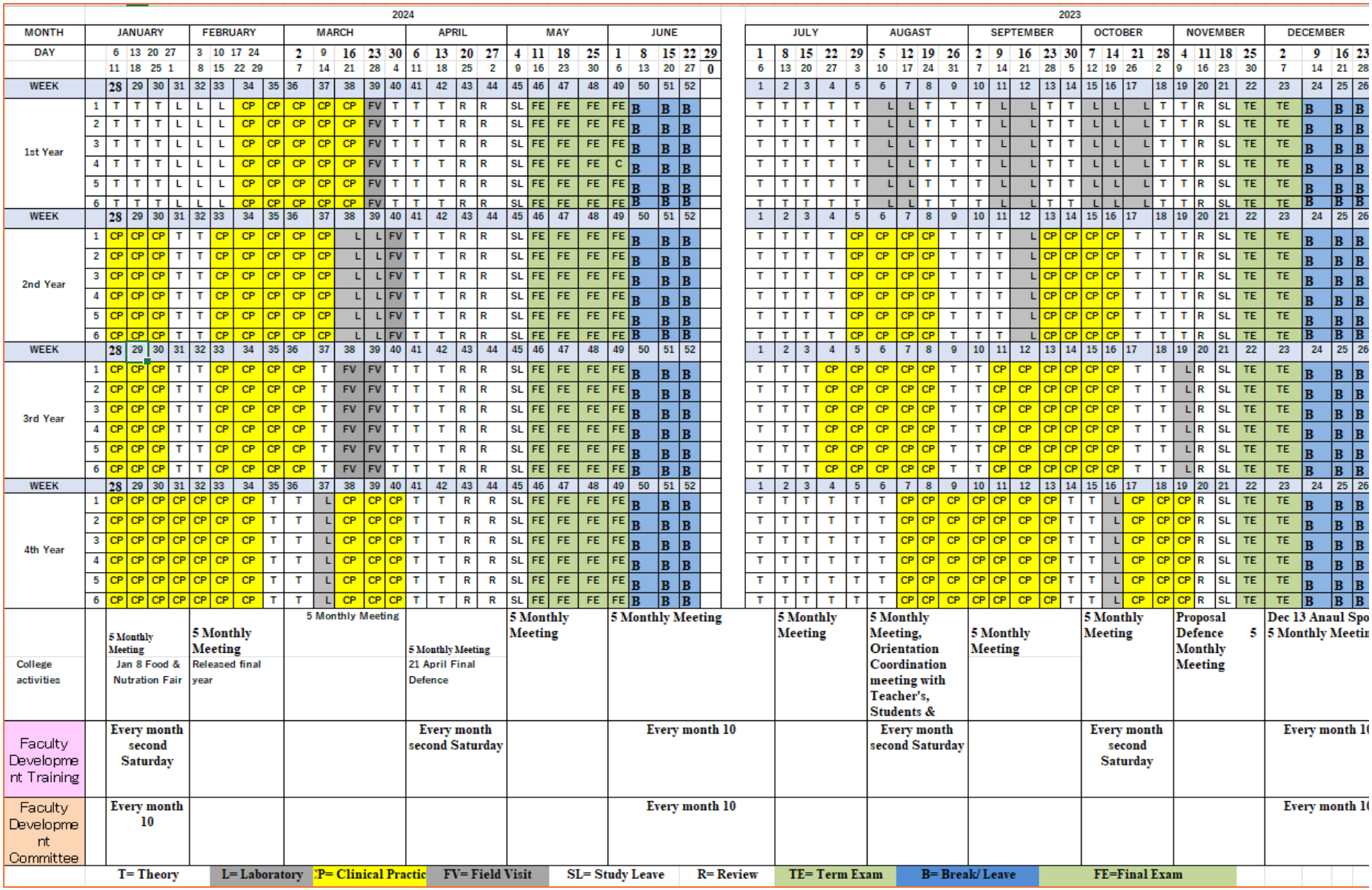
An effective feature of this FD training, we believe, is that it is not a one-time event, but rather an ongoing, faculty-led initiative. Each program should be planned and implemented based on the academic calendar and annual training plan developed through discussions in the FD Committee will be recommended. Nursing colleges are encouraged to customize the content, target participants, and frequency of training to meet their specific educational needs.
In addition, an introductory session is recommended at the beginning of the program to ensure that all faculty members—especially those unfamiliar with the concept of faculty development (FD)—understand its significance and purpose.



Group Discussion



Group work



MONTH	JANUARY					FEBRUARY				MARCH					APRIL				MAY				JUNE				
DAY		6	13	20	27	3	10	17	24	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29
		11	18	25	1	8	15	22	29	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	0
WEEK		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
1st Year	1	T	T	T	L	L	L	CP	CP	CP	CP	CP	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	2	T	T	T	L	L	L	CP	CP	CP	CP	CP	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	3	T	T	T	L	L	L	CP	CP	CP	CP	CP	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	4	T	T	T	L	L	L	CP	CP	CP	CP	CP	FV	T	T	T	R	R	SL	FE	FE	FE	C	B	B	B	
	5	T	T	T	L	L	L	CP	CP	CP	CP	CP	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	6	T	T	T	L	L	L	CP	CP	CP	CP	CP	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
WEEK		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
2nd Year	1	CP	CP	CP	T	T	CP	CP	CP	CP	CP	L	L	FV	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	2	CP	CP	CP	T	T	CP	CP	CP	CP	CP	L	L	FV	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	3	CP	CP	CP	T	T	CP	CP	CP	CP	CP	L	L	FV	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	4	CP	CP	CP	T	T	CP	CP	CP	CP	CP	L	L	FV	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	5	CP	CP	CP	T	T	CP	CP	CP	CP	CP	L	L	FV	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	6	CP	CP	CP	T	T	CP	CP	CP	CP	CP	L	L	FV	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
WEEK		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
3rd Year	1	CP	CP	CP	T	T	CP	CP	CP	CP	T	FV	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	2	CP	CP	CP	T	T	CP	CP	CP	CP	T	FV	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	3	CP	CP	CP	T	T	CP	CP	CP	CP	T	FV	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	4	CP	CP	CP	T	T	CP	CP	CP	CP	T	FV	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	5	CP	CP	CP	T	T	CP	CP	CP	CP	T	FV	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	6	CP	CP	CP	T	T	CP	CP	CP	CP	T	FV	FV	T	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
WEEK		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
4th Year	1	CP	CP	CP	CP	CP	CP	CP	T	T	L	CP	CP	CP	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	2	CP	CP	CP	CP	CP	CP	CP	T	T	L	CP	CP	CP	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	3	CP	CP	CP	CP	CP	CP	CP	T	T	L	CP	CP	CP	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	4	CP	CP	CP	CP	CP	CP	CP	T	T	L	CP	CP	CP	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	5	CP	CP	CP	CP	CP	CP	CP	T	T	L	CP	CP	CP	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
	6	CP	CP	CP	CP	CP	CP	CP	T	T	L	CP	CP	CP	T	T	R	R	SL	FE	FE	FE	FE	B	B	B	
College activities		5 Monthly Meeting Jan 8 Food & Nutration Fair				5 Monthly Meeting Released final year				5 Monthly Meeting					5 Monthly Meeting 21 April Final Defence				5 Monthly Meeting				5 Monthly Meeting				
Faculty Development Training		Every month second Saturday													Every month second Saturday								Every month 10				
Faculty Development Committee		Every month 10																					Every month 10				

MONTH	JULY					AUGAST				SEPTEMBER					OCTOBER				NOVEMBER				DECEMBER				
DAY	1	8	15	22	29	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	
	6	13	20	27	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	7	14	21	28	
WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
1st Year	T	T	T	T	T	L	L	T	T	T	L	L	T	T	L	L	L	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	T	L	L	T	T	T	L	L	T	T	L	L	L	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	T	L	L	T	T	T	L	L	T	T	L	L	L	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	T	L	L	T	T	T	L	L	T	T	L	L	L	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	T	L	L	T	T	T	L	L	T	T	L	L	L	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	T	L	L	T	T	T	L	L	T	T	L	L	L	T	T	R	SL	TE	TE	B	B	B	
WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
2nd Year	T	T	T	T	CP	CP	CP	CP	T	T	T	L	CP	CP	CP	CP	T	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	CP	CP	CP	CP	T	T	T	L	CP	CP	CP	CP	T	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	CP	CP	CP	CP	T	T	T	L	CP	CP	CP	CP	T	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	CP	CP	CP	CP	T	T	T	L	CP	CP	CP	CP	T	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	CP	CP	CP	CP	T	T	T	L	CP	CP	CP	CP	T	T	T	R	SL	TE	TE	B	B	B	
	T	T	T	T	CP	CP	CP	CP	T	T	T	L	CP	CP	CP	CP	T	T	T	R	SL	TE	TE	B	B	B	
WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
3rd Year	T	T	T	CP	CP	CP	CP	CP	T	T	CP	CP	CP	CP	CP	CP	T	T	L	R	SL	TE	TE	B	B	B	
	T	T	T	CP	CP	CP	CP	CP	T	T	CP	CP	CP	CP	CP	CP	T	T	L	R	SL	TE	TE	B	B	B	
	T	T	T	CP	CP	CP	CP	CP	T	T	CP	CP	CP	CP	CP	CP	T	T	L	R	SL	TE	TE	B	B	B	
	T	T	T	CP	CP	CP	CP	CP	T	T	CP	CP	CP	CP	CP	CP	T	T	L	R	SL	TE	TE	B	B	B	
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	T	T	T	CP	CP	CP	CP	CP	T	T	CP	CP	CP	CP	CP	CP	T	T	L	R	SL	TE	TE	B	B	B	
WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
4th Year	T	T	T	T	T	T	CP	CP	CP	CP	CP	CP	CP	T	T	L	CP	CP	CP	R	SL	TE	TE	B	B	B	
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	T	T	T	T	T	T	CP	CP	CP	CP	CP	CP	CP	T	T	L	CP	CP	CP	R	SL	TE	TE	B	B	B	
College activities	5 Monthly Meeting Orientation Coordination meeting with Teacher's, Students &					5 Monthly Meeting				Proposal Defence 5 Monthly Meeting					Dec 13 Anaul Spo 5 Monthly Meetir												
Faculty Development Training	Every month second Saturday														Every month second Saturday												
Faculty Development Committee																											

T= Theory | L= Laboratory | P= Clinical Practic | FV= Field Visit | SL= Study Leave | R= Review | TE= Term Exam | B= Break/ Leave | FE=Final Exam

Example of academic calendar combined with committee activities schedule in one of target nursing college

Quality Assurance

Another suggestion is that in some sessions, faculty members may conduct mock lectures using materials they have developed and receive peer feedback. This activity helps improve both the quality and delivery of teaching content and supports the establishment of systems for specialized, high-standard instruction.
This type of training process should follow the PDCA: Plan–Do–Check–Act), to ensure continuous improvement. Outcomes from each session should be applied to actual teaching practice including classroom and lab sessions, evaluated for effectiveness, and used to inform future training cycles.

2.2. Objectives

The objectives of the in-house Faculty Development (FD) training are as follows:

-To strengthen faculty members' capacity to plan and deliver effective lectures and lab-lessons that prepare students for clinical practice.

-To improve the quality of instruction by developing and refining instructional materials, teaching methods, and assessment strategies aligned with student learning needs.

-**To support clinical education** by improving faculty members' ability to monitor and guide students during clinical placements through practical, evidence-informed approaches.

-**To foster peer learning and professional dialogue** through activities such as mock lectures and feedback sessions that foster professional dialogue and reflective teaching practices.

-**To establish a sustainable faculty development system** by encouraging colleges to implement training through structured annual plans, regular review processes, and the active involvement of the Faculty Development Committee.

2.3. Example of FD activities training program

The following is an example of an in-house Faculty Development (FD) training program conducted at a nursing college. This session was designed not only for college faculty members but also included participation from clinical nurses involved in supervising students during clinical placements. The inclusion of both educational and clinical staff enabled meaningful dialogue regarding the continuity between classroom education and clinical training and emphasized the importance of academic-practice (clinical) collaboration.

Training Focus:

The theme of this training is to improve the quality of lab-lessons in preparation for clinical placements.



Specific objectives include:

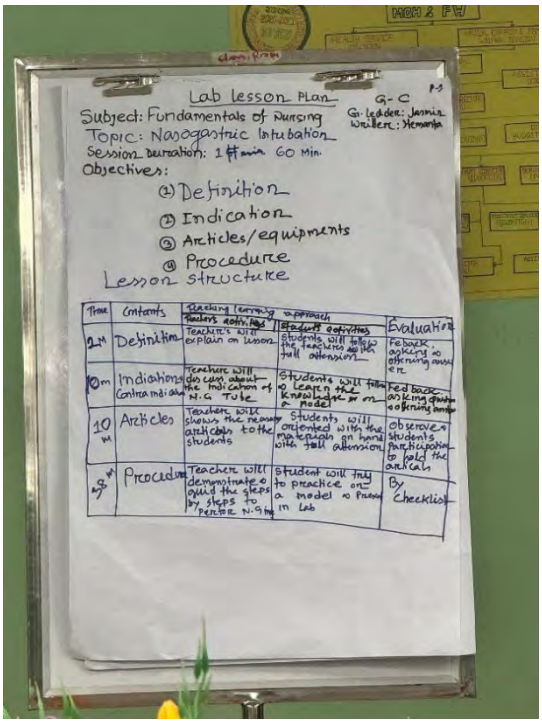
- To review key elements of effective skill lab teaching.
- To identify criteria for a good lab lessons and appropriate assessment methods.
- To develop and presenting lab lesson plans through group work and discussion.
- To practice demonstration-based teaching through role-play exercises, using structured assessment checklists.

Participants: College principal, College Faculty members, Clinical nurses (MTs) from collaborative hospital

Timetable:

Time	Topics	Activity	Teaching Methodology
11:30-12:00	【Session 1】lecture	Enhancement of skill lab teaching and development of Faculty	Lecture &Discussion (40min)
12:00-12:30	【Session 2】2-1Group work (4 group)	Develop a Lab lesson plan on chosen topics (10 min) Presentation by selected groups (3 min each*=12min) Feedback and discussion session (3 min each=12min**)**	Active learning session-Worksheet exercise & Discussion (40min)
12:30-13:00	【【Session 2】2-2 Role playing	Lab lesson (Demonstration part) and its assessment Preparation 10min Role play 10min Feedback 10 min	Role playing using checklist
13:00-13:05	Closing		

Participants had opportunities to understand key strategies for effective skill lab teaching and clarify the faculty's role in clinical education（Session 1）. Then, Session 2-1 intended to design lab lesson plans in group work, present their ideas, and engage in feedback sessions. Role-playing session (2-2) was also included, enabling participants to experience simulated teaching with peer evaluation using a structured checklist.



Example of the presentation material which participants made during the groupwork session



Feedback session after the role play

While this training focused on skill lab lessons, similar FD programs can be expanded to cover lecture planning as well, using the structure and tools developed through lab-focused training. Additionally, faculty observation during procedure performance and feedback skills (how to support students through constructive and timely feedback) could be another FD training theme.

This program serves as one example. Nursing colleges are encouraged to design their own FD training programs through discussion within their Faculty Development Committees, based on local needs and available resources.

The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

1st In-house Faculty Development (FD)Training

Venue: XXX
Date: Sunday, 18th May 2025
Time: 9:00-14:20

The objectives of this training are participants to:

1. Explain the role of teachers and the importance of Faculty Development (FD) and a concept of in-house FD training
2. Understand the purpose of FD to continuously foster the faculty's knowledge, skills, and professional competence.
3. Discuss the definition and objectives of skill lab lesson
4. Discuss the importance of skill lab lesson
5. Discuss the criteria for a good lab lesson
6. Understand how to assess a laboratory class
7. Develop a lab lesson plan

Timetable

No	Time	Topics	Activity	Teaching Methodology
	8:30-9:00		Registration	
1	9:00-9:10	Opening Remarks		-
2	9:10-9-20	Pretest		(Google form)
3	9:20-9:50	Reflection of FD and introduction of in-house FD training	**Concept and purpose of in-house FD training** -Review of the FD	Lecture Discussion Q & A session
4	9:50-10:30	lecture	Enhancement of skill lab teaching and development of Faculty	Lecture &Discussion (40min)
5	10:30-11:10	Group work	Develop a Lab lesson plan on chosen topics (15 min) Presentation by selected groups (3 min each*2=6min) Feedback and discussion session (8 min*2=16min)	Active learning session-Worksheet exercise & Discussion (40min)
6	11:10-11:30	Tea break & moving to Lab room		20min
7	11:30-12:30	Role playing	Lab lesson (Demonstration part) and its assessment Preparation 10min Practice 20min Role play 10min*2G =20 min Feed back 5 min*2G=10min	Role playing using checklist
8	12:30-13:00	Discussion	How to conduct effective evaluation of lab lesson	Discussion: Extract good points and issues based on the role playing
9	13:00-13:10	Post-test		(Google form)
10	13:10-13:20	Closing		
11	13:20-14:20	Lunch		

Example of the FD training agenda

2.4. Tips and considerations for implementation

The following is the tips and considerations which have emerged through project activities and can serve as guidance for implementing effective in-house Faculty Development (FD) training.

1. Use interactive formats

Interactive approach-such as group work, brainstorming, role play, and peer feedback- are essential to promote active learning and reflective practice among faculty members.

2. Tailor training content

Training topics should be selected based on the specific needs of the institution. Flexibility in contents, duration, and participant selection allows for greater relevance and impact.

For example, institutions may also consider including newer methods, such as objective structured clinical examinations (OSCE), as part of the training content. Learning such methods together can enable MTs and experienced faculty to better support and mentor new faculty members, helping to maintain and replicate quality practices.

3. Integrate the PDCA (Plan–Do–Check–Act) cycles

Continual refinement of training content through participant feedback and observed outcomes in actual teaching enhances effectiveness and quality of the training.

4. Encourage committee-based planning

Faculty Development Committees should play a central role in supporting sustainable and autonomous, and structured training systems.

5. Start small, then expand

Begin with a focus area, such as lab lesson planning, and gradually expand to broader topics such as lecture design, student assessment and evaluation, and feedback methods.

6. Involve clinical staff

Inclusion of clinical staff such as hospital MTs can be effective in FD sessions whenever possible. Their insights enhance mutual understanding and reinforce the continuity between academic and clinical education.

This guide provides one possible model for in-house FD training. Institutions are encouraged to adapt and build upon it to suit their unique educational environments through ongoing discussion and academic- practice (clinical) collaboration.

2.5. Introduction of good practices after the training

This section highlights good practices observed at colleges that have implemented in-house FD training. These examples demonstrate how faculty-led efforts can lead to practical improvements in teaching and learning.

Development of Exercise and Lecture Plans

As part of follow-up to in-house FD training, one nursing college developed structured lab-lesson plans across a range of topics, including fundamental nursing, psychiatric nursing, and pediatric nursing. In some cases, this initiative expanded to include lecture plan development, using the similar planning format.

Creation of Competency-Based Evaluation Tools

Faculty also independently created competency-based evaluation checklists aimed at improving the clarity and consistency of student assessments. The previously used tools were considered too abstract and lacked alignment with specific course goals.

Key benefits of the newly developed tools:

- **For students:** Clearly articulated learning objectives and better understanding of which competencies required further development.
- **For faculty:** Enhanced objectivity and consistency in student evaluations, with reduced subjectivity in grading.

New checklists, developed based on syllabus and course materials, offered clear benefits as following:

For students: they clarified learning goals and helped to identify which skills still needed improvement.

For faculty: they supported more objective and consistent evaluation, minimizing subjectivity.

Please keep in mind that the examples presented here are intended to illustrate good practices and may not address every context or challenge. When applying your learning in practice, you may encounter difficulties—and that is part of the learning process. There is no single “correct” approach; rather, effective implementation often requires adaptation and refinement overtime.
We strongly encourage faculty members to support each another in applying FD concepts into practice, what you’ve learned from the FD training, to share your experiences and outcomes, and to reflect together on how to improve.
Building a culture of open feedback, shared reflection, and collaborative problem-solving among faculty members will contribute to a more supportive and effective educational environment for the faculty as well as for the students.

Clinical Research

3.1. Overview

Collaborative clinical projects that unite nursing students, practicing clinical nurses, and academic faculty have gained momentum in recent years. Such academic–practice (clinical) collaboration are **mutually beneficial**, often leading to improved patient outcomes, innovation in practice, and enhanced nursing research capacity as a whole (Gustin, et al. 2024, OJIN) Clinical research, conducted as part of the graduation requirement for fourth-year nursing students, is actively encouraged through the activities of Research Committees established in nursing colleges under the CBNS-II project. These research projects are ideally to be implemented collaboratively by college faculty, nursing students, and clinical nurses, with a focus on addressing practical issues within clinical settings.



Clinical research committee members' meeting involving students, faculty, and senior staff nurses

Purpose and significance

The primary goal of promoting clinical research is not only to develop students' academic skills but also to foster a research-oriented mindset among nursing professionals. In contemporary health care settings, nurses are increasingly expected to:

- Identify clinical needs
- Critically evaluate practices
- Contribute to quality improvement initiatives

By acquiring research competencies, nurses can enhance their engagement in evidence-based practice (EBP), improve their **clinical teaching and mentorship capabilities**, and contribute to the continuous advancement of **safe and high-quality clinical practice and patient care**.

Starting Small: Integration into Clinical Practice

In some settings, clinical research may begin with integration into **in-service training activities** for clinical nurses. Initial efforts may involve small-scale initiatives, such as:

- Group discussions of academic papers
- Reflective dialogues on ward-related challenges
- Brainstorming sessions for improvement strategies

These informal conversations often lay the foundation for more structured research projects. Findings may be presented in **internal forums**, and high-quality research is encouraged to be shared at academic conferences or published in peer-reviewed journals.

3.2. Objectives

The objectives of the collaborative clinical research activities are as follows:

-To strengthen research capacity among faculty, clinical nurses, and students by conducting collaborative research projects that address practical issues in clinical settings.

-To promote evidence-based practice (EBP) by developing skills in identifying clinical problems, designing research, and applying findings to improve nursing care.

-To enhance academic-practice (clinical) collaboration between nursing colleges and hospitals through joint research efforts that foster shared understanding and continuous dialogue.

-To support faculty development by encouraging individual academic research aligned with their areas of academic expertise and promoting dissemination through publications and presentations.

-To increase student engagement in clinical research by involving them in graduation research and collaborative projects that build practical inquiry skills and professional confidence.

3.3. Examples of clinical research

Overview of pilot clinical research

A pilot clinical research project was launched collaboratively by college faculty, students, and clinical nurses at the surgical war of the CBNSII main target hospital. The initiative is led by the Research Committee (RC), which aims to strengthen evidence-based practice (EBP) and improve clinical and academic capacity through integrated research activities

Purpose

The project promotes:

- Research capacity development among stakeholders,
- Integration of evidence into clinical teaching and practice,
- Collaborative academic-clinical engagement in research and evaluation.

Stakeholders and Roles

Stakeholder	Roles and Contributions
Teachers (4 faculty members)	Plan and guide the research, supervise students, support nurses, provide feedback, and contribute to dissemination (e.g., publication, presentation).
Students (10 participants)	4th-year undergraduate students conduct literature reviews, develop proposals, collect and analyze data, and present findings.
Hospital Nurses (3 nurses)	Engage in developing proposals, obtain institutional permissions, support data collection, and participate in discussions and presentations.
Research Committee, College Principal, Nursing Superintendent	Provide administrative, academic, and clinical support, and ensure coordination between academic and clinical settings.

Project Process

1. Regular monthly meetings are held with all stakeholders to transform typical 4th-year graduation research into a collaborative academic-clinical research initiative. The first planning meeting emphasized the importance of **Evidence-Based Practice (EBP)**, highlighting its three core components Best available research evidence
2. Clinical expertise
3. Patient values and context

All the components are important for nurses to expand their knowledge and refine their clinical practice by systematically collecting, processing, and implementing research findings

Key Deliverables

- **Students:**
    - Conduct literature review and develop IRB proposal
    - Design data collection instruments (by second week of April)
    - Begin data collection (third week of April)
    - Perform data analysis (fourth week of April, during midterms)
    - Present results to hospital staff
    - Final thesis defense
- **Hospital Nurses:**
    - Provide institutional support and field guidance
    - Offer contextual feedback and participate in data collection
    - Attend final presentations
- **Teachers:**
    - Support research planning and supervision
    - Provide technical and methodological guidance
    - Contribute to evaluation and dissemination

Research Theme Selection

During initial stakeholder meetings, students and faculty proposed an action-oriented intervention study. However, senior faculty advised that the first phase should focus on situational analysis to inform future interventions. Based on the foundational study of the analysis this year will inform targeted interventions to be implemented in the following year.

Accordingly, the research title evolved from:

"Situational Analysis of Infection Prevention and Control (IPC) at the Surgical Ward in Shaheed Suhrawardy Medical College and Hospital"

to

"Assessment of the Associated Factors on Infection Prevention and Control Practices among Health Care Providers at the Surgical Ward in Shaheed Suhrawardy Medical College and Hospital, Bangladesh."

Timeline and Responsibilities

1. Students

Main Roles: Lead the research process from planning to final presentation.

Responsibilities:

- Conduct literature review
- Develop research plan and IRB proposal
- Share drafts with teachers and hospital nurses for feedback
- Finalize data collection instruments Conduct data analysis

- Share preliminary findings with hospital nurses
- Prepare and deliver final thesis defense

2. Hospital Nurses

Main Roles: Provide field support, contextual feedback, and clinical coordination.

Responsibilities:

- Collaborate with students in preparing a brief research proposal
- Visit hospital for administrative and clinical approvals
- Coordinate with medical doctors (MDs), registered nurses (RNs), and hospital administrators
- Provide practical and contextual feedback throughout the research process
- Participate in student presentations and discussions
- Support future IRB application (planned for the intervention study next year)

3. College Teachers

Main Roles: Provide academic supervision and promote knowledge dissemination.

Responsibilities:

- Engage in research planning and guide students throughout the process
- Support clinical nurses in integrating research into practice
- Provide ongoing methodological and ethical guidance
- Evaluate student performance and research outcomes
- Promote dissemination via publications, conference presentations (poster/oral), and documentation of best practices

3.4. Tips and Considerations for implementation

To ensure the successful and sustainable implementation of this pilot clinical research project, the following considerations should be considered:

1. Build on existing curriculum and begin small

- Start by integrating research activities into the current graduation research or existing coursework to minimize disruption.
- Select a manageable theme that aligns with both academic objectives and clinical priorities.
- Use the pilot phase as a foundation to gradually expand intervention or action research initiatives in the following years.

2. Minimize burden on participants

- Recognize the time constraints of students, faculty, and clinical nurses, and plan activities accordingly.
- Assign clear, achievable tasks with realistic deadlines to avoid overburdening any individual.
- Use shared digital platforms for communication, feedback, and coordination to reduce time

spent on in-person meetings.

- To support nurses new to research, provide a brief training checklist outlining key steps and expectations. This checklist makes it clear what nurses need to do and helps them join the research with confidence.
- Share sample tools such as consent forms, data collection templates, and abstract writing guides to facilitate understanding and practical application.

First Steps in Nursing Research

Nursing research feels overwhelming… If you've ever thought this, remember: it often begins with simple questions that arise in your daily clinical practice.

Here's a step-by-step guide to help you get started:

1. Identify a research question

Take note of any "Why?" or "How?" questions you notice during patient care. These small questions can be the seeds of meaningful research. Discuss your observations with clinical nurses, faculty members, and even a student research leader to help refine and focus your question.

2. Review the literature and gather information

Search the literature to find what is already known or discovered, and what is still unclear and need to be clarified to fill the gaps between knowledge and practice.

3. Develop a conceptual framework

Decide on the research purpose and select an appropriate methodology-such as surveys, interviews, or observational approaches-to guide your inquiry.

4. Design a research plan

Outline your research steps and check if it is feasible. A well-prepared research proposal serves as a roadmap for the entire research process, allowing researchers to assess the plan's feasibility and ethical considerations, and build shared understanding and consensus in collaborative research team.

5. Collect and analyze data

Carry out your data collection according to your plan, and proceed with analysis in a systematic manner.

6. Summarize and share results

Present your findings clearly using tables or charts and provide thoughtful interpretation in the discussion section. Compile everything into a well-organized research paper to share your insights with others. It is especially valuable to share your results with clinical nurses and seniors as they can inform future improvements in the ward and guide next year's research activities.

Every small step can help improve the quality of nursing care. Value your curiosity and take your first step with confidence!

3. Foster a medium- to long-term research vision

- Encourage faculty to see this pilot not as a one-time one-year activity, but as the start of a mid-term academic-clinical research strategy.
- Document lessons learned during the pilot phase to improve future research cycles.
- Promote continuity by engaging new student cohorts in ongoing or follow-up research themes.

4. Create multi-stakeholder presentation opportunities

- Provide students with opportunities to present their research findings not only within the university but also at:
    - Hospital departments (e.g., ward-level feedback sessions) involving directors and MDs and other professionals
    - Institutional research meetings
    - Joint academic-clinical conferences or university-hospital liaison councils
- These venues enhance the relevance and visibility of student research and strengthen academic-practice (clinical) collaboration and interprofessional understanding.

5. Strengthen faculty coordination and support structures

- Designate a core faculty member within Research Committee responsible for coordination and follow-up across academic years.
- Institutionalize the research process within faculty development and Research Committee agendas to ensure continuity and ownership.

6. Promote recognition and dissemination

- Acknowledge contributions of students, faculty, and clinical staff in all presentations and publications.
- Encourage participation in local or national academic forums and explore opportunities for joint publications or poster presentations.
- It is important for the government to recognize the value of such forums for knowledge exchange and research advancement.
- The regular organization of science forums or health research symposiums should be supported as part of national health and education strategies with proper budget allocation and policy-level support to foster a sustainable research culture.

3.5. Feedback from faculty and nurses/Future prospects

Faculty Reflections: faculty members who supervised the pilot clinical research project shared the following insights:

- Positive learning for students:

  Students reported that receiving direct, practical feedback from both university faculty and hospital nurses was highly valuable. It allowed them to gain a deeper understanding of real-world clinical issues and enhanced their ability to apply research skills in practice.
- Professional growth for faculty:

Faculty members expressed that supervising the research allowed them to reflect on their own research practices and reaffirm the importance of evidence-based approaches in both education and clinical care. They found the collaboration with clinical staff intellectually stimulating and professionally enriching.

- Collaboration with nurses as co-educators:

  Faculty noted that involving clinical nurses not only enriched students' learning experiences but also positioned nurses as co-educators. This dynamic fostered mutual respect and a shared commitment to quality care.

Nurses' Perspectives: clinical nurses involved in the pilot project expressed optimism about the role of research in improving practice:

- Interest in research as a tool for change:

  Nurses appreciated the opportunity to participate in research activities, which they had often viewed as distant from their daily work. They felt that this hands-on engagement helped demystify research and revealed its potential to bring about practical improvements in patient care.

- Capacity building for clinical inquiry:

  Nurses commented that the process introduced them to new methods of inquiry, such as problem identification, literature review, and structured data collection. Many felt it could pave the way for developing in-house quality improvement initiatives in the future.

Future Prospects

Based on the pilot's success, several future directions are envisioned:

- **Scaling and continuity:**

  The pilot serve as a foundation for a longitudinal research initiative, with themes evolving based on findings from the initial study. Future groups of students can take on extended or follow-up research projects with continual guidance of the faculty.

- **Building a research culture:**

  Continued collaboration between academia and clinical settings is expected to cultivate a culture of inquiry, where research becomes a routine part of professional development for both students and clinical nurses.

- **Recognition and dissemination:**

  Moving forward, research findings will be shared not only within the college but also in e,g, hospital-based seminars and joint college–hospital forums. This visibility is expected to enhance interprofessional understanding, institutional support, and motivate further engagement. The regular organization of science forums or health research symposiums should be supported as part of national health and education strategies. Budget allocation and policy-level support are essential to institutionalize dissemination activities and foster a sustainable research culture.

Clinical Nurse Teacher (CNT) Training

4.1. Overview

Clinical Nurse Teacher (CNT) is generally expected to be a highly experienced, registered nurse who uses their knowledge, skills and expertise to provide clinical education and professional development to nursing students and nursing staff. CNTs provide essential guidance across several domains, including professional role development, knowledge and skill acquisition, value formation, organizational assimilation, and role modeling (Evans et al., 2011, Nurs Educ Today）.

CNT Training is designed to strengthen the capacity of clinical nurses who are responsible for nursing students during clinical practices. This training encouraged to aim to ensure that students receive high-quality guidance aligned with educational objectives and fosters collaboration between clinical settings and nursing colleges.

This training is supposed to be conducted by MTs in hospitals, but academic–practice (clinical) collaboration with college MTs is highly needed and recommended. The training content focuses on essential topics such as the role and responsibilities of CNTs, how to support student learning in clinical settings, and effective communication with students as well as fundamental nursing skills.

The training is recommended to be conducted periodically, based on the needs identified by the hospital. Continuous improvement is promoted through regular review and refinement of training content based on participant feedback and practical outcomes.



CNT's demonstration on hand hygiene and fundamental nursing skills

4.2. Objectives

The objectives of the CNT Training are as follows:

- **To build foundational knowledge and skills** necessary for effective student education during clinical practice.
- **To promote a clear understanding of the roles and responsibilities** of Clinical Nurse Teachers.
- **To improve the quality of clinical education** by enforcing CNTs with practical strategies for teaching, communication, and student evaluation.
- **To establish and reinforce a training structure** that allows for continuous improvement of clinical nursing skills at hospital.

4.3. Examples of training program

The following is an example of a Clinical Nurse Teacher (CNT) training program implemented in a hospital with a support of CBNS-II project. This program is designed to be adaptable based on institutional needs and can serve as a reference model.

Training Overview

- **Duration**: 6 days
- **Participants**: around 20–26 clinical nurses
- **Trainers**: MTs from both hospital and nursing college [1]
- **Training Style**: Interactive and participatory (lectures, group work, discussion, presentation, role-play, and clinical skill demonstration and practice)

Key Features

This training emphasizes participatory learning and practical skill development. It is not limited to passive lectures but actively involves participants through group discussions, role-playing, and hands-on practice. The program encourages critical thinking and problem-solving skills that are applicable to real clinical situations and clinical practice. Pre- and post-tests are conducted to assess knowledge acquisition. In addition, participants must pass practical skill demonstrations to ensure they possess the skills required of a CNT. The training content and materials are developed collaboratively by hospital MTs and nursing college MTs, ensuring relevance and alignment with both clinical and educational needs.

[1] For the activities of the CBNS-II project, we mutually collaborated with MTs from nursing colleges and other hospitals to ensure effective and smooth training.

Clinical Nurse Teacher's Training
Day 1 Agenda

Date: XXX
Time: 8:30-4:30am
Chairperson: XXX
Participants: Senior Staff Nurse

Objectives of the day: Participants will be able to-

1. Understand the Concept of clinical nurse teacher, difference between clinical nurse teachers Training & In-service training.
2. Describe the nursing documentation.
3. Understand the key point of the methods of encouraging and apply it to nursing students.
4. Understand knowledge about assignment system of students, and to describe perform Assessment and evaluation of the students in the clinical area
5. Explain the importance of time management, barriers in utilizing effective time management & prioritization of daily task by critical thinking.
6. Understand the need for behavior change communication.
7. Briefly describe leadership & management
8. Understand the concepts & principles of nursing ethics.
9. State the concept of holistic nursing care, its component and importance of holistic nursing care. Analyzation of the Dying patient care by using Nursing Process.

Training Schedule

Sl No	Time	Topics	Teaching Methodology
		Registration	
1	8:30-8:40	Introduction of the participants	
2	8:40-8:50	Welcome speech and inauguration	Speech
3	8:50-9:00	Explanation of the agenda	
4	9:00-9:30	Pretest	30 min
5	9:30-10:40	**Orientation of Clinical nurse teachers training**: (a) Concept of clinical nurse teacher (b) Difference between clinical nurse teacher training & In-service training. **Clinical placement:** (a)Nursing documentation -Report and Record (b) Assessment and Evaluation of the students 'activities. (c) Concepts about the duty roster of student nurses. -Knowledge about assessment system of students -Perform Assessment and evaluation of the students in the clinical area during clinical practice (c)	Lecture (30min) Planning and listing of in-service training in hospital ward with rational – Group A&B Total time- 40 min Total groups- 4 (Preparation 15 mins Presentation 5×4 =20 min) Overall Feedback = 5 min Group A- Surgery ward Group B- Emergency ward Critiquing the existing chart: Group C – Medicine Chart & Temperature Group D –Assessment & Evaluation checklist
6	10:41-10:55	**Tea breaks - 15 min**	

7	10:55-11:40	**Time management:** **Critical reflective thinking-problem solving on daily ward activities:** -Introduction -Importance of Time Management -Barriers in utilizing -Effective Time Management -Prioritization of daily task by Critical thinking	Lecture 20 mins **Scenario based Presentation** Total time- 25 min Total Groups:4 Two groups will be selected by lottery for presentation Preparation - 5 mins Presentation- 8×2 =16 mins Feedback - 04mins
8	11:40-01:00	**Communication and BCC** **Communication:** -Define communication -Purpose of communication -Types of communication -Process of communication -Barriers of communication **BCC:** -Introduction -Objectives and Process -Factors influencing BCC in healthcare -Criteria for developing BCC messages -Importance of behavior change	Lecture 20+20= 40mins Role play based on given scenario and topic Total time- 40 min Total Groups - 4 Group A- BCC Group B- Linguistic barrier, Group C- Physiological barrier, Group D- Attitude barrier, Preparation-10 min Role play- 6×4=24min Feedback- 6min
9	01:00-02:00	**Lunch & Prayer time 60 mins**	
10	02:00 - 03:00	**Leadership and management** a. Define Leader & Manager b. Concept Leadership & Management c. Types of Leadership & management d. Qualities of leader e. Leadership style f. Team Building	Lecture -20 min Group work: Role play Total time- 40 min Preparation: 10min. Total- 3 Groups Preparation- 10 min Presentation:3×8 =24mins Group A- Democratic Group B- Autocratic Group C- Servant Feedback: 06 min
11	03:00-04:15	**Fundamental Nursing Skills-6:** · Blood transfusion and Its` hazards · Indication of blood transfusion · Preparation prior to transfuse blood. · Checking system for blood transfusion · What to do if any complication occurs	Lecture (20 min) Demo: 20 min Practice by using checklist in 4 groups: 35min
12	4:15 - 4:30	Review and paper basis evaluation of the day	15 min (paper basis)

Example of CNT training Agenda

Training Topics

- Orientation to CNT roles and responsibilities
- Preparation of clinical placement
- Health education, counselling and motivation
- Behavior changes communication (BCC)
- Mentorship and coaching
- Supervision and monitoring
- Time management
- Nursing Leadership
- Nursing ethics and holistic care
- Infection prevention and control (IPC)
- Waste management
- Nursing Handover & takeover
- Nursing process and nursing care plan
- Fundamental nursing skills:
    - Head to toe assessment
    - Oxygen therapy & nebulization
    - Sterilization and disinfection
    - Vital signs, Mouth care, Back care, Head wash, Bed making
    - NG tube insertion and feeding, NP/OP suctioning
    - Medication administration
    - Blood transfusion
    - Wound care & bandaging
    - Positioning & Transferring
    - Urinary catheterization

Evaluation and Certification

- **Post-test**: Minimum passing score of 70%
- **Group work participation**: 10%
- **Clinical skill demonstration**: 20%
- **Overall pass mark**: 70 out of 100
- Certificates are awarded only to those who meet all criteria
- Outstanding participants are recognized based on role-play performance, comments during group work, and overall test scores

Online questionnaire platform was used for evaluation for this training. Instruction and trial test were needed in advance for smooth implementation, but this made it easier to compile and analyze the participants answer.

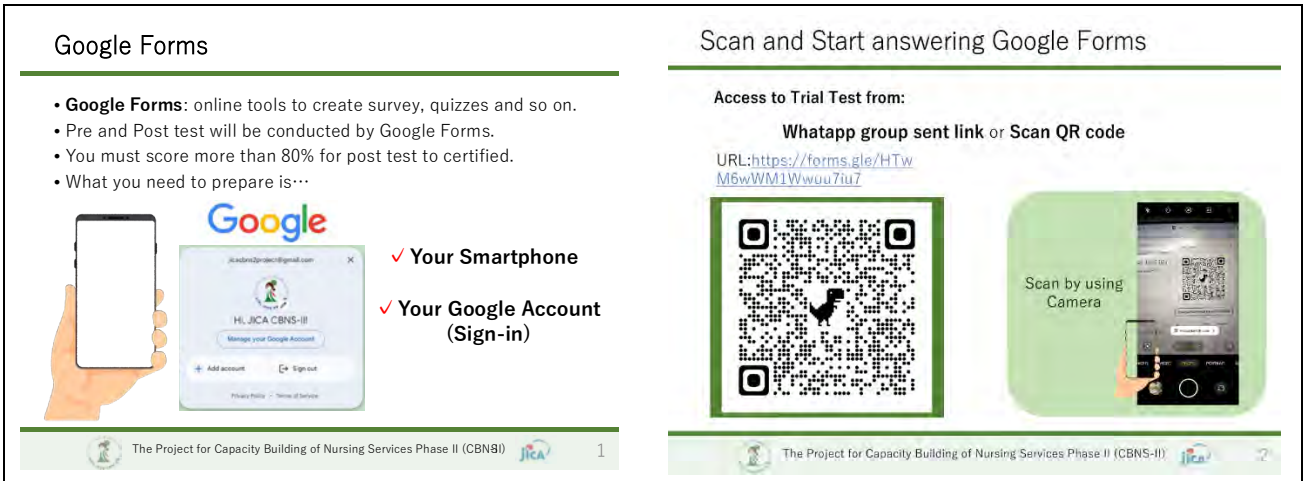


Figure. 4 Instruction of the pre-post test using online questionnaire form

Future recommendation on Post-Test for CNT candidates:

To ensure the quality of CNTs, it is recommended to allow only one chance to take the post-test again (retake test) when anyone fails. Allowing more than one retake test is not recommended, as it may reduce the reliability of the qualification process.

CNT Candidate Criteria

- Minimum of 2 years in government service
- 2–5 years' experience as a Senior Staff Nurse (SSN)
- BSc Nursing degree or higher (mandatory)
- Basic IT skills (mandatory)
- Advantageous: BCC training, teaching experience with students, research activities
- Adequate interpersonal communication skills (recommended average 4–5 on internal evaluation)

Note for future implementation:

- In addition to a BSc Nursing, candidates who have obtained a post-basic nursing degree are also eligible.
- For assessing adequate interpersonal communication skills, it is preferable to utilize objective indicators in addition to subjective evaluations (e.g., peer feedback, communication-focused performance assessments like asking problem-based questions).
- It is also recommended to ask the candidates about their future plans to contribute to strengthen nursing after they have certified as CNT, by conducting the interview. Checking their detailed and clear plan helps to consider if they have capacity to become CNT.

Customization for Future Implementation

While this example reflects a specific training program, future implementations are expected to be tailored to the needs and resources of each hospital. The content, structure, and number of participants can be adjusted accordingly. Flexibility in design ensures that the program remains relevant, feasible, and sustainable across diverse clinical settings.

Regarding training duration and evaluation criteria, hospitals are encouraged to adapt these parameters based on their unique circumstances to ensure the training remains practical and effective.

Journal club: a simple learning space beyond CNT training:

In addition to Clinical Nurse Trainer (CNT) training, simple learning activities can help strengthen clinical nursing skills. For example, starting a **Journal Club** allows new or motivated nurses to discuss research topics and share ideas on applying evidence-based practice (EBP). A short 30-minute session once a week, with nurses taking turns as facilitators, can make this easy to run. Participants summarize key points, talk about how findings relate to their work, and suggest ways to improve patient care. Such small but regular activities help build a culture of continuous learning in the team.

4.4. Tips and considerations for implementation

The following is the tips and considerations which are found through the project activities.

Academic–Practice (clinical) Collaborative Implementation

Although CNT training is primarily led by hospital-based MTs, close collaboration with MTs from nursing colleges is highly recommended. Such academic–practice (clinical) collaboration not only facilitates alignment of instructional methods and content but also fosters effective communication and mutual understanding between clinical and academic sectors.

Interactive Learning Approach

As emphasized previously, an interactive format: incorporating group discussions, role plays, practical exercises, and hands-on skill sessions are key to effective CNT training. These methods help participants internalize the content and apply it meaningfully in clinical teaching.



Presentation of the group work discussion



College MT's demonstration session

Contribution to Continuing Professional Development (CPD)

CNT training also serves as a valuable component of CPD for clinical nurses. In particular, the review and practice of fundamental nursing skills has been noted as a significant learning opportunity by participants.

Scheduling and Workload Management

CNTs are usually integrated into clinical shifts, balancing patient care with student supervision. To ensure meaningful engagement in student guidance, shift adjustments are essential for CNTs actively involved in teaching. For these perspectives, understanding from hospital director, nursing superintendent, and ward-in-charge is essential. Their active involvement from the planning period of this CNT Training will be effective.



Hospital director's visit to observe the training (physical assessment session)

Sustaining Practice and Reflective Improvement

CNTs are expected to apply the training content in real student education at clinical practices. Encouraging documentation of teaching practices and creating opportunity for CNTs to share experiences and reflect on challenges are vital to promoting continuous improvement. These efforts help sustain educational enhancement.

Inter-hospital Cooperation

Engaging MTs from other hospitals and exchanging information on training practices can provide fresh perspectives and stimulate quality improvement. Sharing experiences and challenges across facilities supports mutual learning and enriches training content.



Daily debriefing session after the training together with hospital MTs (host), college MTs, and MTs from other hospitals

4.5. Feedback from participants / Introduction of good practices after the training

1) The value of CNT training for capacity development

The CBNS-II project provided CNT training to eight target hospitals. Tests were conducted before and after the training, and the average correct answer rate increased significantly after the training.

Figure. 5 shows the difference in the correct answer rate between the pretest and posttest.

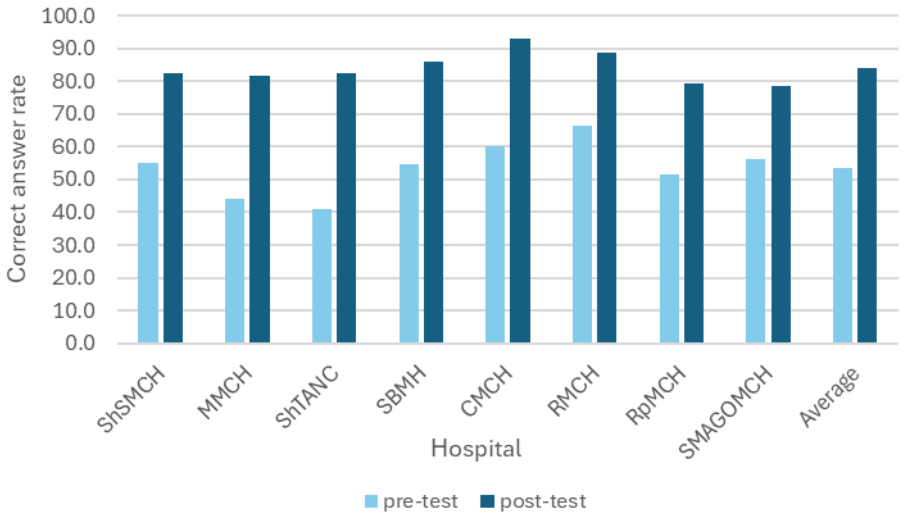


Figure. 5 The difference in the correct answer rate between the pretest and posttest

Table.1 indicated that the average correct answer rate increased by 30.4 points after the training implementation, a statistically significant difference ($t = 12.6$, $p < 0.05$). Therefore, it was concluded that the CNT training has shown to be effective in improving the Senior Staff Nurses' competence.

Table. 1 T-test of average correct answer rates on pre-test and post-test

	Pre-test	Post-test	Difference	t	p
Number of hospitals	8	8	30.4	12.6	0.00
Average score	53.7	84.1			
Standard deviation (SD)	8.2	5.0			

Reference: Pre/Post test result of 1st batch CNT training for 8 target hospitals

2) The value of the CNT training for Clinical practice.





Interview for the nursing superintendent of the Shaheed Suhrawardy Medical College Hospital

Previously, student nurses were not properly supported in their clinical practice, as there was no Clinical Nurse Teacher (CNT) in the hospital to guide and oversee them. However, after the training, CNT s support the student nurses after the training, nursing students displayed an interest in clinical practice and bedside learning by practicing basic core skills.

Interview for the nursing students at the College of Nursing Sher-E Bangla Nagar.

We found different clinical practice environment compared to the clinical practice environment they faced during their 1st year clinical placement. Previously we only did medication. But now we are getting the floor to show our creativity. During our current clinical practice students got the opportunity to do poster presentation in front of patient and attendance which we did not do it in their previous clinical practices. We also learnt how to do therapeutic communication to build rapport with patient, how to take history from subjective and objective data.

If we asked any question to our seniors, they answered patiently although there was huge patient load. Senior Nurses support motivated students more to provide quality nursing care to the patient.

In-service Training at Clinical Placement

5.1. Overview

In-service training may include educational activities conducted concurrently with nurses' official duties, aimed at improving their knowledge and skills. This training can be optional and designed for personal skill enhancement and self-development. Delivered in the clinical work setting, in-service training can focus on refining existing skills and acquiring new knowledge directly related to job performance such as nursing documentation and fundamental nursing skills. It may also support the development of leadership, motivation, and a positive professional attitude. Hospitals are encouraged to organize these trainings, sometimes in academic–practice (clinical) collaboration with nursing colleges, ensuring that the content addresses current clinical challenges and promotes continuous improvement in nursing care quality.

Program Structure

The training program has been designed as a continuous system of professional development, implemented at multiple levels and frequencies to meet diverse learning needs:

- Monthly Sessions: Department-wide training sessions focused on clinical skills, safety protocols, and standards of care. These sessions include all MTs and CNTs.
- Weekly Workshops: Targeted sessions covering high-priority topics, such as fundamental nursing skills. Senior Staff Nurses from each ward participate in these workshops.
- Need-Based Training: These are organized in response to new policies, clinical incidents, or identified gaps in performance, offering timely capacity-building support.

Training content is selected based on clinical relevance and institutional goals, with an emphasis on practical skills that support day-to-day nursing care.

5.2. Objectives

The objectives of the in-service training are as follows:

-**To support training needs for skill refinement and self-improvement** related to clinical practice.
-**To deliver practical training focused on improving job-related competencies** within the clinical environment.
-**To foster leadership, motivation, and professional attitudes** among clinical nurses.



Nursing students in clinical practice and nurse in charge



CNTs and Nursing superintendent conducting in-service training

5.3. Example of a training program

In this example, a single theme is selected every two months and applied consistently across all wards to ensure hospital-wide standardization. The first session in each cycle is delivered to all CNTs to align their understanding and establish a foundation for subsequent ward-level training. Using a cascade model, CNTs then conduct small-batch sessions on their respective wards in cooperation with MTs, using identical content and tools to ensure consistency.

Theme: Nursing Documentation

One implemented theme was “Nursing Documentation,” focusing on the principles and legal considerations of accurate record keeping. Training included lectures, demonstrations, hands-on practice with patient charts and care plans, and peer feedback. Training materials included standardized forms and summary handouts. Nurses reported improved confidence and awareness regarding documentation practices, which also enhanced communication and reduced risk.

Specific objectives included:

- To understand the Importance of Proper Documentation
- To identify Types of Nursing Documentation
- To learn Best Practices for Record Keeping
- To explore Common Documentation Tools and Systems
- To understand the legal implications of improper documentation and its impact on patient care and legal accountability.

Timetable:

Time	Topics	Teaching Methodology
10.00- 10:05	Participants Registration	
10.06-10.20	Nursing Documentation & record, report.	Lecture (15 min) Demonstration/ Hands on practice by MT (20min) Feedback for Redemonstration (20min)

Figure. 6 Example of In-service training plan of the ShSMCH

Expanding the Training Approach

While this model emphasizes hospital-wide standardization, it also allows flexibility. Wards with specialized services or patient needs may conduct tailored sessions on topics such as emergency care, infection control, etc. Additionally, in-service training may be expanded to cover non-clinical competencies, such as feedback strategies for junior staff and students.

Hospitals are encouraged to adapt and expand upon this example according to their local needs. Committee-led planning and ongoing evaluation are key to sustaining the relevance and impact of in-service training programs.

5.4. Tips and Considerations for implementation

The following is the tips and considerations which are found through the project activities.

Align training with clinical needs and institutional goals

Select topics based on identified performance gaps, policy changes, or emerging clinical challenges especially related to clinical placement. Involving MTs, CNTs, and clinical staffs in topic selection ensures relevance and ownership.

Promote standardization through shared training themes

Deliver the same training theme across all wards within the same period to ensure consistent nursing practices. Start each cycle with a centralized session for MTs and CNTs, followed by ward-level implementation using the same content.

Adapt to ward-specific needs

In addition to shared hospital-wide themes, plan training sessions tailored to specific wards, such as emergency care units, pediatric, or surgical wards. This allows standardization and specialization to coexist.

Use a cascade model for training delivery

Equip CNTs with knowledge and tools during centralized sessions so they can independently lead sessions in their responsible wards. This structure supports scalability and reinforces peer-led learning.

Schedule training strategically within working hours

Whenever possible, conduct short training sessions during working hours to encourage participation. Consider using convenient time and offer multiple sessions per ward to accommodate shift workers.

Ensure standardized and accessible materials

Use consistent tools such as checklists, summary handouts, and feedback forms across sessions. Make materials available in advance and ensure they are easy to use.

Collect feedback and encourage reflective practice

After each session, gather feedback from participants and facilitators to identify what worked and what needs improvement. Facilitate short debriefings to reinforce learning.

Maintain documentation and records

Keep clear records of session content, attendance, and outcomes. This supports follow-up, evaluation, and continuity.

Making in-service training visible: using simple performance measures

To ensure that in-house training for nurses truly improves patient care, it is helpful to use simple performance measures. For example, tracking clinical audit results, observed improvements in nursing skills, or other practical indicators can show progress over time. Sharing these results with staff highlights the real impact of training and encourages continuous learning. It also helps managers and stakeholders recognize the value of training and supports evidence-based improvements in care quality.

5.5. Feedback from participants / Future prospects

All eight hospitals targeted by CBNS-II project faced the problem of not having a budget for the in-service training. In-service training should be tailored to the needs of nurses within the hospital and organized in a way that is convenient for them to participate.

As a good example of in-service training implemented with limited budget and manpower, we introduce the in-service training program at ShSMCH. Their initiative will be a hint for the continuous in-service training.

1. Tips for implementing in-service training with limited budget and manpower.

・In-house training is not necessarily intended to ensure that all nurses within the hospital

participate in training and acquire skills. The purpose is to provide each individual with the opportunity to select the topics they need and continuously improve their nursing skills and knowledge at their own pace. This approach increases participants' motivation for training while ensuring that the number of participants remains manageable, allowing training to be conducted with a small budget and limited manpower.

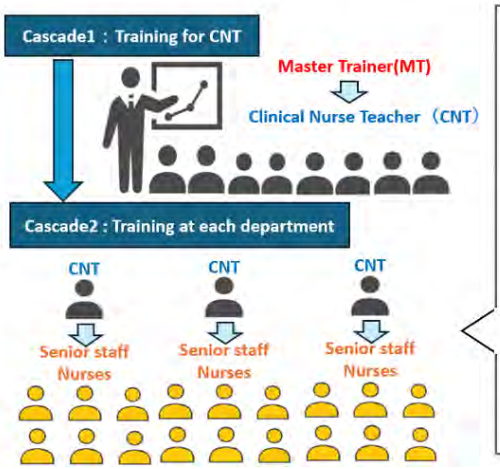
- Use internal resources as lecturers (MT) to avoid paying outside lecturers.
- Emphasize group work, such as exercises, discussions, and role-plays, and reduce lectures that require distributing a lot of handouts.

2. Arrangements to make training convenient for participants

- It is not necessary to conduct full-day training for several days. Select high-needed skills and conduct a 1(one) topic training for nurses who want to brush up his/her skill; e.g. April: Nebulization, May: Blood transfusion, etc (Refer to Figure. 6 Example of In-service training plan of the ShSMCH)

- If all the nurses in the hospital need training, the CNT in each ward should be trained first. Then, the CNT will train the other nurses in their wards. This method, called the "cascade method (Figure. 7)", is efficient and effective for training all nurses in the hospital. It is recommended for disseminating skills that do not require special equipment, such as nursing documentation, or for standardizing particular nursing care.

Figure. 7 The cascade method and training plan at each department



Step-by-Step Plan for Organizing the Training:

1. **Need-Based Agenda:** Select from the CNTs training fundamental skills. Each agenda needs to 07wks for implementation of the training schedule.
2. **Group the Participants into Batches:** Divide the nurses on the sixth floor into 13 batches to maintain coverage in patient areas. Example (if there are 60 nurses total, and each session accommodates 15-20 nurses):

Month	Weeks	Day & Time	Batch	Floor	Agenda
April	3rd wks	Wednesday at 11am	13th batch	MTs + CNTs Leader	Nursing Documentation
	4th wks	Thursday at 11am,	11th &12th batch	5th Floor	
	5th wks	Wednesday at 11am,	9th & 10th batch	4th Floor	
May	1st wk	Tuesday at 11am	8th & 7th batch	3rd Floor	
	2wks	Monday at 11am	6th & 5th batch	2nd Floor	
	3rd wks	Sunday at Sunday	4th & 3rd Batch	1st Floor	
	4th wks	Saturday	1st & 2nd batch	Ground Floor	
June & July	As same as schedule				Vital Sign



This guide was developed as apart of the CBNS-II project aiming to enhance nursing services and clical practice through collaborative effort and capacity building

添付資料　（人間 JR26061 看護人材育成 06）

添付資料 11：　ディセミネーションセミナー　アジェンダ、発表資料

添付資料 12：　最終ステークホルダーワークショップ　アジェンダ、発表資料

添付資料 13：　看護教育および臨地実習の継続的な質向上のための提言書

Dissemination Seminar on Project Outcome and Sustainability
Agenda

Venue: Windy-Town, Bangladesh-China Friendship Conference Center, Sher-E Bangla Nagar, Dhaka

Date: May 14, 2026　　Time: 9:30–16:00

1. Purpose

This dissemination seminar will be held to share the activities and achievements of the CBNS-II Project and disseminate the CBNS Model, practical knowledge, and lessons learned to support sustainable nursing capacity strengthening among relevant institutions.

2. Objectives

- Sharing Project Achievements: Broadly share the capacity strengthening activities implemented by the target colleges and hospitals and the outcomes achieved.
- Presentation of the Model: Organize the experiences of the project into the CBNS model and present it as a practical framework for nursing human resource development.
- Strengthening Continuous Networks: Promote interaction among target and non-target institutions and strengthen the foundation for continuous knowledge sharing and collaboration.

3. Timetable

No.	Time		Activities	Person Responsible
1	9:30-10:00		Registration	
2	10:00-10:10	10 min	Opening session	CBNS-II
3	10:10-10:15	5 min	Remarks/ Speech	DGNM
4	10:15-10:20	5 min	Remarks/ Speech	Ms. Yuko Morikawa, Senior Representative, JICA
Session 1 Project Overview and Introduction of the CBNS Model				
5	10:20-10:50	30 min	• Project overview (CBNS-I and CBNS-II) and introduction of the CBNS model • Introduction of the MT training module and navigation guide	Dr. Abdul Latif, CBNS-II
Session 2 CBNS Model (1): Capacity Development and Localization through Cascade Training				Facilitator: Satu Mondal, CBNS-II
6	10:50-11:20	30 min	Introduction of CBNS Model (1) • Cascade model implementation • Skill development and in-service training • Empowerment of MTs and CNTs through cascade training	MTs from Dhaka team (Dhaka, Sylhet)

No.	Time		Activities	Person Responsible
7	11:20-11:35	15 min	Q&A Session on CBNS Model (1)	Facilitator: CBNS-II
8	11:35-11:50	15 min	Break	
Session 3 CBNS Model (2): Training Methodologies to Enhance Participants' Learning				Facilitator: Nasima Sultana, CBNS-II
9	11:50-12:20	30 min	Introduction of CBNS Model (2) • Practical use of interactive, learner-centered, and case-based approaches to enhance critical thinking and problem-solving • Debriefing for continuous improvement during training	MTs from the Dhaka team (Gazipur, Barisal)
10	12:20-12:35	15 min	Q&A Session on CBNS Model (2)	Facilitator: CBNS-II
Session 4 CBNS Model (3): Strengthened Collaboration Between Colleges and Hospitals				Facilitator: Afroza Banu, CBNS-II
11	12:35-13:05	30 min	Introduction of CBNS Model (3) • Strengthening institutions as well as academic-clinical partnerships • Fostering institutional collaboration through effective communication • Enhancing hands-on training opportunities through clinical practice	MTs from the Mymensingh team (Mymensingh, Rangpur)
12	13:05-13:20	15 min	Q&A Session on CBNS Model (3)	Facilitator: CBNS-II
13	13:20-14:20	60 min	Lunch & Prayer	
Session 5 CBNS Model (4): Standardization and Quality Improvement through Inter-Institutional Mutual Learning				Facilitator: Afroza Banu, CBNS-II
14	14:20-14:50	30 min	Introduction of CBNS Model (4) • Lessons learned from inter-institutional visits and how they were applied in the MTs' own institution afterwards • Collaborative efforts for standardization and quality improvement of own institution and activities	MTs from Mymensingh team (Rajshahi, Chattogram)
15	14:50-15:05	15 min	Q&A Session on CBNS Model (4)	Facilitator: CBNS-II
Session 6 Reflection on CBNS-II Activities				
16	15:05-15:35	30 min	Reflection • Reflection on CBNS-II activities based on today's presentation and prospects for nursing capacity development in Bangladesh	Registrar, BNMC Principal, Grameen Caledonian College of Nursing Director, NIANER
17	15:35-15:50	15 min	Recognition session	CBNS-II
18	15:50-16:00	10 min	Speech and closing remarks from the chairperson	Dr. Syeda Naushin Parnini, Additional Secretary, MEFWD
19	16:00		Group photo session (all participants / members from the eight target nursing colleges and hospitals)	



Project overview and Introduction of CBNS Model

The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

Dissemination seminar, May 14, 2026

Outline

1. Outline of CBNS-II
2. Project activities
3. Overview of CBNS model

Outline of CBNS-II

Background of CBNS-II

Project purpose:
Make nursing education better and be properly monitored and evaluated

Quality of BSc in Nursing education
- Accreditation
- Nursing research
- Committee activities



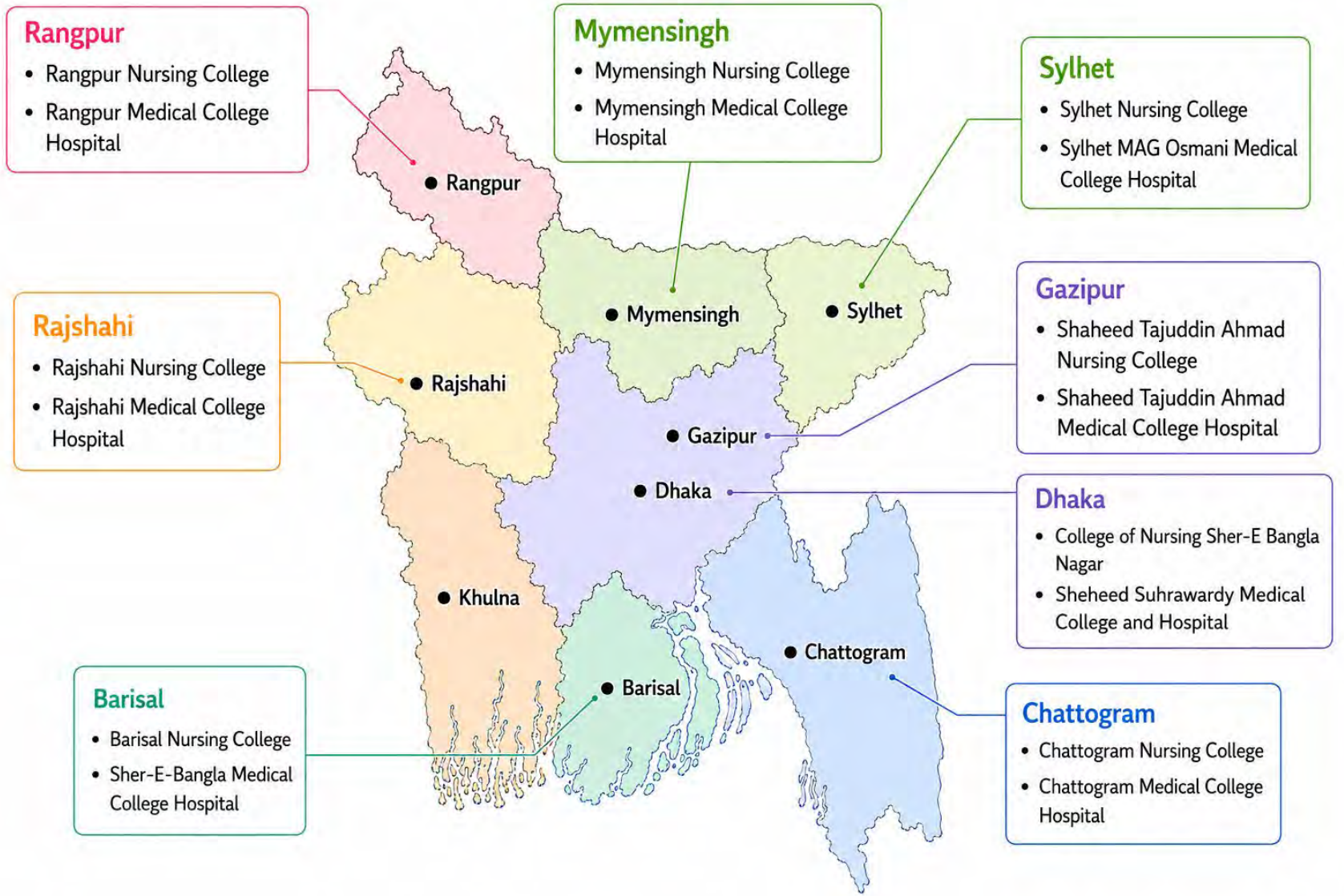
Effective clinical practice system
- MT Training
- CNT Training
- In-service training



1. Nursing administration 2. Nursing education 3. Clinical practice 4. Dissemination

Outline of CBNS-II

- Duration:
  March 2022 – June 2026
- Targets:
  8 Nursing Colleges and Collaborative Hospitals



Project activities

Activities : Nursing administration



<u>Training on the Introduction of 5S</u>

Training to **strengthen Nursing management capacity** through 5S.

<u>Workshop on sharing Japanese experiences in nursing administration</u>

Lecture to **share Japanese experience and discussions on nursing administration in Bangladesh** were held.

<u>Support for the Nursing College Accreditation</u>

Self-assessment reports and accreditation applications were submitted to BNMC.



Activities : Nursing education & clinical practice



Master Trainer (MT) Training

Cascade type training to develop Master Trainers who leads the continuous professional development (CPD) activities in their facility.



Committee Activities

Committees to support the continuous improvement and strengthening of nursing education, research and clinical practice.

Activities : Nursing education



Faculty Development (FD) Training

In-house training lead by MTs in college to improve the quality of college faculty's skills.



Workshop of Subject Based Nursing

Opportunity to discuss **the current situation and how to promote subject-based nursing/teaching** in the college.

Activities : Clinical practice



Clinical Nurse Teacher (CNT) Training

In-house training in hospital lead by MTs to develop CNTs.

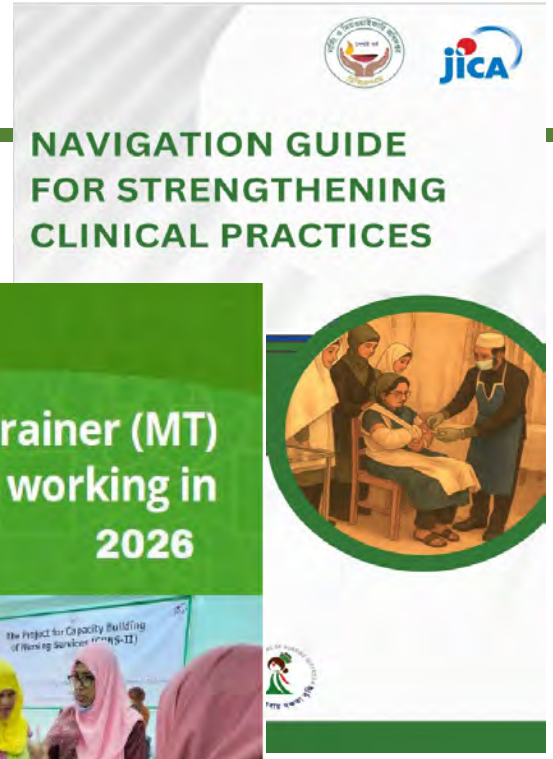


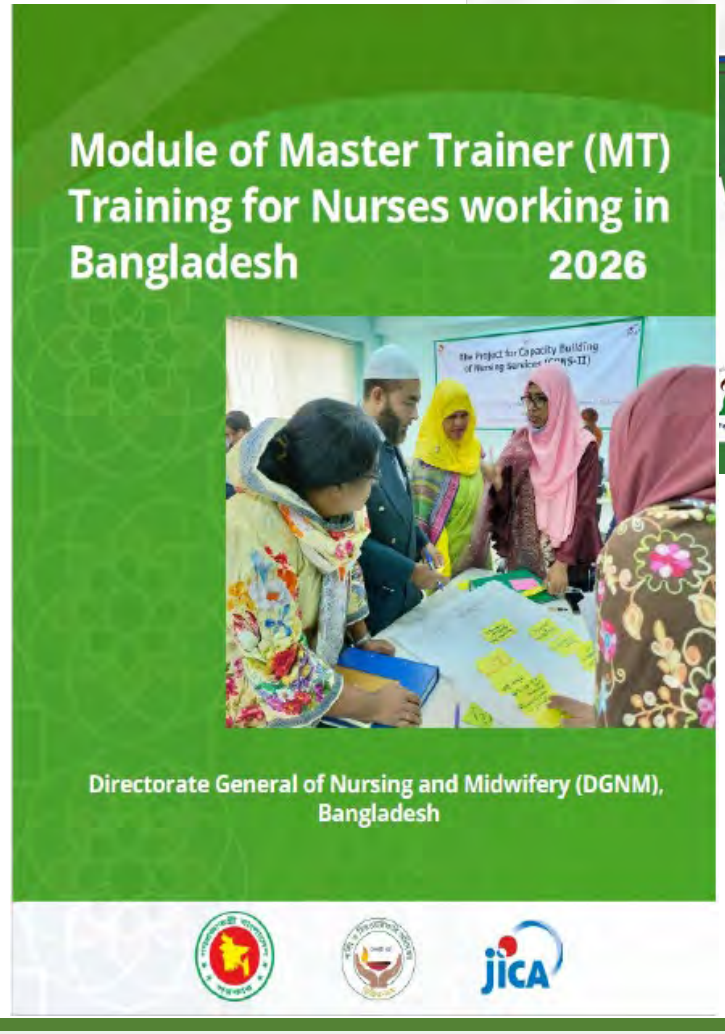
In-service Training for nurses

In-house training in hospital lead by MTs and CNTs to develop nursing skills of Senior Staff Nurses.

Activities : Dissemination







Mutual Visit

Opportunity to **share the knowledge, experiences, and good practice** in the project activities.

MT Training module and Navigation guide development

The module was developed to enable DGNM to **sustainably plan and implement MT training**, and navigation guide to support NCs and hospitals to **conduct CPD activities after the project.**

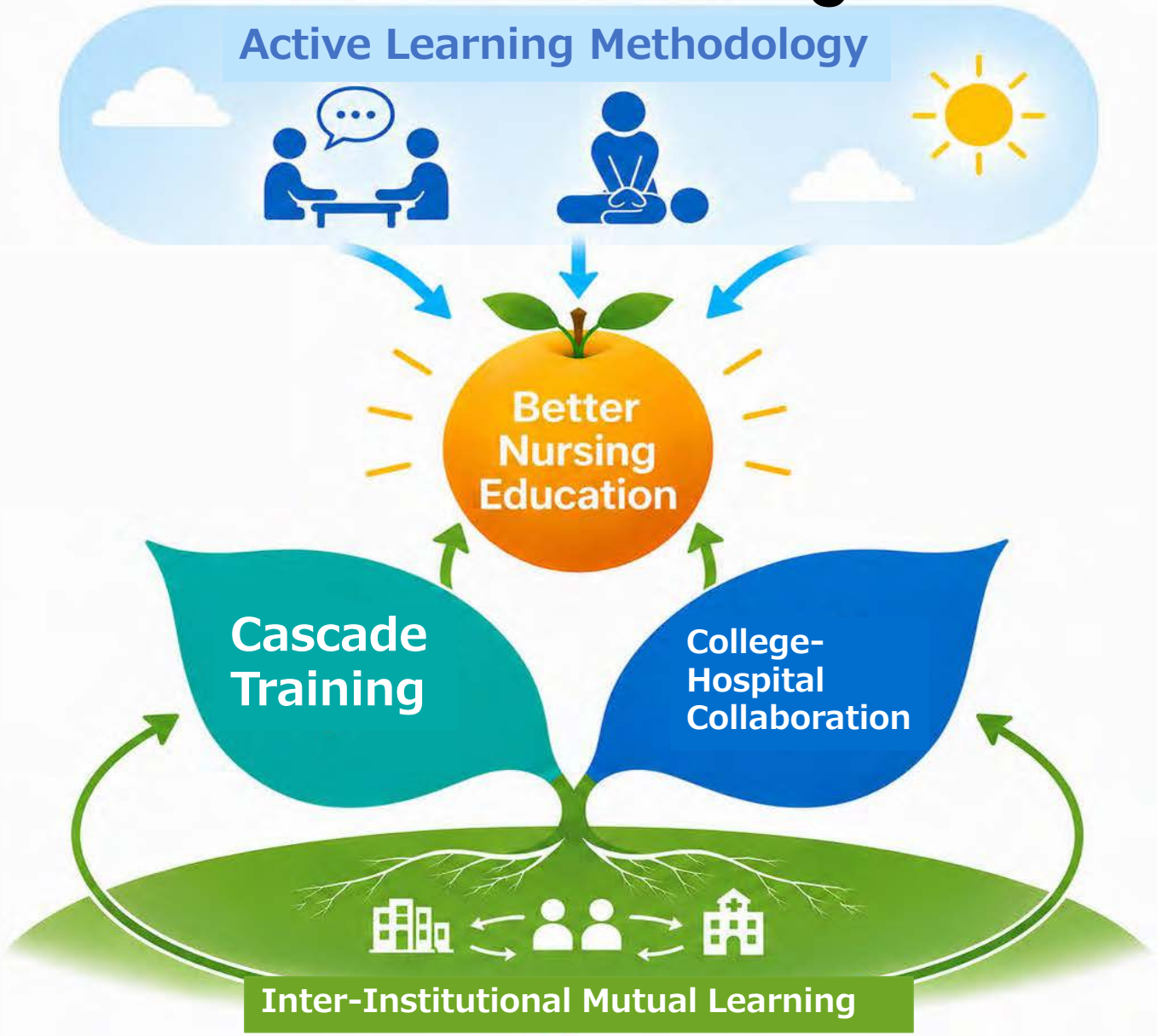
Dissemination seminar

Opportunity to **disseminate experiences and lessons learned from CBNS-II project activities** to non-target institutions.

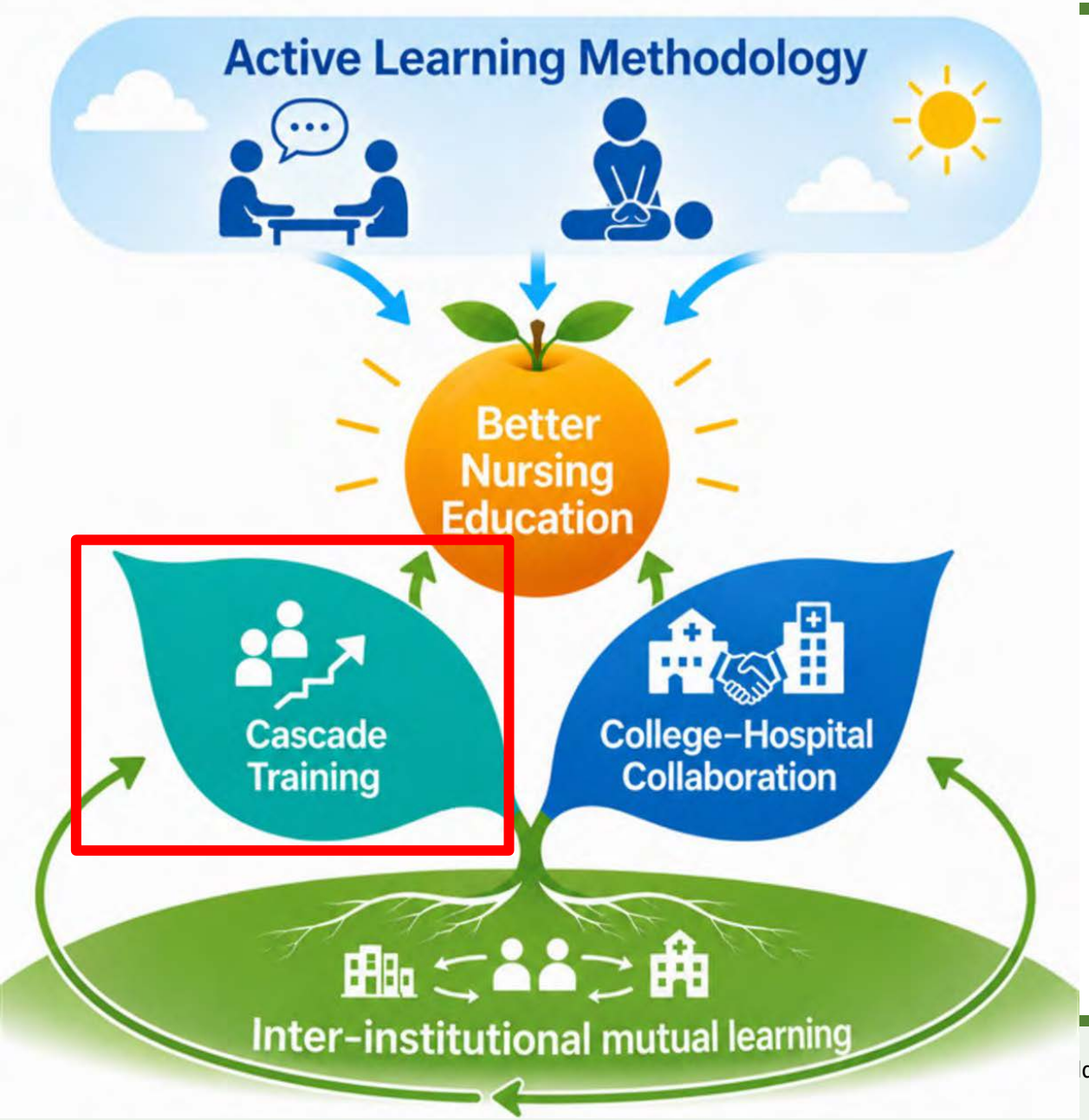
Overview of CBNS model

Effective approaches to enhance Nursing Education

CBNS model



CBNS model: Cascade training



Master Trainer(MT)-led cascade training generates continuous practical competency in the college and hospital.

- ◆Cascade model implementation
- ◆Skill development and in-service training
- ◆Empowerment of MTs and CNTs through cascade training

Master Trainer (MT) Training

- **Active learning sessions** on the following 10 modules for 12 days.

CPD Training in Nursing	Hospital and Ward Management
Leadership and Management	Nursing Ethics
Nursing Process and Fundamental Nursing Skills	Preparation of Clinical Practice Placement
Faculty Development	Research in Nursing
BCC, Communication, and self-management	Information and Communication (ICT) in Nursing

- A total of **64 master trainers** were certified.

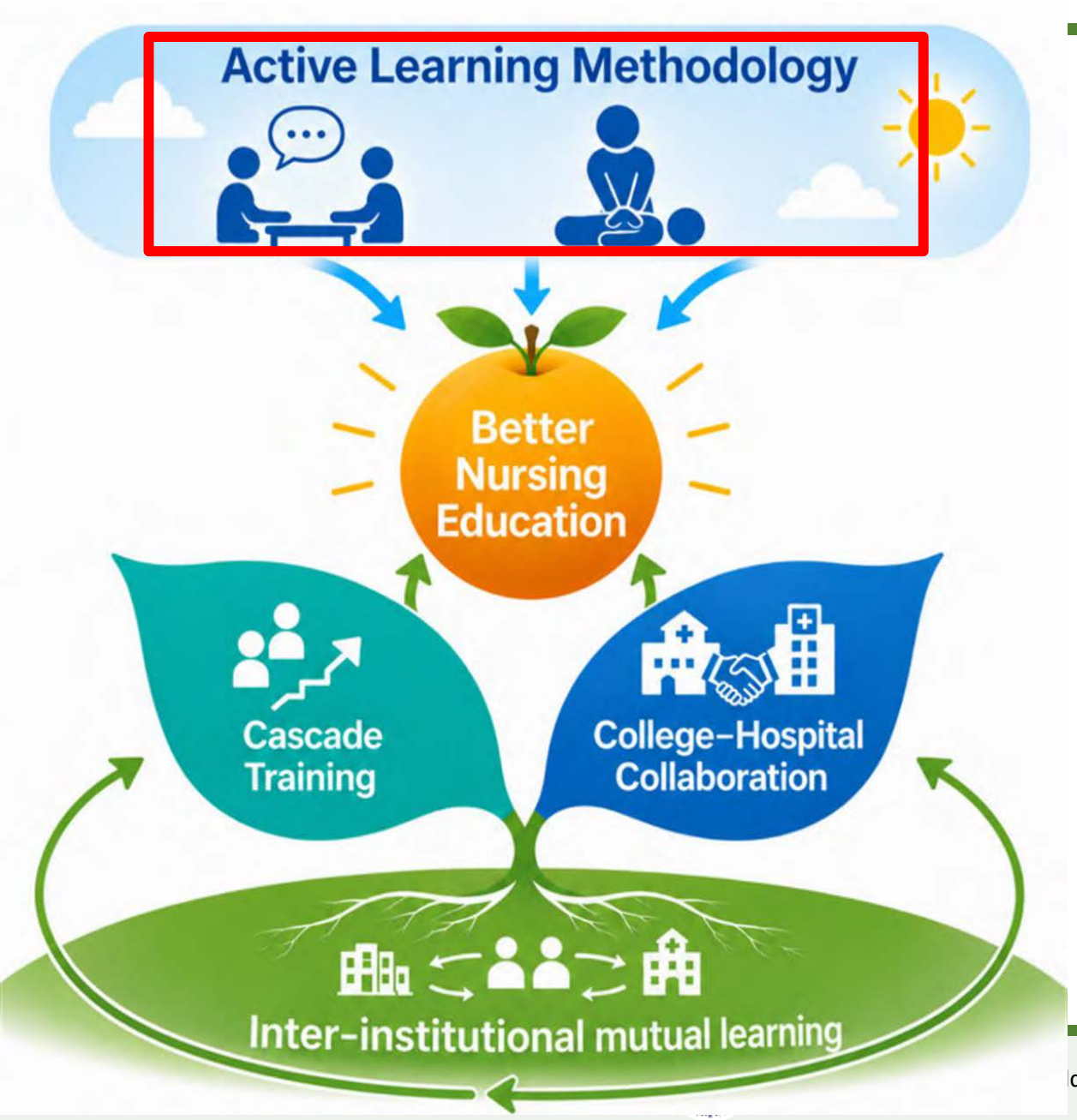
Faculty Development Training

- In-house training lead by MTs to **improve the quality of college faculty's skills.**

Example of themes
Lab lesson plan
Interactive teaching style
Orientation of clinical practice
Nursing care process and plan



CBNS model: Active learning



Active learning improves skill reinforcement and motivation for continuous capacity development.

- Practical use of interactive, learner-centered, and case-based approaches to enhance critical thinking and problem-solving
- Debriefing for continuous improvement during training

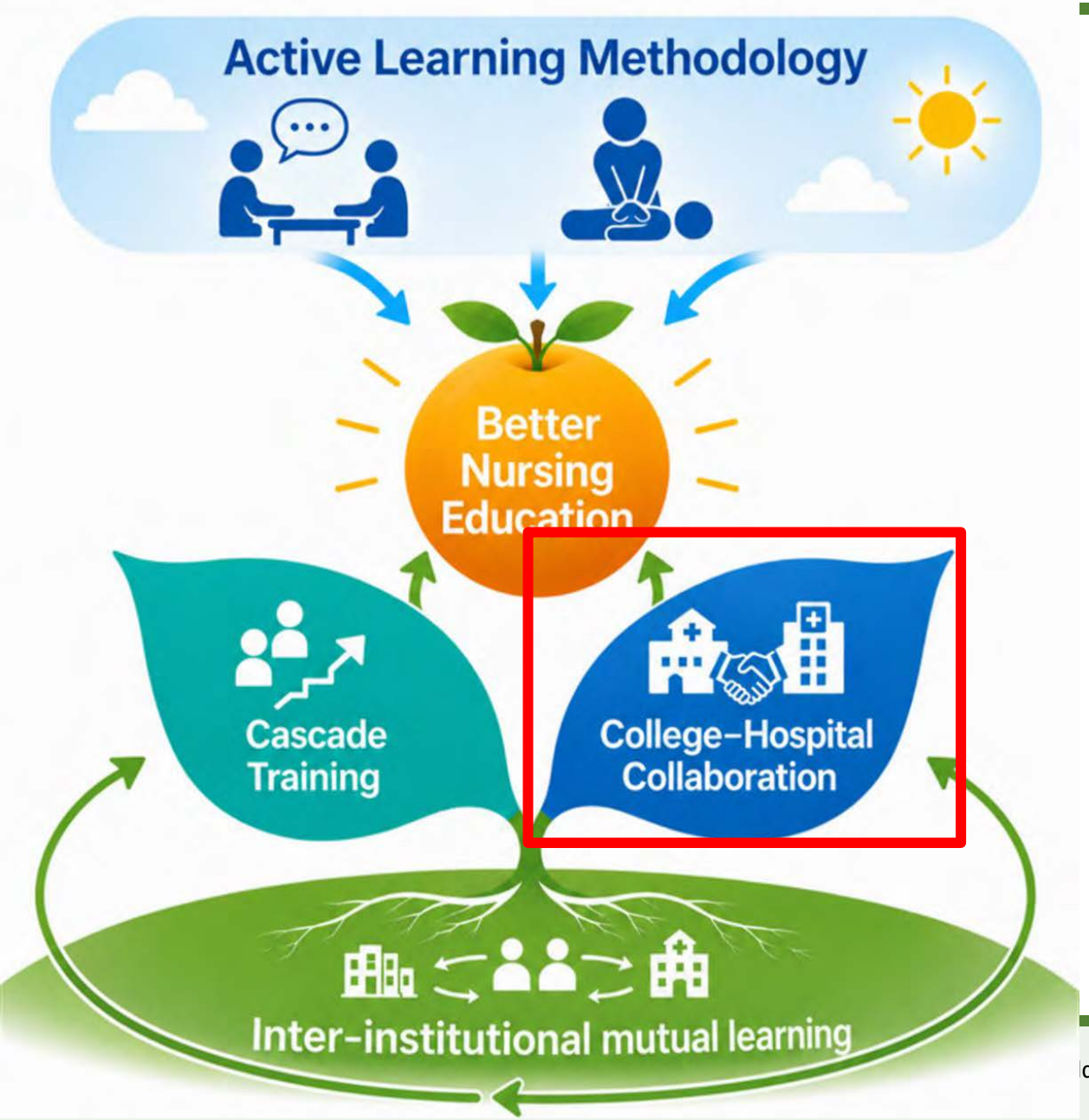
CBNS model: Active learning

CNT Training

- In-house training in hospital lead by MTs to **develop CNTs who support nursing students and staffs in clinical settings.**



CBNS model: College-Hospital collaboration



Strengthened college and hospital collaboration improves the quality of nursing education and clinical practice.

- Strengthening institutions as well as academic – clinical partnerships
- Fostering institutional collaboration through effective communication
- Enhancing hands-on training opportunities through clinical practice

CBNS model: College-Hospital collaboration

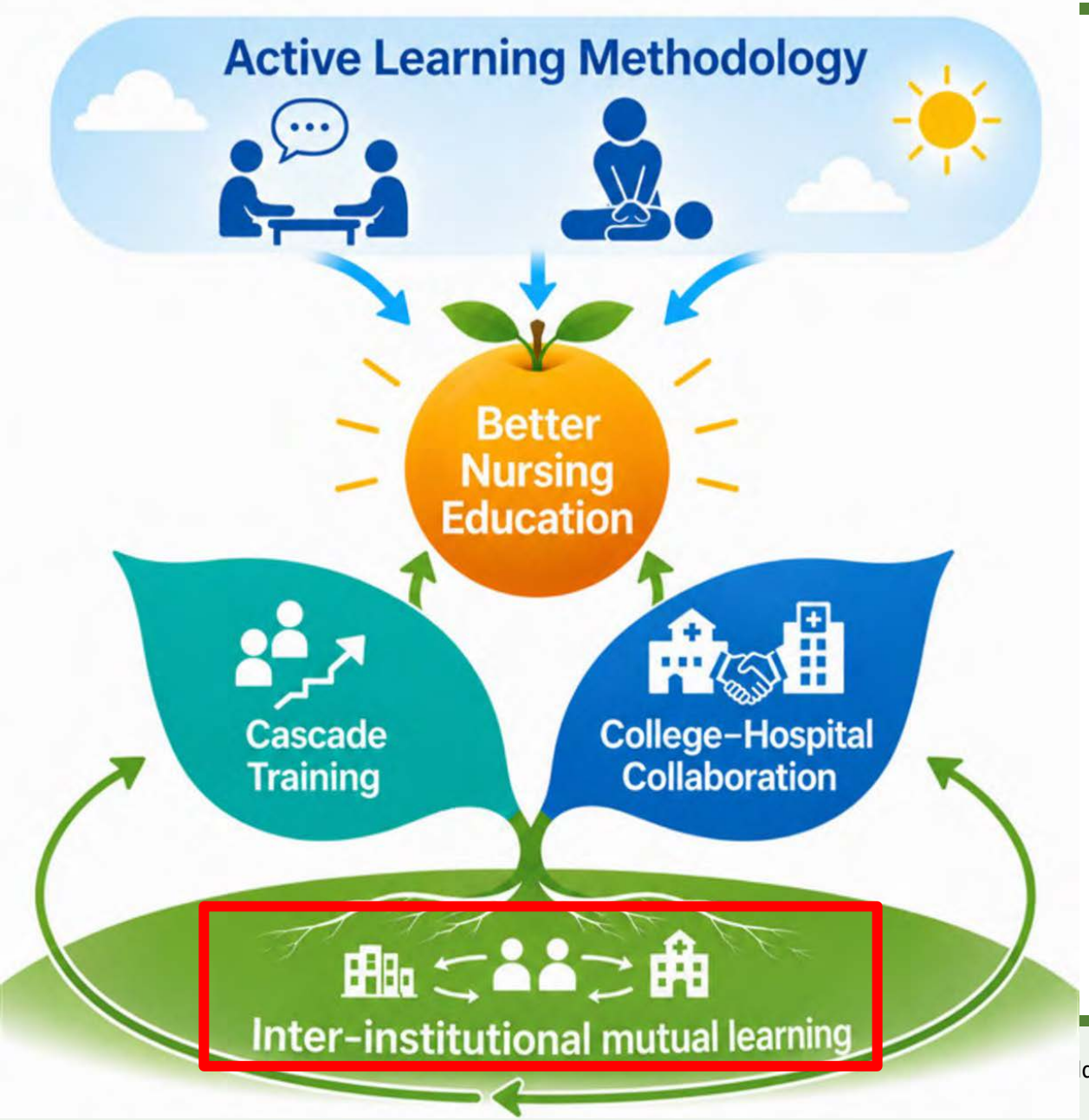
Coordination Committee (CC)

- Build **coordination and collaboration relationship for clinical practice** between college and hospital.

Discussion point in CC (Example)
Ensure Lab practice in college before clinical practice
Promote supervision by CNTs, MTs, and faculties
How to reduce student's absence



CBNS model: Inter-institutional mutual learning



Mutual learning between institutions standardizes practices, promotes the sharing of good practices and the formation of a learning community.

- Lessons learned from inter-institutional visits and how they were applied in the MTs' own institution afterwards
- Collaborative efforts for standardization and quality improvement of own institution and activities

CBNS model: Inter-institutional mutual learning

Mutual Visit

- Share the **knowledge, experiences, and good practice** in the project activities among nursing colleges and hospitals.



Deepen mutual learning

Strengthen networking among institutions

Ensure sustainability



Capacity Development and Localization through Cascade Training 1

The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

Date: 14 May 2026 Prepared by: Dhaka team

Capacity Development and Localization through Cascade Training

- Cascade model implementation
- Skill development and in-service training
- Empowerment of MTs and CNTs through cascade training

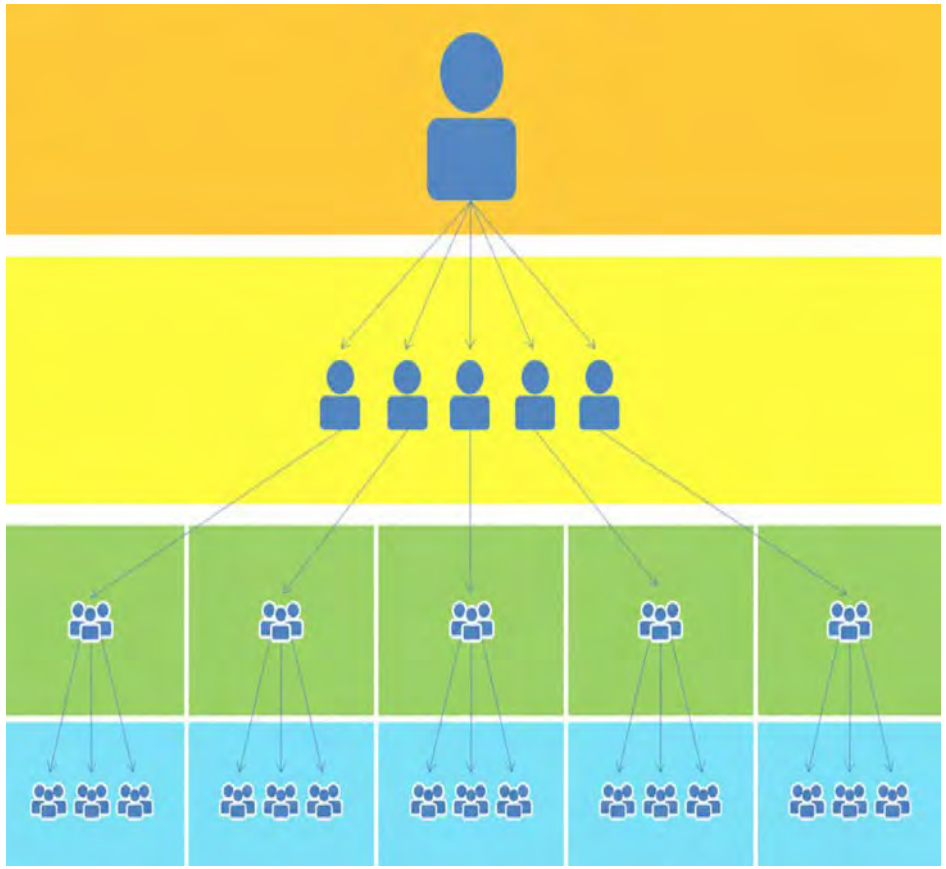


Cascade Training

Capacity Development and Localization through Cascade Training

- The **Cascade model of professional training is a top-down model of professional learning** .
- Train the trainer through several layer which is largely used for in-service training.

- **Objective of the model:**
  - To develop local trainer
  - To ensure the long-term sustainability of the training activities.

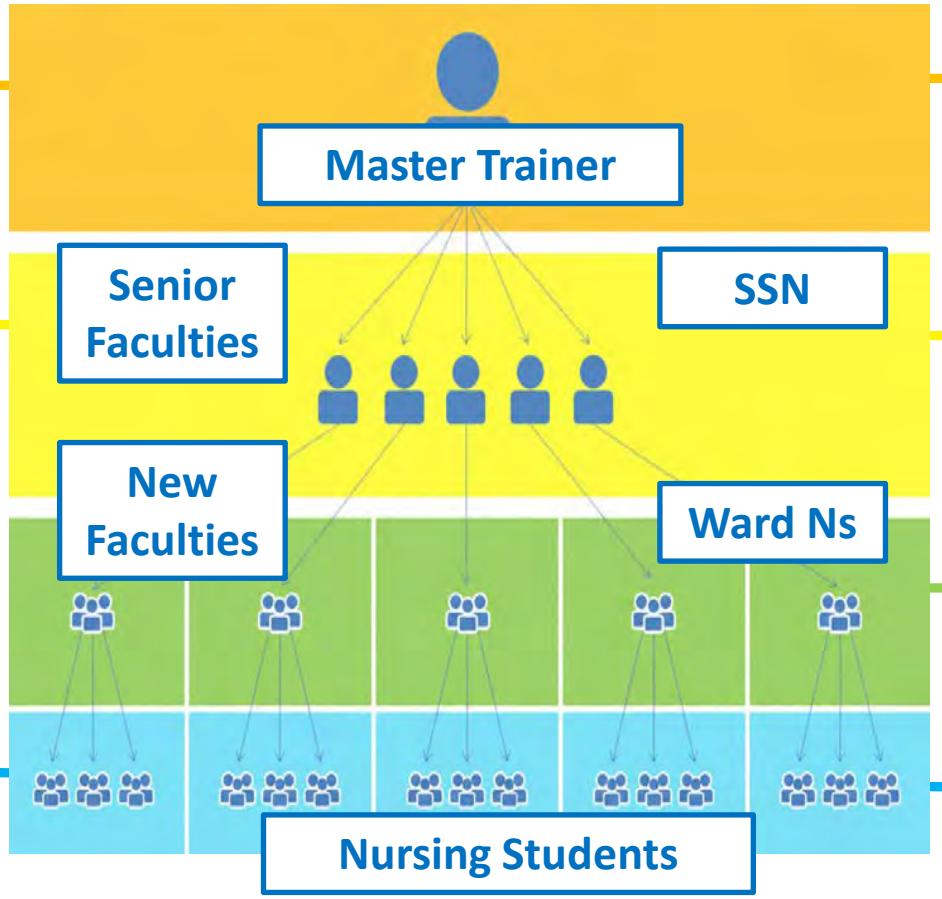


Components of the Cascade Model of CBNS2 Training

Nursing College

- ✓ Faculties par each site took **MT Training**
- ✓ Conducted **FD Training** to the faculties
- ✓ Faculties **applied learned knowledge and skills** to teach nursing students

Cascade Training



Collaborated Hospital

- ✓ SSN par each site took **MT Training**
- ✓ Conducted **CNT Training** to the SSN
- ✓ Conducted **in-service Trainings** at their ward
- ✓ Ns **applied learned knowledge and skills** to teach nursing students

Components of the Cascade Model of CBNS2 Training

1. Advanced Training – Training of Master Trainer

Master Trainer is a highly experienced and specially prepared trainer who teaches other trainers directly.

For example, Preparation of Clinical Practice Placement session include…

Supervision and Monitoring (Group Exercises)





Mentorship and Coaching (Lecture and Brainstorming)

Conduct Coaching in the Clinical Area (Role Play)



Components of the Cascade Model of CBNS2 Training

2. First Level Training – FD Training, CNT Training

Concept of FD Training

Faculty Development Training is a structured program that strengthens educators' teaching, mentoring, and assessment skills. It equips faculty to improve curriculum delivery, support learners effectively, and enhance overall educational quality in academic and clinical settings.





Concept of Clinical Nurse Teacher (CNT) and CNT Training

A Clinical Nurse Teacher (CNT) is a trained, experienced registered nurse who supports students and staff in developing clinical skills and bridging theory and practice through bedside teaching, including orientation, supervision, and evaluation. CNT Training prepares nurses for this role by strengthening their teaching, mentoring, and assessment skills in clinical settings.

Components of the Cascade Model of CBNS2 Training

3. Second Level Training – in-service Training

Concept of in-service training :

In-service training of nurses is specialized, on-the-job organized education designed to update nursing staff on new clinical practices, technologies, and safety protocols within their healthcare facilities. It aims to improve patient care standards and compliance, covering topics like Nursing documentation, Daily bed statement, BCC in Bedside care, and IPC changes.

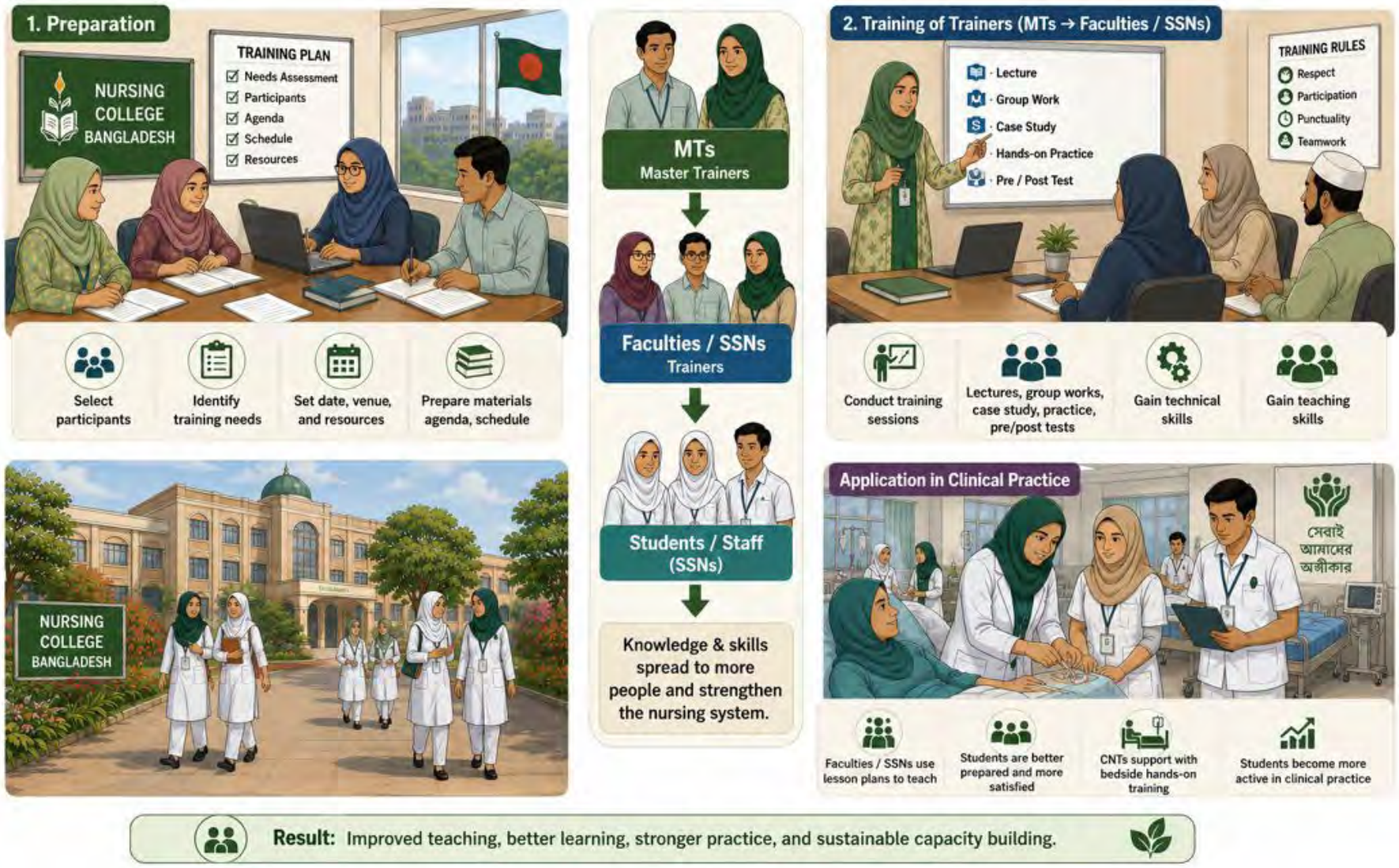








Capacity Development and Localization through Cascade Training



Result: Improved teaching, better learning, stronger practice, and sustainable capacity building.

Capacity Development and Localization through Cascade Training

Comparison Before and After the Activities:

Before	Implementation	After
The Cascade model or the internal /institutional training concept was not considered	Faculties and senior staff nurses trained as Master Trainers under the CBNS-2 project	Active Master Trainers are now ensuring ongoing training to enhance teaching efficiency / clinical environment
Skills gap among teachers in applying topic-specific teaching methodologies.	Implementation of interactive teaching and evaluation methods (e.g., Scenario-based, PBL, Case Analysis).	Teachers are now proficient in modern, interactive methods such as Problem-Based Learning (PBL) and Case Analysis.
A hesitation regarding the competency of & use of senior teachers as Master Trainers	Master Trainers conducted Training Needs Assessments (TNA) and developed a comprehensive annual training plan	Mutual trust and professional relationships have improved; a structured annual training calendar is now functional
Absence of institutional training culture and programs	Continuous in-house training sessions are being conducted by Master Trainers at their own institution	A sustainable in-house training culture has been established, offering continuous professional growth opportunities
MTs could not adequately exhibit leadership competencies	Do teamwork, decision making, delegation of task and taking responsibility of organizing program	Developed leadership skills

Capacity Development and Localization through Cascade Training

Case Study

MT Afroza has completed MT Training then conducted CNT Training for the first time at their hospital. After CNT Training, she has supported CNT Mothiour to plan in-service training at his own ward though CNT Mothiour expressed that he never planned the training and worried about it. MT Afroza spoke to CNT Mothiour that she felt the same when she became MT and needed to plan CNT Training. She shared her own experiences to overcome the situation.

Key Points:

- ✓ CNTs and ward nurses has their supporter at their own institution
- ✓ They can ask a question and receive a support when they need
- ✓ Training needs will be assessed at their own institution
- ✓ MTs, CNTs and ward Nurses all support and learn from each others
- ✓ This led to skill development as well as empowerment of MTs and CNTs
- ✓ This model will be effective at the college situation too.



Capacity Development and Localization through Cascade Training 2

Date: 14 May 2026 Prepared by: Sylhet team

Capacity Development and Localization through Cascade Training

- Cascade model implementation
- Skill development and in-service training
- Empowerment of MTs, Faculties, and SSNs through cascade training



Cascade Training

Empowerment of MTs, Faculties, and SSNs through Cascade Training

1. Preparation of CPD Training session conducted during the MT Training

No.	Time	Topics	Activity	Teaching Methodology	Person Responsible
7	11:45-12:45		Lunch & prayer time– 60mins		
8	12:45-14:45	CPD Training in Nursing	*Preparation of CPD Training* -Training and implementation methods -Preparation using a 5W1H approach - What are the 5W and 1H question	Lecture 20mins Group work 80mins Request: Development of training schedule, agenda, candidates, timetable at their workplace	National Experts as a lecturer

After completing MT training , MTs increased their self-efficacy through conducting cascade training (In-house FD training, CNT Training, and Inservice training and increased collaboration with college and hospital).

Empowerment of MTs, Faculties, and SSNs through Cascade Training

2. Step by Step Preparation

1. Preparation

- ✓ Select participants (Faculties for FD / SSN for CNT Training)
- ✓ Identify training needs
- ✓ Set a date and the venue, select the resources
- ✓ Prepare training materials, agenda, and schedule
- ✓ Pre/post test preparation (Google format / Paper base)



2. Training of Trainers (MTs → Faculties / SSNs)

- ✓ Master Trainers (MTs) conduct training sessions for Faculties / SSNs
- ✓ Sessions include lectures, group works, case study, hands-on practice, and pre/post tests
- ✓ Faculties and SSNs gain both technical skills and teaching skills

Empowerment of MTs, Faculties, and SSNs through Cascade Training

2. Step by Step Preparation (Cont)

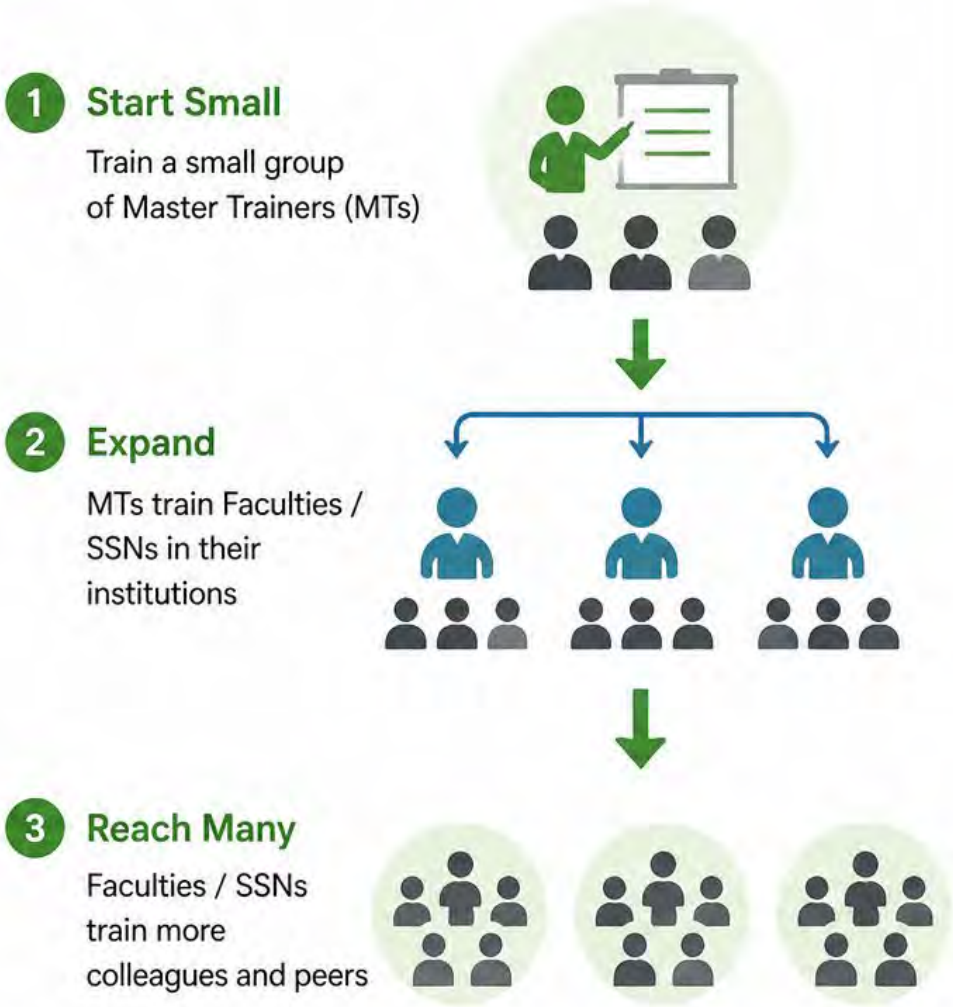
3. Cascade Implementation (Faculties → Students / CNTs → Staff Nurses & Students)

- ✓ Faculties and CNTs return to their workplaces
- ✓ Faculties applies their learned skills to teach students
- ✓ CNTs conduct in-service training for nurses and students
- ✓ Training is adapted to local needs and conditions

4. Follow-up & Improvement

- ✓ Monitor results (e.g., test scores, feedback)
- ✓ Submission of the report to principal / hospital director and share the progress
- ✓ Provide support and supervision
- ✓ Continuously improve training content and delivery

Empowerment of MTs, Faculties, and SSNs through Cascade Training



Why It Works (Advantages)

Starts Small, Expands Big
Begins with a small group, then reaches many people.

Builds Local Trainers
Creates local trainers who continue teaching others, not just temporary learners.

Sustainable System
Establishes a continuous learning system at the local level.

Key Results (Benefits)

- Increased confidence in teaching and public speaking
- Improved communication and collaboration
- Stronger clinical knowledge and practical skills
- Ongoing training system established at the local level

Empowerment of MTs, Faculties, and SSNs through Cascade Training

Comparison Before and After the Activities:

Before	Implementation	After
Had no experience of organizing training	Did all preparatory work like planning, participant selection, equipment preparation, conduction of training and debriefing	Learned the steps of organizing whole training
Felt hesitation to do formal communication with large cohort of people	Communicated with concerning authority, resources, project members, participants	Improved communication skills
No experience of lecture delivery and other teaching methodology (Hospital MTs)	Delivered lecture in an interactive way Instruct group work, role play and presentation	MTs strengthened their self-efficacy through conducting cascade training and overall teaching competence
Students practiced less due to lack guidance and supervision	Actively learn from the faculties and CNTs at lab and hospital	Increase student's interest to practice
Insufficient knowledge on lab lesson plan before training	Faculty development lecture conducted include preparation of lab lesson plan	Prepare and use lab lesson plan properly.

Empowerment of MTs, Faculties, and SSNs through Cascade Training

Case Study

MT Nasrine has completed MT training and back to her college. She called Faculty Development to conduct FD training. They chose the lab lesson plan as a topics and developed it during the FD Training. Faculty participated in FD Training start using the lab lesson plan to teach student before sending them to the clinical practice. Student showed satisfactory towards this process and became more active on attending clinical practice as CNTs at the ward also supported with bedside hands-on training.

Key Points:

- ✓ Training spread step-by-step: MT → Faculty → Students → supported by CNTs
- ✓ Practical topic selected and applied immediately
- ✓ Strong link between classroom learning and clinical practice
- ✓ Students became more active and better prepared
- ✓ Training is effective when it is practical, applied quickly, and reinforced at multiple levels.


Thank
You!

Capacity Development and Localization through Cascade Training



How to start / utilised CBNS Model and experiences at your institution

Start In-Service Training (Ultra-Minimum Version)

Key Message: Start small, keep it simple, and grow step by step.

1. Use who you have
   - 1–2 motivated staff as trainers

2. Choose one simple topic
   - Focus on a basic, daily skill

3. Keep it very short
   - 10–15 minutes
   - Demonstration + quick discussion

4. Do it on-site
   - At the college / ward, during work

5. Use it immediately
   - Apply in daily practice

6. Repeat and rotate
   - Do regularly
   - Learners become next trainers



Training Methodologies to Enhance Participants' Learning 1

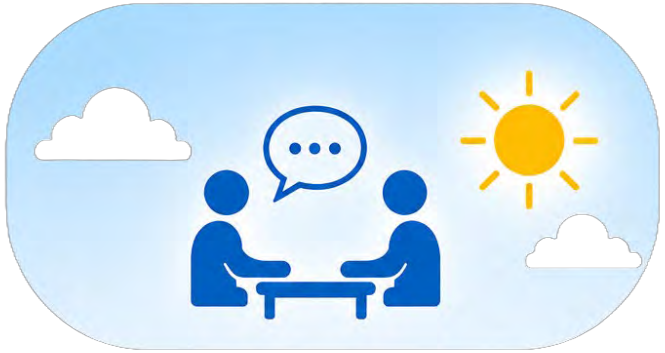
The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

Date: 14 May 2026 Prepared by: Gazipur team

Training Methodologies to Enhance Participants' Learning

- Practical use of interactive, learner-centered, and case-based approaches to enhance critical thinking and problem-solving

- Debriefing for continuous improvement during training



Active Learning Methodology

Training Methodologies to Enhance Participants' Learning

Definition of Training Methodologies

Training methodology is the **planned and systematic way of conducting training** by selecting suitable teaching methods, learning activities, tools, and strategies to achieve the intended learning outcomes effectively.





Training Methodologies to Enhance Participants' Learning



Different Training Methodology used in CBNS2 Trainings

Return demonstration by participants using a competency checklist

Interactive lecture using PPT and videos

Demonstration of the clinical procedure

Case scenario group discussion to improve critical thinking

Question–answer session for clarification of doubts

Hands-on simulation practice using a mannequin.

Post-test assessment to measure knowledge improvement

Participant feedback for training evaluation

- Interactive discussion
- Pre-reading material discussion
- Scenario based role play
- Group discussion
- Fish Bone/ mind map analysis
- Case Study
- Inquiry based learning
- Small group exercises, etc…

Training Methodologies to Enhance Participants' Learning – Example 1

Interactive lecture using PPT and videos -Group Discussion-



Please discuss with your own site team regarding below issue.

We have developed coordination committee between college and hospital focal person to discuss and implement a clinical practice placement.
Please reflect and feedback this committee activities and way forward.

e.g. Challenging in existing system, any change happened / made since Coordination Committee developed.

40mins discussion, 3mins presentation from each 8 sites.

Training Methodologies to Enhance Participants' Learning – Example 2

Interactive lecture using PPT and videos -Case Study-

Maintaining Intake Output Chart

•A student nurse was asked to record the intake output chart of a pancreatectomy patient. The patient is getting I/V fluid, has drain and catheter. The student nurse recorded the urine output, but she forgot to add the amount of drain collection.

As a clinical coach how will you guide student to learn the accurate way the way of maintaining intake and output chart?



Training Methodologies to Enhance Participants' Learning

Role Play



Training Methodologies to Enhance Participants' Learning

BLS Demonstration



Training Methodologies to Enhance Participants' Learning



Comparison Before and After the Activities:

Before	Implementation	After
Passive, less participation	Interactive learning such as Role play, group work and hands on practice has impacts on participants	Active participation, high engagement.
Doubts remain, fear to ask.	Q & A sessions helped to assess the learning and knowledge	Doubts clarified, confident to ask questions.
Unaware of mistakes.	Feedback & reflection given chance refresh learning	Aware of strengths/weaknesses, self-improvement.
Concerned about extra preparation and time demands. (Faculty MTs)	FD training explain the role and way to conduct effective session, makes them more responsible	Recognize workload but feel teaching is more rewarding.

Training Methodologies to Enhance Participants' Learning

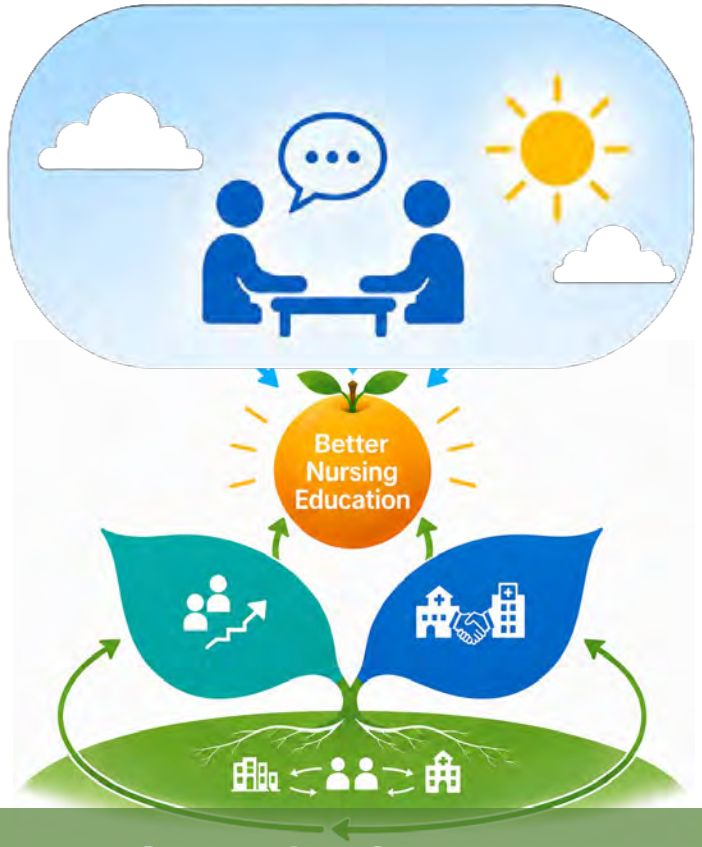


Case Study

Mr. Mehedi is a college lecture and looking after first year student. On his lecture, he tried to engage students with the topics so always asking them their opinion however, students are hesitant to share in the classroom. Mr. Mehedi has been selected as a MT training participants and completed 12 days training. He was very much interested in Teaching Methodology, especially a scenario-based teaching. He start planning the group discussion using scenario which interest the students. Now student seems more confident to share their opinions and learning from their classmates as well.

Key Points

- ✓ Interactive methods increase student participation
- ✓ Group discussion builds student confidence
- ✓ Students learn from each other (peer learning)
- ✓ Active learning improves understanding
- ✓ Teacher facilitation is important for engagement
- ✓ Training helps teachers improve their teaching skills

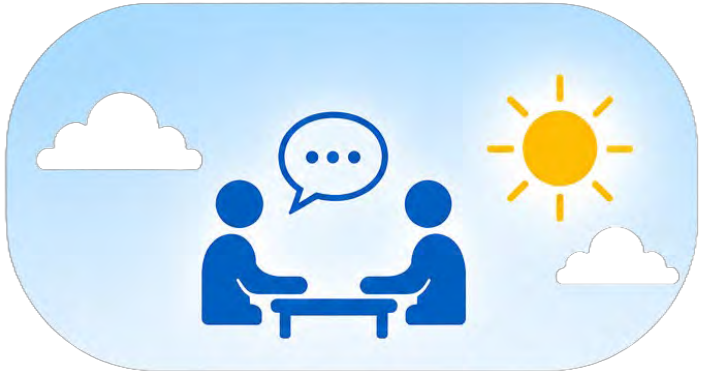


Training Methodologies to Enhance Participants' Learning 2

Date: 14 May 2026 Prepared by: Barisal team

Training Methodologies to Enhance Participants' Learning

- Practical use of interactive, learner-centered, and case-based approaches to enhance critical thinking and problem-solving
- Debriefing for continuous improvement during training



Active Learning Methodology

Debriefing for Continuous Improvement during Training

Definition of Debriefing Session

A debriefing session is a structured conversation that happens after an event, activity, or project. The goal is to review what happened, understand why it happened, and learn from it.



- ✓ It helps improve the activity for next time
- ✓ It provides an opportunity to learn.



Debriefing for Continuous Improvement during Training

Typical structure

- ✓Facts – What happened?
- ✓Feelings / reactions – How did people experience it?
- ✓Analysis – Why did things go the way they did?
- ✓Lessons learned – What should be repeated or changed?
- ✓Action steps – What will we do differently next time?



Debriefing for Continuous Improvement during Training

Example during CNT training



- **Description (What happened):**

During the IM (Intramuscular) injection demonstration session in the CNT Training, not all necessary equipment was properly arranged or prepared before the session began.

- **Feelings (What did we think/feel):**

We felt the session was not as smooth as expected, which made it difficult to maintain the flow of the demonstration.

Debriefing for Continuous Improvement during Training



Example during CNT training (cont.)

- **Evaluation (What was good and not good):**

The demonstration itself was useful for participants' learning; however, the lack of proper preparation and incomplete equipment arrangement affected the effectiveness of the session.

- **Analysis (Why did it happen):**

This occurred due to inadequate preparation, lack of proper planning, and insufficient team coordination and communication.

Debriefing for Continuous Improvement during Training

Example during CNT training (cont.)

- **Conclusion (What have we learned):**

We learned that proper planning and complete arrangement of all necessary equipment are essential before conducting any practical session to ensure smooth implementation and effective learning.



Debriefing for Continuous Improvement during Training



Lesson Learn	Findings/Difficulties	Place to improve
1. Teaching Capacity	Poor confidence	Need more practice.
2. Ability to conduct group work to the participants	Less engagement of participants	Need more concentration for engaging of participants.
3. Time management of each session and overall activities.	Sometimes , there was poor time management.	More practice and attentive for good time management for smoothly running of the session.
4. Engagement of the participants of each session and group work actively.	Identified some participant were not engage in group work.	Participants need more motivation to engage the group work .
5. Agenda implementation.	During training period MTs faced some difficulties due to lack of co-ordination and co-operation.	Need more study and group discussion about agenda before starting the session.

Training Methodologies to Enhance Participants' Learning



Comparison Before and After the Activities:

Before	Impremention	After
Lack of skill of developing agenda	Followed a standard agenda with proper planning and monitoring and distribution of task of each MTs and strictly follow it	Proper and consistent implementation of agenda
Difficulty in improving participant performance	Applied interactive methods (e.g., debriefing, group discussion, role play) to enhance participant performance	Noticeable improvement in participant engagement and performance
Weak group work and a lack of cooperation among MTs	Strengthened teamwork through collaborative planning, role sharing, and regular coordination meetings	Strong teamwork, coordination, and cooperation among MTs
Unable to identify strengths and weaknesses of MTs and participants	Used self-assessment tools and feedback forms to identify strengths and weaknesses of MTs and participants	Clear understanding of strengths and areas for improvement of both MTs and participants
Poor time management during sessions	Introduced structured session plans with clear time allocation for each activity	Efficient time management during sessions


Thank
You!

Training Methodologies to Enhance Participants' Learning



Active Learning Methodology

How to start / utilised CBNS Model and experiences at your institution

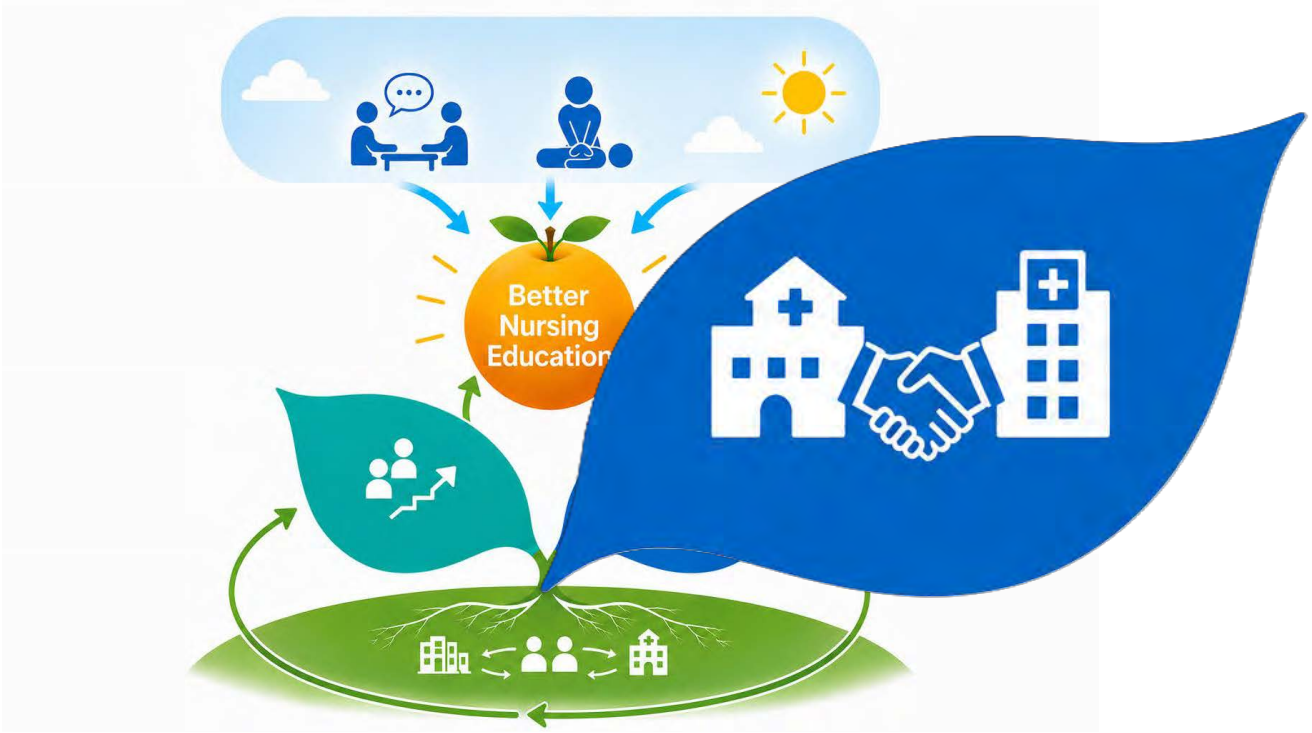
Key Message : Use different technic to make your faculty / staff / student engage with the activities

Practical Teaching Methodology Example in Daily Activities

- Demonstration before lab practice
- Group discussion on case study
- Scenario based role play during fundamental nursing skill practice

Practical Debriefing Example in Daily Activities

- After a student completes a procedure (e.g., injection or patient assessment), the instructor conducts a 5–10-minute debriefing.
- In hospital wards, nurses can do short team reflections after shifts.
- During classroom sessions, teachers can end with a quick reflection discussion.



Strengthened Collaboration between Colleges and Hospitals 1

The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

Date: 14 May 2026 Prepared by: Mymensingh team

About Theme

Strengthened Collaboration between Colleges and Hospitals

- Strengthening institutions as well as academic – clinical partnerships
- Foster institutional collaboration through effective communication
- Enhancing hands-on training opportunities through clinical practice



College-Hospital Collaboration

Strengthening Institutions as well as Academic – Clinical Partnerships



Committee Activities

Clinical Research Activities



Strengthening Institutions as well as Academic – Clinical Partnerships



Committee Activity

Committee activity refers to the organized actions, responsibilities, and functions carried out by a group of appointed members within an institution.

Purpose

- Achieve **specific goals**
- Ensure **governance**
- Improve **quality**

Key Responsibilities

- Planning
- Organizing
- Decision Making
- Monitoring
- Evaluation

Strengthening Institutions as well as Academic – Clinical Partnerships

NURSING COLLEGE

Collaborative Research Activity

Together, we generate evidence to improve nursing practice and education

HOSPITAL

1 Research Planning

- Students and teachers collaborate with nurses
- Identify research topics and plan projects

2 Practical Research at Hospital

- Conduct data collection and analysis (e.g., pre/post intervention, experimental, control)
- Strengthen skills, practice, and clinical environment

3 Dissemination & Publication

- Share and publish research findings
- Recognize best hospital research
- Co-authoring for teachers

Expected Outcomes

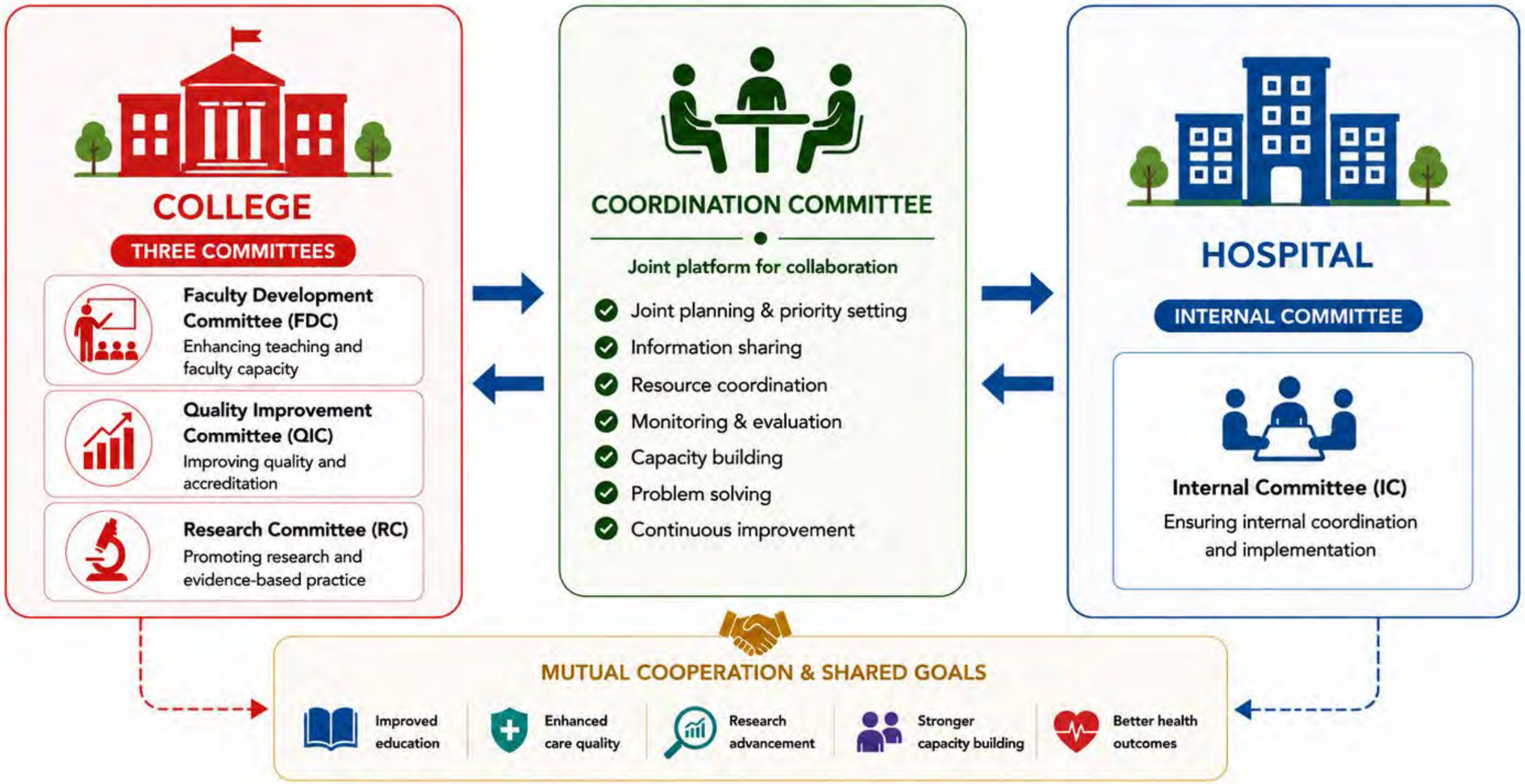
- Improved quality of nursing research
- Enhanced clinical expertise and academic specialization
- Increased research publications
- Strengthened collaboration and capacity building

Strengthening Institutions as well as Academic – Clinical Partnerships

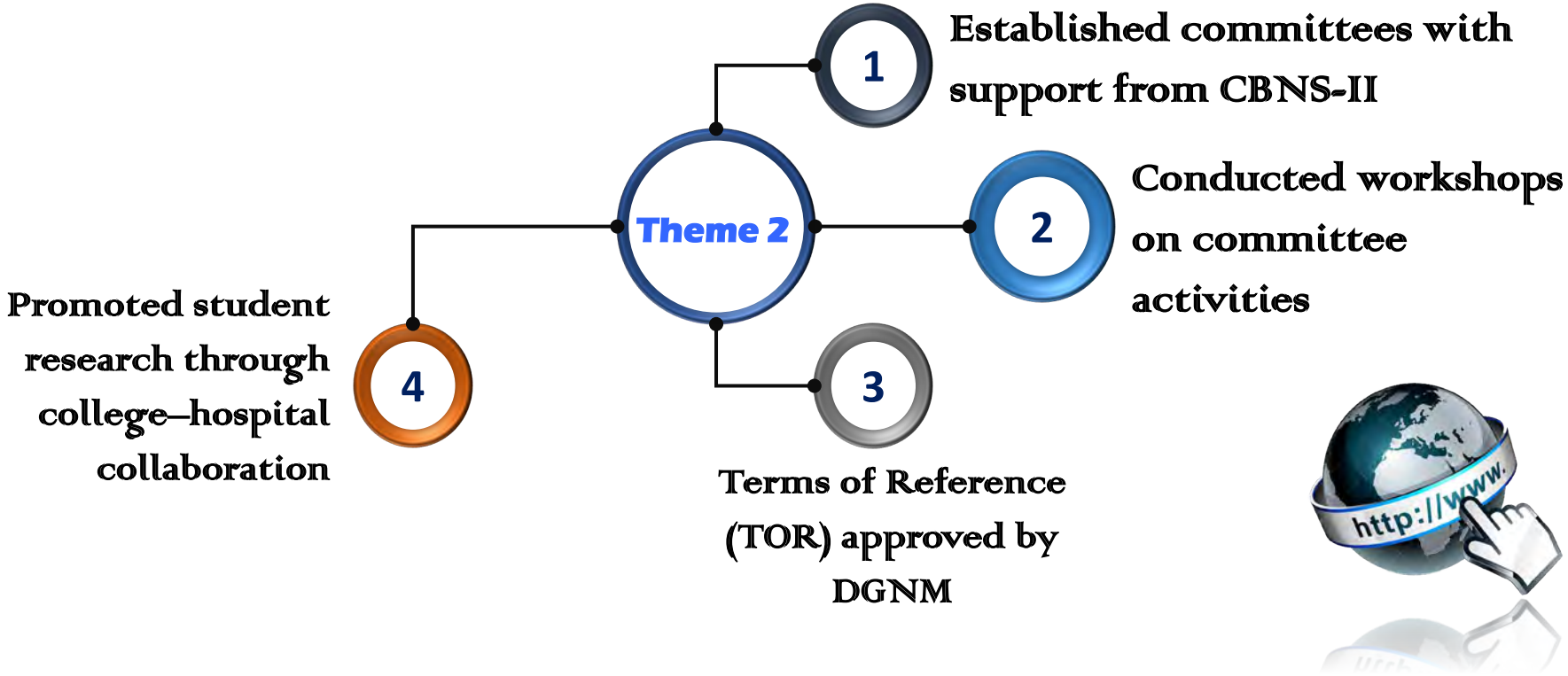
Purpose of the committee

1. Identify the problem
2. Planning policy development
3. Improve communication between college and hospital
4. Avoid confusion and duplication of work
5. Ensure quality and standard of care
6. Encourage teamwork
7. Increase supervision, monitoring and evaluation
8. Supporting institutional improvement

Strengthening Institutions as well as Academic – Clinical Partnerships



What was implemented (specific activities/examples)



Strengthening Institutions as well as Academic – Clinical Partnerships

Comparison Before and After the Activities:

Before	Impremention	After
Weak academic–clinical linkage There was no strong collaborative relationship between college and hospital. e.g.- high absenteeism	(CC) Regular coordination meetings and joint planning between college and hospital	Strong collaborative relationship between college and hospital. e.g. less absenteeism
Limited uses of lab lesson plan and checklists	(FDC) Competency-based learning using checklists, and lab practice.	Improved competency and standardized practice
Limited collaborative research activities	(RC) MT/CNT act as clinical research mentors for students Students received guidance in research activities- proposal, data analysis, etc.	Increased student participation, quality of research activity improved A portion of students completed and submitted research works
Less responsibilities taken about student guidance	(IC) Preparation of CNT for guiding the students.	Improved guidance and accountability for student support
Less support from administrative level	(IC) Regular administrative meetings, policy support, and resource coordination	Increased administrative support and effective resource management

Strengthening Institutions as well as Academic – Clinical Partnerships

Case Study 1

At first, coordination between the nursing college and hospital was weak. Teachers and clinical staff worked separately, causing poor communication, inconsistent student supervision, and student absenteeism. To solve this issue, a Coordination Committee (CC) was established. Regular meetings and joint planning improved communication and clarified shared responsibilities. As result, collaboration became stronger, student supervision improved, and the learning environment became more supportive.

Key Points

- ✓ Establishment of Coordination Committee (CC)
- ✓ Regular meetings between college and hospital staff
- ✓ Joint planning and shared responsibilities
- ✓ Improved communication and supervision
- ✓ Better student attendance and learning environment



Strengthened Collaboration between Colleges and Hospitals 2

Date: 14 May 2026 Prepared by: Rangpur team

About Theme

Strengthened Collaboration between Colleges and Hospitals

- Strengthening institutions as well as academic – clinical partnerships
- Foster institutional collaboration through effective communication
- Enhancing hands-on training opportunities through clinical practice



College-Hospital Collaboration

Enhancing Hands-On Training Opportunities Through Clinical Practice

Situation of Clinical Practice

- Lab lesson plan not conducted properly
- Less hands-on practices
- Fundamental Nursing Skill not conducted by Nurses at Hospital
- Student absence rate was high
- Less coordination among College and Hospital for clinical practice placement

→ **Limited utilization in clinical practice**





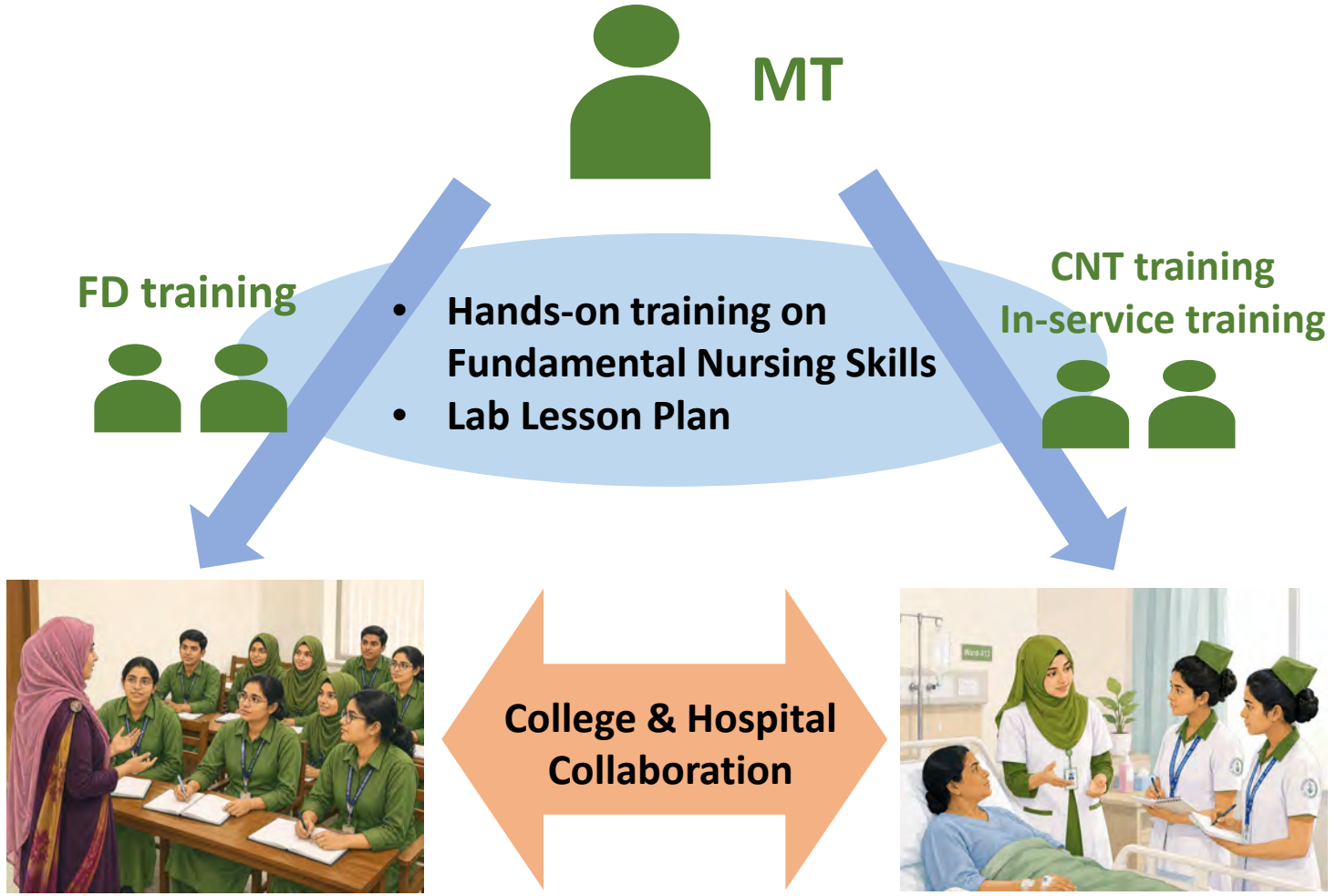
Enhancing Hands-On Training Opportunities Through Clinical Practice

Clinical Practice Enhancement

- **MT training**
- **CNT training**
  - Hands-on practices on Fundament Nursing Skills
  - Monitoring & Supervision Skills

- **FD training**
  - Lab lesson plan
  - Monitoring & Supervision Skills

- **Coordination Committee Meeting**
  - Strengthen communication among College & Hospital for clinical practice placement



Enhancing Hands-On Training Opportunities Through Clinical Practice

Clinical Practice Enhancement



Students Faculty

Communication

MT/ CNT Students



- Follow the lab lesson plan & check list
- Pre-conference every time before clinical practices
- Faculty come hospital with students to monitor clinical practices
- Establish rotation plan for faculty

Discuss monitoring and supervision for student during clinical practices regularly

- CNT monitor & supervise students
- Bed-side, hands-on teaching conducted
- Communication line establish between College and Hospital, in case of emergency

Enhancing Hands-On Training Opportunities Through Clinical Practice

Before	Implementation	After
Faculties don't follow the lab lesson plan & check list	FD training: Lab lesson plan	Faculties follow the lab lesson plan & check list Ensure quality classroom teaching, lab practice and demonstration
- Hospital nurse don't know what to teach to students. - Faced difficulties to guide and monitoring the students properly in clinical practice.	- CNT training: documentation, supervision & monitoring - In-service training: hands-on practices	- Wards staffs properly guide and monitor students in clinical practice - Bed-side teaching conducted
- Student absentees of clinical practices - Students were less interested in clinical practice due to lack of proper guidance.	- CC Meeting: Regular coordination - WhatsApp group for student supervision & monitoring	- College and Hospital communicate often - Student absence rate dropped - Students more involve and interested in clinical practice - Faculty conduct supervision based on rotation plan

Enhancing Hands-On Training Opportunities Through Clinical Practice

Case Study

Before Ms. Nasima, a Senior Staff Nurse become CNT at Hospital, lacked confidence in supervising students and providing bedside training. Students showed low interest and poor attendance in clinical practice, while college–hospital coordination was limited. After CNT training, Ms. Nasima became more confident in supervising students and providing hands-on practice.
As a result, student attendance, engagement, and confidence in clinical practice improved. She received the voice from students such as “Clinical practice was interesting. Thank you madam for teaching me so nicely.”

Key Points:

- ✓ Regular coordination strengthens collaboration between colleges and hospitals
- ✓ Clear roles and hands-on guidance improve clinical practice education
- ✓ Strong collaboration increases student confidence, engagement, and satisfaction


Thank
You!

Strengthened Collaboration between Colleges and Hospitals



College-Hospital Collaboration

How to start / utilised CBNS Model and experiences at your institution

Clinical Practice & Collaboration (Ultra-Minimum Version)

Key Message: Communicate with Hospital before sending students to clinical practices.

1. Decide responsible person in both College and Hospital

- 2-3 motivated staff as communication member from each College and Hospital

2. Create WhatsApp group

3. Communicate each other when you send students

- Use WhatsApp chat group for student management and in case of emergency

4. Recommend to have physical meeting every month



Standardization and Quality Improvement through Inter-Institutional Mutual Learning 1

The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

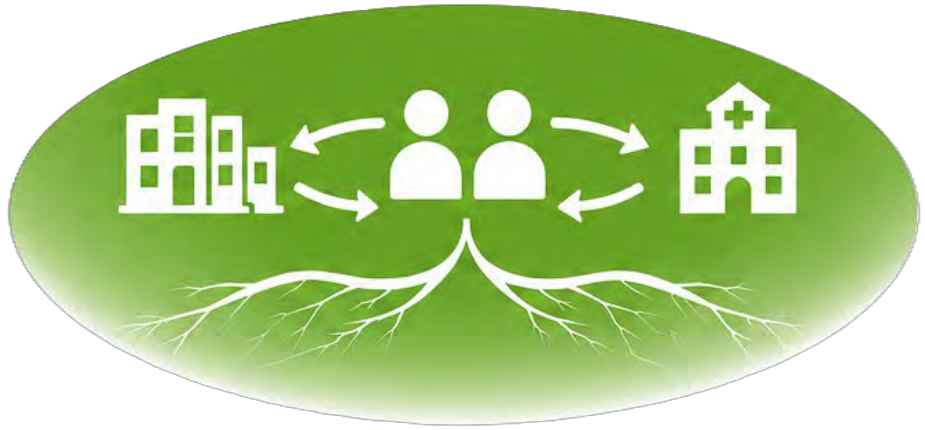
Date: 14 May 2026 Prepared by: Rajshahi team

About Theme

Standardization and Quality Improvement through Inter-Institutional Mutual Learning

- Lessons learned from inter-institutional visits and how they were applied in the MTs' own institution afterwards

- Collaborative efforts for standardization and quality improvement of own institution and activities



Inter-Institutional Mutual Learning

What is “Mutual Visit”?

- Inter-institutionals visit: Medical College Hospital and Nursing College
- **Host institute**: Share experiences and good practices.
- **Visiting institute**: Observe facilities, share knowledge, learn from each other and apply the learning in other own institution .

Got full support from hospital Director: logistic supports, allocated budget for entertainment, welcomed visiting participants in person and offered appreciated crest to the chief advisor.



Mutual Visit: Day 1 activities

- ✓ Share experience from both RMCH & RNC.
- ✓ Conducted in-person visit of RMCH & RNC

Hospital visit areas:

- oAdministrative block
- oMedicine & Surgery ward
- oWaste management system
- oUnknown patient ward
- oRecord room
- oICU & IPC department
- oIndoor pathology

College visit areas:

- oCollege visit areas:
- oAdministrative block
- oSkills lab (Midwifery, Anatomy,
- oMicrobiology, Computer)
- oResearch cell
- oLibrary
- oClassrooms



Mutual Visit: Day 2 activities

- ✓ **Group work & discussion**: Good practice, challenges and recommendations. Sharing sessions of group findings.
- ✓ Closing session by Principal and Deputy Nursing Superintendent.



Current Situation of Subject Based Nursing

- Not fully structured system of subject based teaching
- Number of subjects and subject assignment were decided by principal.
- Few faculty members who had expertise on specific subject.
- Not sure what defines what is considered to determine potential expertise.

→ Imbalance and mismatch distribution of subjects are common in nursing colleges.





Experience sharing by CONSBN and MNC

Workshop of Subject Based Nursing

Objectives

To share the current status and develop an action plan of Subject-based teaching among the participating colleges

1. Orientation about the subject based teaching.
2. Shared experience of subject based teaching implementation (by MNC and CONSBN).
3. **Group work**:
   Set criteria for distribution of subjects. Develop subject based teacher list according to given excel template. Shared idea with others nursing college.



Participants developing subject based teaching list

Example: Faculty information analysis and subject assignment

Match: ◎; Do not Match: X; Potentiality:○

Faculty ID	Degree	Teaching experience (duration)	Course assigned	Potentiality		
				Fundamental Nursing	Adult/ gerontological Nursing	Community Health Nursing
T001	MPH	3 years	- Fundamental Nursing (co-teacher) - Community Health (co-teacher)	×	×	○
T002	PhD/ MSC	15 years	- Community health (main)	○	×	◎
T003	MSC in Adult Nursing	18 years	- Adult Medical & Surgical Nursing (main)	○	◎	×

How the experiences of mutual visit were applied in the MTs' Own Institution Afterwards

Before	Implementation	After
Not clearly defined the role and specific scope of responsibilities of the SSNs	**Mutual Visit** Inspired by ShSMCH visit	Introduced role clarification and specific responsibilities of SSNs
Less organized in the College	**Mutual Visit** Inspired by several other College visit	- Labeled all equipment and facilities - Installed location boards - Improved overall organization and environment.
Inadequate information of faculties background	**Subject-base nursing** - Collected information on expertise and experience of faculties - Allocate faculty based on data analysed	- Assign teachers with deep knowledge in their specific subject area - Improve knowledge and skill on specific subject. - New faculties get opportunity to learn from experienced teacher.

How the experiences of mutual visit were applied in the MTs' Own Institution Afterwards

Case Study

Classes at the Nursing College were often missed due to uneven workload distribution, with some faculty teaching more than three subjects while newer faculty had limited learning opportunities. As a result, both faculty and students were dissatisfied.
To address this, the principal and MTs at Rajshahi Nursing College introduced subject-based teaching after learning good practices from CONSBN and MNC. Main and co-teachers were assigned to each subject, reducing missed classes and improving teaching focus. Newer faculty also gained learning opportunities from experienced teachers, leading to higher satisfaction among faculty and students.

Key Points:

- ✓ Learning from other institutes' good practices supports institutional improvement
- ✓ Understanding workload imbalance helps identify effective solutions
- ✓ Subject-based teaching with balanced roles improves teaching quality and faculty satisfaction



Standardization and Quality Improvement through Inter-Institutional Mutual Learning 2

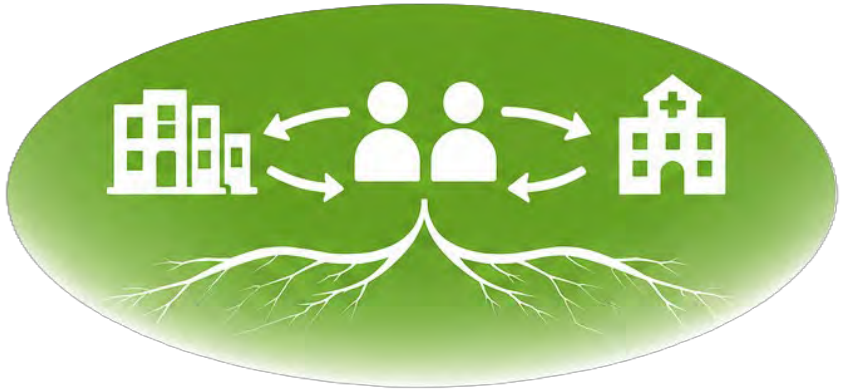
Date: 14 May 2026 Prepared by: Chattogram team

About Theme

Standardization and Quality Improvement through Inter-Institutional Mutual Learning

- Lessons learned from inter-institutional visits and how they were applied in the MTs' own institution afterwards

- Collaborative efforts for standardization and quality improvement of own institution and activities



Inter-Institutional Mutual Learning

Why Accreditation?

- Ensure quality in **education & care**
- Promote consistent standards
- Improve patient outcomes

Accreditation is important for standardizing nursing quality

Standard 1: **Administration and Leadership**
(Leadership autonomy, Roles assigned with guidelines etc.)

Standard 2: **Student type and Intake**
(Admission follows government policy etc.)

Standard 3: **Teaching staff and learning**
(Effective teaching methods, Evidence-based learning etc.)

Standard 4: **Curriculum Delivery**
(Competency-based learning, Theory–practice balance etc.)

Standard 5: **Resources** (Safe facilities & student support etc.)

Process toward Obtaining Accreditation Supported by CBNS-II

Step 1

- Understanding the Accreditation concept
- Orientation on the BNMC-approved self-assessment tool (Principal and all faculty members)

Step 2

- Created a working group according to the five standard
- Conducted self-assessment according to the five standards
- Found and filled gaps based on the result of self-assessment



Step 3

- Applied to the BNMC for a site visit to validate the self-assessment results
- BNMC: Site visit (Nov 2025), Decision making committee (Feb 2026)
- The executive committee meeting will be held to declare accreditation status.

Standardization and Quality Improvement through Accreditation Process

Accreditation standards	Before	Implementation	After
Standard 1	Documents were not organized	Maintain records and documentation	Ensure documentation and record keeping
Standard 3	Traditional teaching method	- FD training - Lesson plan and lab lesson plan	- Teaching competencies and confidence improved. - Apply a variety of teaching methods - Standardized lesson plans & lab lesson plans
Standard 3	Limited clinical supervision	CNT training: supervision and monitoring	- Supervision, monitoring, and feedback by CNTs. - Student absence rate has dropped - Students are motivated and actively participated to clinical practice
Standard 4	Less communication between College and Hospital	- CC meeting - Feedback system regarding students' issues	- Minimize gaps by monthly meeting.

Case Study

Before accreditation, Chattogram Nursing College had limited awareness of self-assessment and quality improvement. After forming a working group and conducting a self-assessment, the college identified gaps and made improvements. Faculty strengthened teamwork, responsibility, and time management, while students became more engaged in clinical practice. Collaboration with the hospital also improved. As a result, education quality and relationships among faculty were strengthened, and the college is now pursuing accreditation.

Key Points:

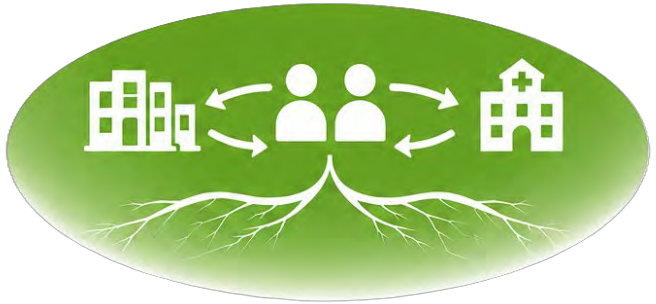
- ✓ Accreditation activity improves the quality of nursing education
- ✓ Self-assessment builds faculty responsibility and reflection
- ✓ Team-based efforts strengthen collaboration among faculty


Thank
You!

Standardization and Quality Improvement through Inter-Institutional Mutual Learning

Key points to start capacity building activities

Key Message: Start understanding the institutional situation and fill the gaps step by step with your colleague.



Inter-Institutional Mutual Learning

◆ **Recommended to start with..**

[Subject base nursing]

1. Compile faculties information within the college

2. Allocate main and co-teacher

[Accreditation]

1. Understand criteria of Accreditation and concept among faculties

[Mutual learning]

1. **Visit near institution (CBNS-II related and/or non-related)**

2. **Hear the story of other institution for their activities**
   Share idea and information

The Project for Capacity Building of Nursing Services Phase 2 (CBNS-II), Bangladesh

(JICA Technical Cooperation Project)

Final Stakeholder Workshop

Agenda

Location: CIRDAP

Date: 2nd June, 2026

Time: 12:30 – 16:00

Agenda: 1. To share the achievements of CBNS-II.
2. To present and discuss the CBNS Model.
3. To discuss future directions with stakeholders for strengthening nursing education.

Timetable:

Time	Activities	Responsible Persons
12:30-13:30	Registration and Lunch	
13:30-13:40	Introduction of Participants	Participants
13:40-13:45	Objectives of the Meeting	CBNS-II
13:45-13:55	Opening Remarks	Ms. Yuko Morikawa, Senior Representative, JICA Bangladesh Office
13:55-14:15	Overview and Key Achievements of CBNS-II	Ms. Yoshie Mizogami, Chief Advisor, CBNS-II
14:15-14:35	Presentation of the CBNS Model: Key Components, Good Practices, and Lessons Learned	Dr. Md. Abdul Latif, Senior Consultant, CBNS-II
14:35-14:45	Recommendations from the Project team	Ms. Yoshie Mizogami, Chief Advisor, CBNS-II
14:45-15:20	Reflections from Key Stakeholders	BNMC, BNA, Representatives from CBNS-II target NCs and hospitals, Representative from CBNS-I target NC and hospital, DPs
15:20-15:30	Future Directions	DGNM
15:30-15:50	Discussion on Future Directions: - Institutionalization of key approaches (CBNS Model) - Potential for scale-up / integration into the national system - Roles of stakeholders and partners	All participants
15:50-16:00	Summary and Closing Remarks	Mohammad Nora Alam Siddique, Additional Secretary (Medical Education Wing), MEFWD



Overview and Key Achievements of CBNS-II

The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

The Final Stakeholder Workshop, June 2, 2026

Overview of CBNS-II

- **Title**: Project for Capacity Building of Nursing Services Phase 2 (CBNS-II) (JICA technical cooperation project)
- **Duration**: March 2022 – June 2026
- **Target Institutions**: 8 public nursing colleges and 8 medical college hospitals at the divisional level

Target Nursing Colleges	Target Medical College Hospitals
College of Nursing, Sher-E Bangla Nagar (Dhaka)	Shaheed Suhrawardy Medical College Hospital
Mymensingh Nursing College	Mymensingh Medical College Hospital
Chattogram Nursing College	Chattogram Medical College Hospital
Sylhet Nursing College	Sylhet MAG Osmani Medical College Hospital
Rajshahi Nursing College	Rajshahi Medical College Hospital
Rangpur Nursing College	Rangpur Medical College Hospital
Barisal Nursing College	Sher-E-Bangla Medical College Hospital
Shaheed Tajuddin Ahmed Nursing College (Gazipur)	Shaheed Tajuddin Ahmed Medical College Hospital
Dhaka Nursing College (Phase 1 target)	Dhaka Medical College Hospital (Phase 1 target)

Background and Key Challenges in Nursing Sector

Governance / System Challenges

- Variations in institutional capacity
- Limited monitoring and supervision
- Weak college-hospital linkage

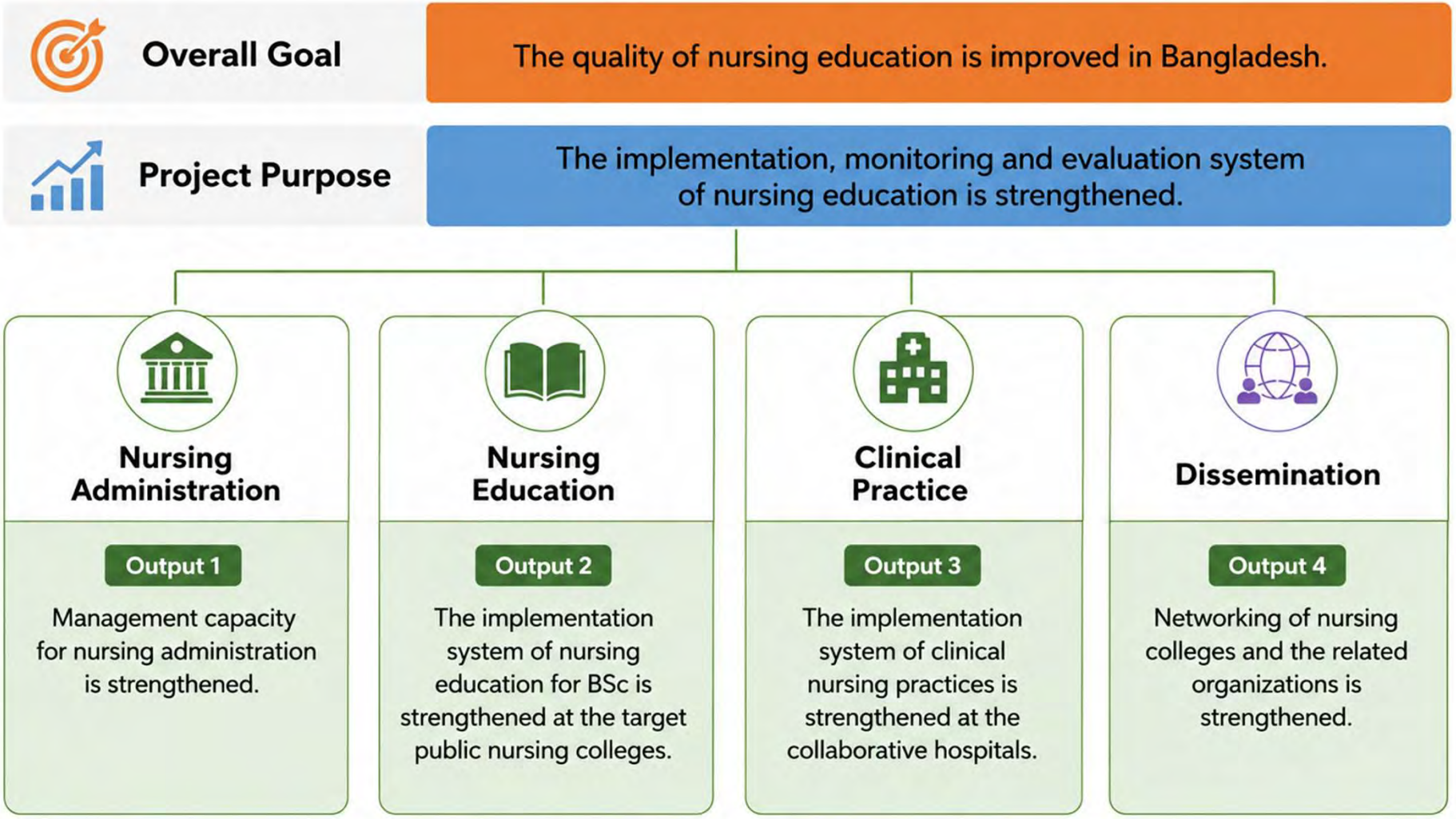
Education / Clinical Practice Challenges

- Theory-practice gaps
- Limited practical learning opportunities
- Insufficient clinical supervision

HR / Professional Challenges

- Limited CPD opportunities
- Unclear career paths
- Need for leadership development

Project Summary of the CBNS-II



Output 1 (Nursing Administration)

Key Components	Major Achievements
Development of nursing career paths	Career path proposals and related documents submitted to MOHFW
Support for nursing college accreditation processes	4 nursing colleges (MNC, CONSBN, RpNC, and CNC) submitted accreditation applications to BNMC
Support for accreditation review and decision-making processes	Accreditation site visits and review committee processes conducted for MNC, CONSBN, RpNC, and CNC
Practical learning on nursing management and quality improvement	Practical approaches to quality improvement and nursing management were introduced and discussed based on Japanese experiences
Inputs to discussions on the CPD framework	CPD concepts incorporated into training activities and policy discussions







Output 2 (Nursing Education)

Key Components	Major Achievements
Master Trainer (MT) training programs	64 MTs trained from nursing colleges and hospitals, including 24 college-based MTs
Development of MT training materials and practical tools	Practical training materials and guidance tools developed and approved
Faculty development (FD) trainings at nursing colleges	MT-led FD trainings introduced and expanded across target colleges
Promotion of college-hospital collaboration	Improved coordination between nursing colleges and hospitals for clinical practice management and student supervision
Promotion of nursing research activities	Pilot clinical research conducted jointly by faculty, students, and hospital staff
Promotion of subject-based nursing education	Discussions on faculty allocation and subject-based nursing education initiated







Output 3 (Clinical Practice)

Key Components	Major Achievements
MT training programs	64 MTs trained from nursing colleges and hospitals, including 40 hospital-based MTs
Clinical Nurse Teacher (CNT) training programs	472 CNTs trained through 19 batches across 8 hospitals
Peer support and collaborative facilitation among MTs	MT facilitation and training management capacities strengthened through peer learning
Support for in-service trainings at hospitals	MTs and CNTs strengthened their capacities to conduct practical trainings and support quality improvement in clinical settings







Output 4 (Dissemination)

Key Components	Major Achievements
Mutual visits among target institutions	8 mutual visits conducted. Practical learning and exchange of good practices strengthened among institutions
Support for seminars and professional development activities	Discussions on nursing leadership, education, and professional development facilitated
MT module approval and policy discussions	MT training modules approved through stakeholder consultations, and distributed to related institutions
Dissemination of practical approaches for strengthening nursing education	Practical guidance and recommendations prepared for sustainability and future dissemination







Key Approaches Promoted under CBNS-II

Considering the operational realities of implementing activities across geographically dispersed institutions, CBNS-II adopted the following practical and institution-based approaches.

College-Hospital Collaboration

Strengthen coordination and communication between nursing colleges and collaborative hospitals through committee activities.

Mutual Learning

Promote peer learning and institutional reflection through experience sharing and practical adaptation.

Institution-based Implementation

Promote continuous improvement and ownership through institution-led implementation and operational engagement.

Active Learning

Promote participatory and practical learning to strengthen student engagement and practical competency development.

Cascade Training

Strengthen continuous institution-based learning through the development and utilization of local trainers.



Key Achievements of CBNS-II

Institutional Collaboration

- Strengthened committee functions
- Improved operational coordination

Capacity Development

- Development of MTs, CNTs, and faculty members
- Strengthened practical guidance capacities

Continuous Learning

- Promotion of active learning
- Mutual learning and peer exchange
- Practical adaptation and reflection

Ownership

- MT-led implementation
- Strengthened institutional initiative
- Institution-based continuous improvement

Lessons Learned from Implementation

1. Regular operational engagement matters.
2. Institution-based implementation promotes ownership.
3. Peer learning promotes practical adaptation.
4. Integrated approaches are more sustainable than isolated interventions.

Key Considerations for Sustainable Implementation

Institutional / Operational Considerations

- Continuous operational engagement remains important.
- Institutional ownership should be strengthened progressively.
- Practical adaptation to institutional contexts is important.

System-level Considerations

- Routine monitoring and follow-up mechanisms need to be strengthened.
- Institutional support systems for continuous learning and CPD remain important.
- Coordination and policy support are important for sustainability and scale-up.

From Implementation Experiences to the CBNS Model

Through implementation experiences and continuous adaptation within the Bangladeshi context, the CBNS model was developed as an integrated and practical approach to strengthen nursing education and clinical practice.



Recommendations

Toward Institutionalization and Sustainable Expansion of the CBNS Model

Sustain what worked	Continue practical approaches that demonstrated positive implementation results.
Strengthen institution-based continuous improvement	Promote continuous learning, reflection, and operational improvement within institutions.
Combine operational and system-level approaches	Link practical implementation activities with policy, coordination, and institutional support systems.
Phased and context-appropriate scale-up	Expand the CBNS model progressively according to institutional readiness and local contexts.

Operational Recommendations for Implementation and Scale-up

Cascade Training

- Continue utilization of MTs for FD, CNT, and in-service training
- Develop institution-based training plans
- Continuously utilize and update training materials

College-Hospital Collaboration

- Continue regular coordination meetings and committee activities
- Strengthen joint planning and supervision mechanisms
- Promote joint activities related to clinical practice management

Active Learning Promotion

- Conduct continuous FD activities on practical teaching methodologies
- Utilize lesson plans to support structured and practical classroom facilitation
- Promote peer learning and mutual reflection among faculty members

Mutual Learning

- Maintain communication and networking among institutions
- Promote contextual adaptation of good practices
- Disseminate practical lessons learned and implementation experiences from CBNS-II

System-level Recommendations for Sustainability

Human Resource Development and Support Systems

- Strengthen CPD systems linked with continuous learning and career development opportunities for nurses
- Develop nursing career paths, including institutional roles for MTs and CNTs

Quality Assurance and Institutional Improvement

- Strengthen accreditation processes and institutional quality improvement mechanisms
- Enhance leadership and operational management capacities within institutions

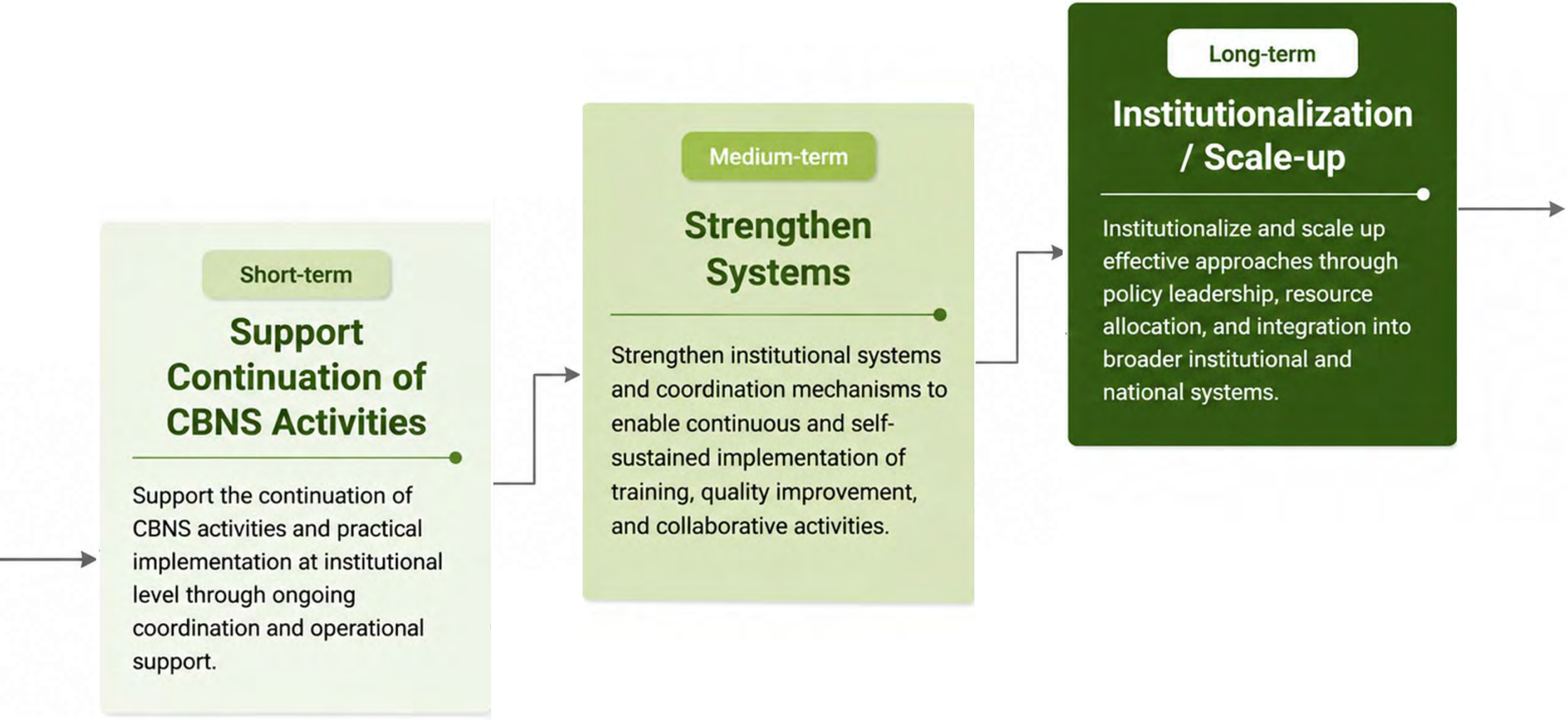
Governance

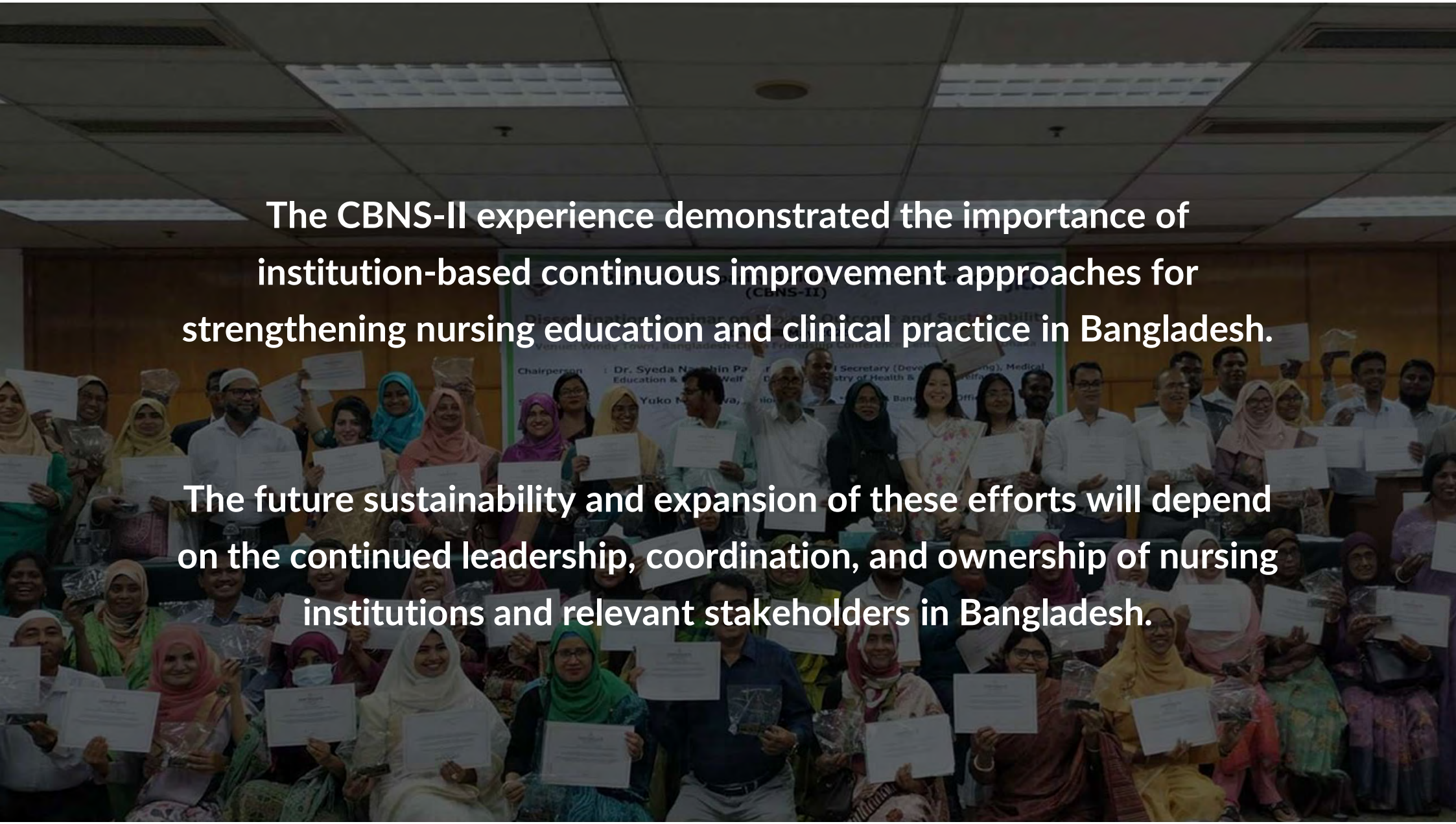
- Strengthen routine monitoring and institutional support mechanisms
- Utilize CBNS-II training modules, tools, and implementation recommendations
- Strengthen coordination and administrative support mechanisms among relevant institutions

Resource Allocation

- Ensure continuity of training and continuous learning activities
- Secure operational budgets for training and implementation activities

Proposed Future Directions





The CBNS-II experience demonstrated the importance of institution-based continuous improvement approaches for strengthening nursing education and clinical practice in Bangladesh.

The future sustainability and expansion of these efforts will depend on the continued leadership, coordination, and ownership of nursing institutions and relevant stakeholders in Bangladesh.



CBNS Model-Component Good Practice & Lessons Learned

The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

Presentation Outline

Outlines

- Overview of the CBNS Model
- Thematic Components of the CBNS Model
- Implemented Activities
- Good Practices & Lessons Learned

Overview of the CBNS Model

- **The CBNS Model** integrates multiple approaches to strengthen nursing education and clinical practice.
- Through coordinated implementation across Outputs 1 to 4, the model promotes continuous improvement, effective monitoring, and long-term sustainability.

Four Major Components of CBNS Model

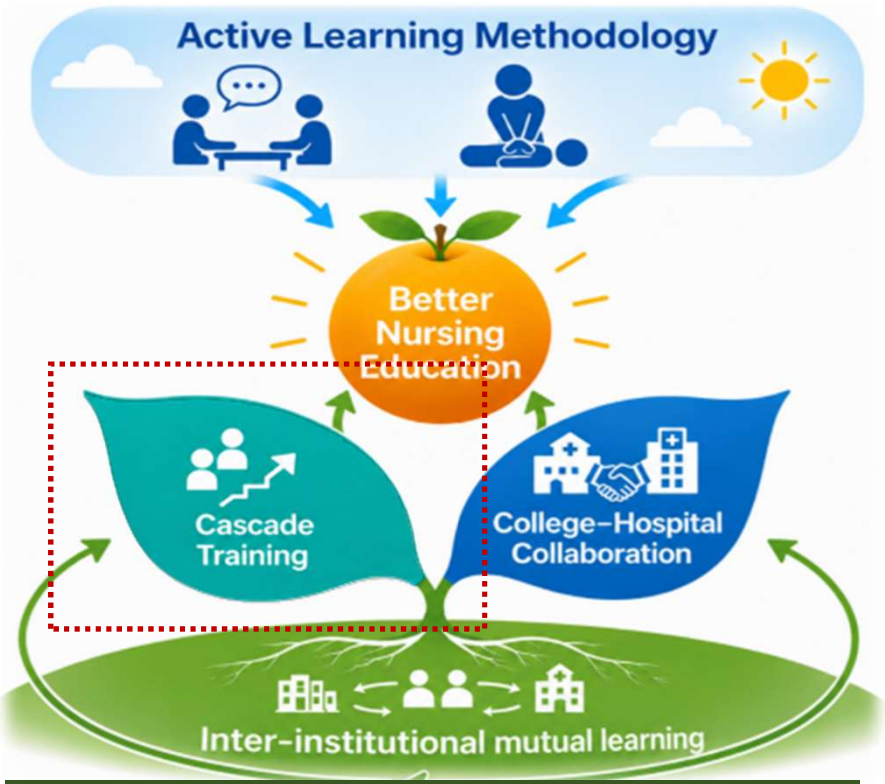
1. Cascade Training
2. Active Learning Methodology
3. College-Hospital Collaboration
4. Inter-Institutional Mutual Learning



CBNS Model

Component 1: Cascade Training

CBNS Model



Cascade Training

Cascade Training Model

- Top-down, multi-layered training framework
- Develops local human resource capacity
- Ensures long-term educational sustainability
- **Master Trainer (MT)-led cascade training** promotes continuous practical competency and self-sustaining learning cycles

Sub-themes:

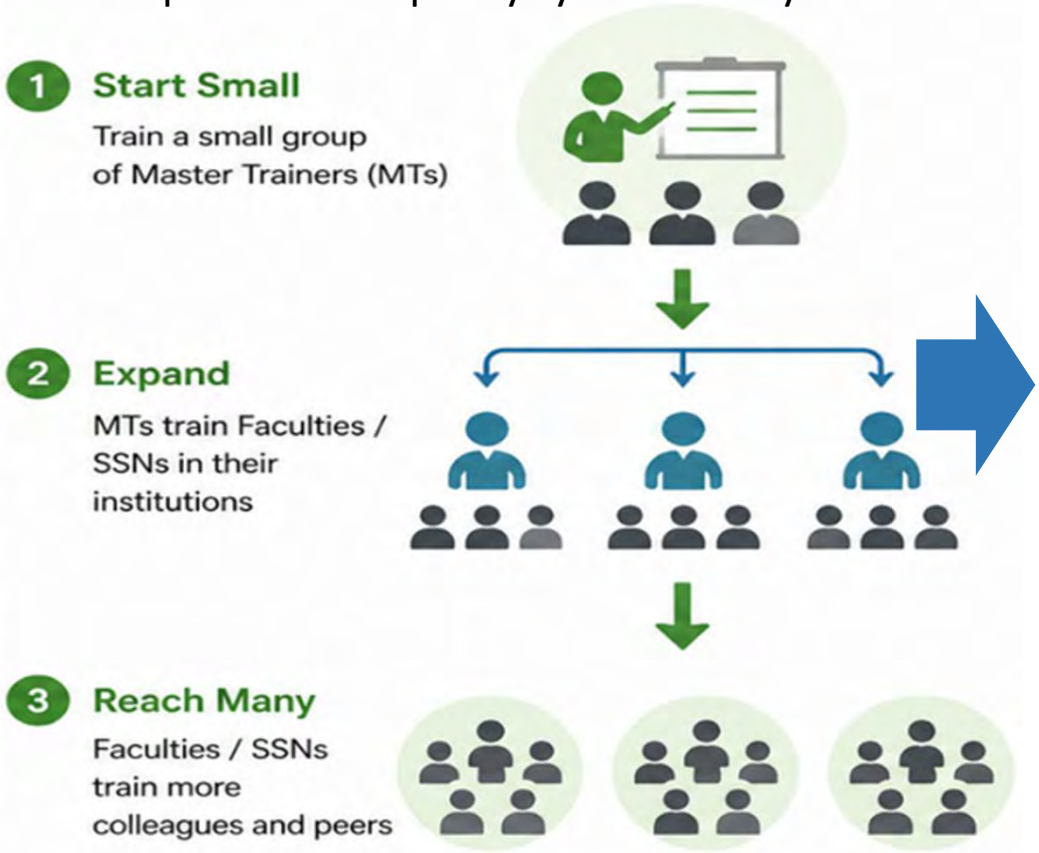
1.1 Cascade model implementation
1.2 Skill development and in-service training
1.3 Empowerment of MTs and CNTs through cascade training

Activities:

- **Master Trainer** (MTs) Training
- **Clinical Nurse Teacher** (CNTs) Training
- **In-Service Training** for General Nurses
- **Clinical Practice** Guidance for Nursing Students

Cascade Model Implementation

- Top-down, exponential training model
- Expand local capacity systematically



Step-by-Step Implementation Process

Preparation	Training of Trainers	Cascade Implementation	Follow-up & Continuous Improvement
•**MT Level** •**Session Setup:** Formulating training schedules using a **5W1H approach** (What, Why, Where, When, Who, How). •**Logistics:** Selecting participants, identifying local training needs, setting venues, preparing physical or digital pre/post-tests (Google Forms/Paper), and creating training agendas.	•**MTs → Faculties / CNTs** •MTs deliver targeted sessions featuring a blend of **lectures (e.g., 20 mins)** and intensive **group work/hands-on practice (e.g., 80 mins).** •Focuses on building both **technical nursing knowledge** and actionable **teaching skills.**	•**Faculties/CNTs → Staff & Students** •Faculties integrate learned skills directly into teaching nursing students. •CNTs/SSNs conduct targeted, **in-service training** for frontline hospital nurses and students, adapting materials to fit local workplace conditions.	• Monitoring • Debriefing • Reporting

Skill Development and In-Service Training

FD Training, CNT Training, In-Service Training

Faculty Development (FD) Training

A structured training program that strengthens educators' teaching, mentoring, and assessment skills in order to improve curriculum delivery, support learners effectively, and enhance overall educational quality in academic and clinical settings.



Clinical Nurse Teacher (CNT) Training

A trained registered nurse who supports nursing students and staff nurses in developing clinical skills through bedside teaching, orientation, supervision, and evaluation.



In-Service Nursing Training

On-the-job education that updates nurses on new clinical practices, technologies, and safety protocols to improve patient care standards and compliance.

Example of Skill Development In-Service Training

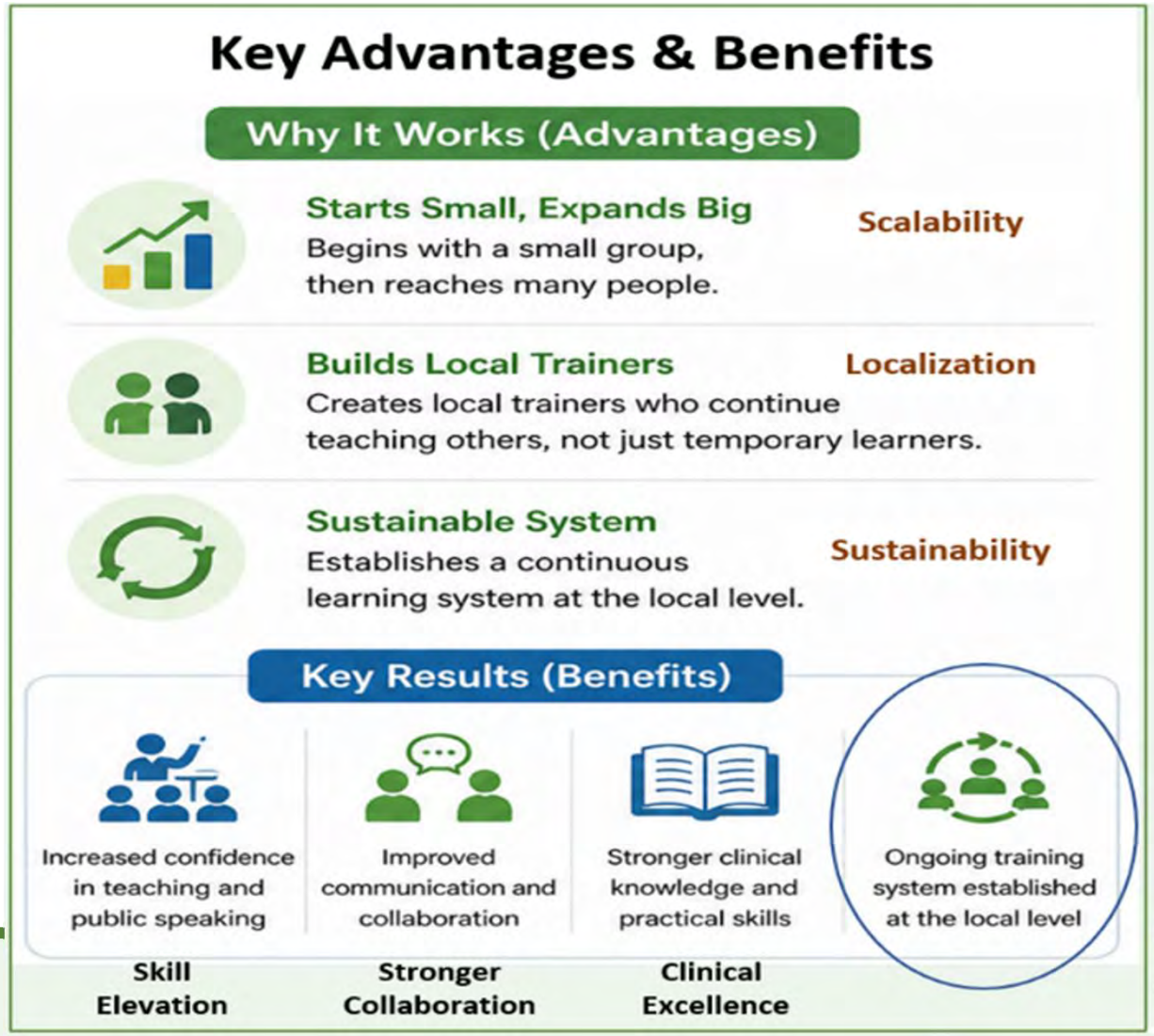


In-Service Training at Hospital Led by MTs and CNTs





Good Practices & Lessons Learned



Key Message

Start small, keep it simple, and grow step by step to ensure immediate clinical application

Component 2: Active Learning Methodology

CBNS Model



Active Learning Methodology

- **Multi-modal and interactive teaching-learning approach**
- Combines suitable teaching methods, activities, and tools
- Reinforces practical skills and learner engagement
- Encourages continuous capacity development

Sub-themes:

2.1 Practical use of interactive, learner-centered, and case-based approaches to enhance critical thinking and problem-solving

2.2 Debriefing for continuous improvement during training.

Activities:

- Interactive & Learner Cantered Teaching Methods
- Lesson Plan Development & Utilization
- Lab Lesson Plan
- Scenario-Based & Problem-Based Learning (PBL)

Multi-Modal Interactive Approaches

Interactive Teaching & Learning Methodologies



Pre-reading Materials



Interactive Lectures (Presentation, Video, Visual Aids)



Clinical Demonstration & Re-demonstration



Analytical Tools (Fishbone Diagrams)



Analytical Tools (Mind Mapping)



Group Discussion & Presentation



Scenario-Based Role Plays & Mini Dramas



Q&A Session, Feedback Session



Pre- & Post-test



Feedback & Debriefing

Examples of Interactive Teaching Methods



Role Play



Demonstration



Group Work



Lab Teaching

Debriefing for Continuous Improvement

Debriefing Session

- Structured conversation that happens after a training or activity
- Review the quality of events, identify gaps, and find ways for further improvement



Main Activities for Debriefing

Description	Feelings	Evaluation & Analysis	Lessons Learned	Action Step
What happened?	How did we feel? How did people experience?	What went well/poorly? Why did it happen?	What is learned? What should be repeated/ changed?	What will we do next?





Good Practices & Lessons Learned

Proven Benefits of Interactive Teaching Methods

By comparing the performance before and after implementation, the interactive training activities yielded several major improvements:

- Enhanced Performance and Engagement
- Stronger Teamwork and Cooperation
- Clear Awareness of Strengths and Weaknesses
- Optimized Time Management

Key Messages

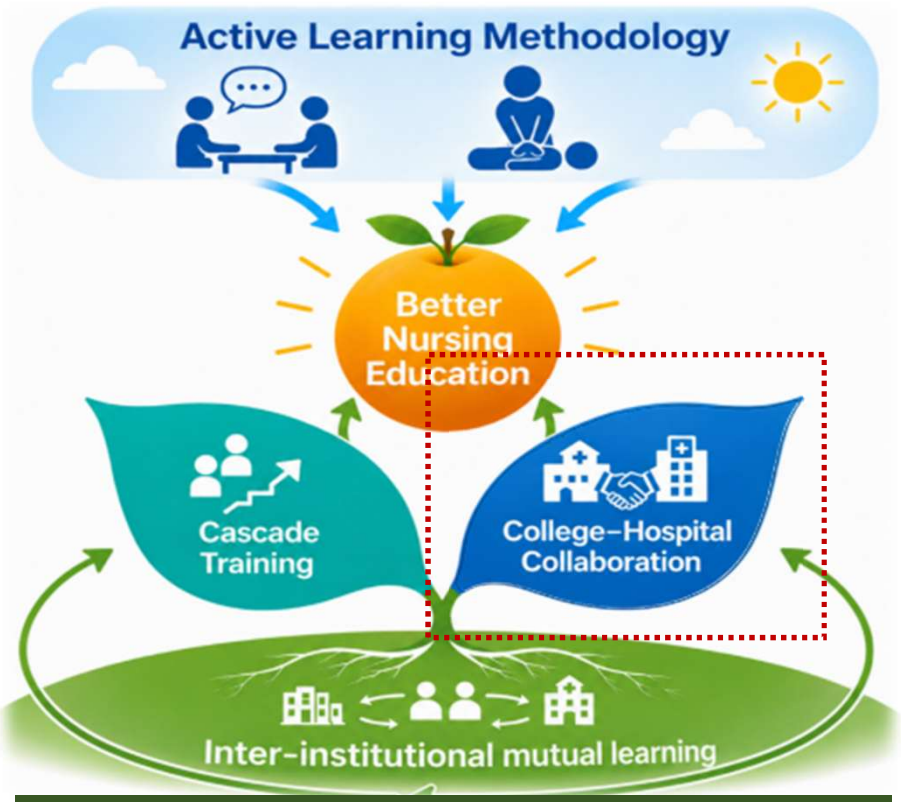
•**Promote Active Engagement**
Use a variety of different teaching methods to drive active engagement among your faculty, staff, and students.

•**Structured Preparation is Crucial**
To successfully execute these methodologies, trainers should always:

- Prepare a checklist
- Assign clear roles
- Do a final check before starting
- Embrace an environment where you can learn from mistakes

Component 3: College-Hospital Collaboration

CBNS Model



College–Hospital Collaboration

College-Hospital Collaboration

- **Academic-practice partnership** between colleges and hospitals
- Enhances students' clinical learning environment
- Strengthens linkage between education and practice
- Improves quality of nursing education and clinical services

Sub-themes:

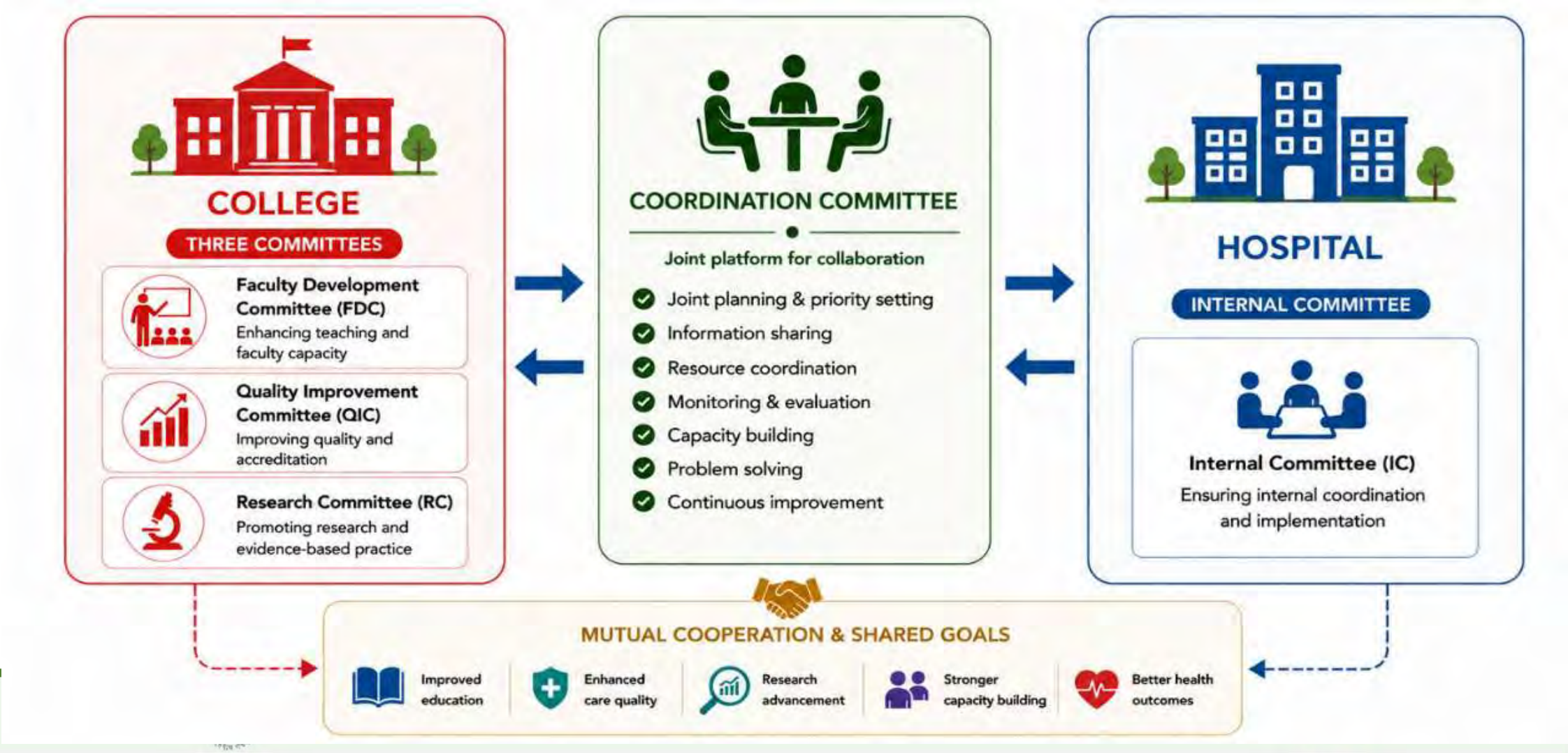
3.1 Strengthening institutional, academic & clinical collaboration and Partnership

3.2 Enhancing hands-on training opportunities through clinical practice

Activities:

- **Different Committee Activities**: Nursing College, Hospital, and Nursing College–Hospital

Institutional, Academic and Clinical Collaboration and Partnership



Examples of Different Committees' Functions




Coordination Committee




QI Committee




FD Committee



Research Committee



Internal Committee

Nursing College & Hospital Collaboration for Clinical Practice

Enhance Clinical Practice



Students Faculty

Communication

MT/ CNT Students



- **Follow the lab lesson plan & check list**
- **Pre-conference every time before clinical practices**
- **Faculty come hospital with students to monitor clinical practices**
- **Establish rotation plan for faculty**

Coordination Committee

Discuss monitoring and supervision for student during clinical practices regularly

- **CNT monitor & supervise students**
- **Bed-side, hands-on teaching conducted**
- **Communication line establish between College and Hospital, in case of emergency**

Good Practices & Lessons Learned

Standardized Quality

Strict adherence to lesson plans and checklists ensuring **consistent lab and classroom demonstration excellence.**

Higher Engagement

Drastic drop in student absenteeism paired with **heightened interest active involvement** in clinical sessions.

Effective Mentoring

Ward staff empowered to properly guide students, resulting in high-quality **bedside teaching and clinical monitoring.**

Unified Coordination

Frequent college-hospital communication **enabling structured faculty supervision rotations.**

Collaboration

Stronger institutional linkage established through joint planning, resulting in **reduced absenteeism.**

Competency

Standardized clinical practice through skill-based training leading to **improved professional competency.**

Research Output

Enhanced research quality through student mentorship**.**

Accountability

Effective resource management and higher guidance standards providing **improved student support**.

Component 4: Inter-Institutional Mutual Learning

CBNS Model



Inter-Institutional Mutual Learning

Iner-Institutional Mutual Learning

- Standardizes practices across institutions
- Promotes sharing of good practices and experiences
- Encourages collaboration and peer learning
- Builds a sustainable learning community

Sub-themes:

4.1 Lessons learned from inter-institutional visits and how they were applied in the MTs' own institution afterward

4.2 Collaborative efforts for standardization and quality improvement of their own institution and activities.

Activities:

- Inter-Institutional Mutual Visit
- Nursing College Accreditation
- Subject-Based Teaching Workshop
- Quality Improving 5s Training

What is “Inter-Institutional Mutual Visit”?

"Inter-Institutional Mutual Visit"

A reciprocal exchange arrangement where the MTs/ Principal/ Nursing Superintendent/ CNTs from three or more distinct Nursing Colleges & Hospitals visited other’s NC & Hospital.

Aims:

- Facilitate mutual learning
- Sharing good practice experiences & its replication
- Analyze visiting organization’s challenges
- Develop mutual action plan with proposed Solutions, and recommendations
- Strengthen institutional networking





First MV at CNC & CMCH

Eight Mutual Visits Conducted



CNC & CMCH



MNC & MMCH



RNC & RMCH



RpNC & RpMCH



SNC & SMAGOMCH



DNC & DMCH



CONSBN & ShSMCH



BNC & BSMCH

Good Practices & Lessons Learned



1. Mutual learning through sharing, seeing and replicating
2. Direct knowledge transfer of visual & digital tools
3. Bridge the gap by showcasing effective utilization of resources



4. Showcases low-cost, high-impact patient care, practical, and budget-friendly innovations
5. Demonstrates first-hand exposure to operational efficiency
6. Highlights proven staff motivation

Lessons Learned

- Empowers staff to initiate grassroots changes
- Emphasizes the critical need for standardized documentation
- Highlights the importance of institutional synergy
- Underlines the value of staff wellbeing in quality care
- Identifies the need for extended engagement to drive results
- Good means of institutional collaboration, mutual learning & networking


Thank
You!

添付資料 13：看護教育および臨地実習の継続的な質向上のための提言書

Policy Recommendations for Strengthening Nursing Education in Bangladesh

Toward Institutionalization and Sustainable Strengthening through Effective CBNS Approaches









The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

Japan International Cooperation Agency (JICA)

June 2026

Policy Recommendations for Strengthening Nursing Education in Bangladesh:

Toward Institutionalization and Sustainable Strengthening through Effective CBNS Approaches

The Project for Capacity Building of Nursing Services Phase II (CBNS-II)

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June 2026

Policy Recommendations for Strengthening Nursing Education in Bangladesh: Toward Institutionalization and Sustainable Strengthening through Effective CBNS Approaches

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List of Abbreviations

Abbreviation	Full Name
BNA	Bangladesh Nursing Association
BNMC	Bangladesh Nursing and Midwifery Council
BSc	Bachelor of Science
CBNS	Capacity Building of Nursing Services (Collective Project Title for Phase 1 and Phase 2)
CNT	Clinical Nurse Teacher
CONSBN	College of Nursing, Sher-E-Bangla Nagar
CPD	Continuing Professional Development
DGNM	Directorate General of Nursing and Midwifery
FD	Faculty Development
JICA	Japan International Cooperation Agency
MOHFW	Ministry of Health and Family Welfare
MT	Master Trainer
ShSMCH	Shaheed Suhrawardy Medical College Hospital
UHC	Universal Health Coverage

Executive Summary

Bangladesh has made substantial progress in expanding nursing education and increasing the number of nursing personnel in recent years. However, challenges remain in ensuring the quality, consistency, and practical effectiveness of nursing education and clinical practice. Variations in institutional capacity, limited clinical learning opportunities, weak linkages between nursing colleges and hospitals, insufficient clinical supervision, and limited mechanisms for continuous professional development continue to affect competency development and educational quality. These challenges highlight the need for practical and sustainable approaches that strengthen not only individual competencies but also institutional systems, collaboration mechanisms, and continuous improvement processes.

To address these challenges, the Project for Capacity Building of Nursing Services Phase II (CBNS-II), supported by JICA, was implemented from 2022 to 2026 in eight public nursing colleges and eight collaborative medical college hospitals across Bangladesh. Building on the achievements of CBNS-I, the project aimed to strengthen nursing education and clinical practice through interventions in nursing administration, nursing education, clinical practice, and dissemination and networking.

Implementation experiences from CBNS-I and CBNS-II demonstrated that sustainable improvement cannot be achieved through isolated training activities alone. Rather, improvements were most evident when training, clinical practice, institutional collaboration, quality improvement, and continuous learning mechanisms were implemented as mutually reinforcing processes within institutions. Based on these experiences, this paper presents the CBNS Model, an integrated framework consisting of four interrelated components: Cascade Training, Active Learning Methodology, College-Hospital Collaboration, and Inter-Institutional Mutual Learning. Together, these components promote continuous capacity development, institutional ownership, collaboration, and quality improvement within nursing colleges and collaborative hospitals.

The project generated four major lessons. First, regular communication and committee-based coordination strengthened collaboration between nursing colleges and hospitals and improved support for clinical practice. Second, the development of Master Trainers (MTs), Clinical Nurse Teachers (CNTs), and faculty members strengthened institutional capacity for training, clinical supervision, and competency-based education. Third, active learning approaches, accreditation-related activities, and mutual learning opportunities promoted continuous learning and institutional quality improvement. Finally, repeated implementation experiences helped strengthen institutional ownership and enabled participating institutions to adapt and sustain activities using their own human resources and operational systems.

Based on these lessons, this paper proposes a set of recommendations for the institutionalization and sustainable expansion of effective CBNS approaches. At the operational level, nursing colleges and

collaborative hospitals are encouraged to continue utilizing MTs and CNTs, strengthen faculty development and active learning, maintain college-hospital collaboration mechanisms, and sustain mutual learning opportunities among institutions. At the system level, further efforts are recommended to strengthen nursing career development pathways, continuing professional development (CPD) systems, accreditation and quality assurance mechanisms, governance and monitoring systems, and sustainable resource allocation arrangements. The paper also highlights the important roles of the Ministry of Health and Family Welfare (MOHFW), the Directorate General of Nursing and Midwifery (DGNM), the Bangladesh Nursing and Midwifery Council (BNMC), and the Bangladesh Nursing Association (BNA) in supporting these efforts.

To guide future implementation, a phased roadmap is proposed. In the short term, priority should be given to sustaining key CBNS activities and maintaining institutional momentum. In the medium term, efforts should focus on strengthening institutional systems, quality improvement mechanisms, and coordination processes. In the long term, successful approaches should be institutionalized and integrated into broader nursing education and health sector systems through supportive policies, governance mechanisms, and resource allocation.

The CBNS-II experience demonstrated that meaningful and sustainable improvements can be achieved through institution-based, practical, and context-appropriate approaches. The future sustainability and expansion of these efforts will depend on the continued leadership, coordination, and ownership of nursing institutions and national stakeholders in Bangladesh. Ultimately, the long-term value of CBNS-II will be determined not by the activities completed during the project period, but by the extent to which its approaches continue to be adapted, sustained, and expanded within the Bangladeshi nursing system in the years ahead.

1. Introduction

1.1 Background

Bangladesh has made significant progress in expanding nursing education and increasing the number of nursing personnel in recent years. The establishment and expansion of nursing colleges and training institutions have contributed to strengthening the nursing workforce and improving access to nursing education opportunities across the country.

At the same time, challenges remain in ensuring the quality, consistency, and practical effectiveness of nursing education and clinical practice. Issues such as variations in institutional capacity, limited practical learning opportunities, insufficient clinical supervision, and weak linkage between nursing education and clinical practice continue to affect the quality of nursing education, competency development, and the effective transition from classroom learning to clinical practice.

In addition, strengthening practical and continuous learning approaches in nursing education and clinical practice has become increasingly important for improving the quality of nursing services and supporting broader health sector goals, including Universal Health Coverage (UHC) and quality of care improvement.

These challenges highlight the importance of strengthening not only individual competencies but also institutional systems, practical implementation mechanisms, operational coordination, and continuous learning environments that support continuous improvement within nursing education and clinical practice settings.

1.2 Overview of CBNS-II

The Project for Capacity Building of Nursing Services Phase II (CBNS-II) was implemented from March 2022 to June 2026, with support from the Japan International Cooperation Agency (JICA), to strengthen nursing education and clinical practice in Bangladesh.

Building on the experiences and achievements of the Phase I project (CBNS-I), which was implemented at Dhaka Nursing College and Dhaka Medical College Hospital from 2016 to 2021, CBNS-II expanded its scope to eight public nursing colleges and eight collaborative medical college hospitals located across the divisional-level institutions in Bangladesh.

The overall goal of the project was to improve the quality of nursing education in Bangladesh. To achieve this goal, the project aimed to strengthen the implementation, monitoring, and evaluation systems of nursing education through interventions in four areas: nursing administration, nursing education, clinical practice, and dissemination and networking.

Activities under these four areas included support for nursing leadership and administration, accreditation processes, faculty development, clinical practice systems, college-hospital collaboration,

dissemination of good practices, and professional networking among nursing institutions. Through these activities, the project sought to strengthen institutional capacity, practical competency, and operational coordination within nursing colleges and collaborative hospitals. A more detailed overview of the project framework, target institutions, and major activities is provided in Annex 1.

Through continuous implementation, operational engagement, and contextual adaptation, the approaches promoted under CBNS-II gradually evolved beyond individual project activities and became increasingly interconnected within institutional practice. Based on these implementation experiences, this paper refers to this integrated set of practical and institution-based approaches as the “CBNS Model.”

The project also emphasized institution-based implementation, continuous learning, operational coordination, contextual adaptation, local ownership, and continuous improvement in order to promote sustainability and practical applicability within nursing institutions and collaborative hospitals.

1.3 Purpose of the Recommendation Paper

This recommendation paper aims to summarize the implementation experiences, achievements, and lessons learned from CBNS-I and CBNS-II and to propose recommendations for the institutionalization and sustainable strengthening of nursing education and clinical practice through effective and institution-based approaches developed under the two projects.

The paper presents the CBNS Model as an integrated framework that emerged from the implementation experiences of CBNS-I and CBNS-II. The model brings together a set of practical and institution-based approaches for strengthening nursing education and clinical practice through continuous learning, operational coordination, and institutional improvement mechanisms.

Based on the implementation experiences of CBNS-I and CBNS-II, the paper proposes both operational recommendations and system-level recommendations to support sustainable implementation, institutional strengthening, and continuous quality improvement within nursing education and clinical practice systems.

The recommendations presented in this paper are intended to contribute to further strengthening nursing education and clinical practice in Bangladesh through practical, context-appropriate, and sustainable approaches.

2. Current Situation and Challenges in Nursing Education and Clinical Practice

2.1 Governance and Institutional Challenges

Despite recent progress in the expansion of nursing education and nursing workforce development in Bangladesh, several governance and institutional challenges continue to affect the quality and sustainability of nursing education and clinical practice.

Multiple organizations, including the Directorate General of Nursing and Midwifery (DGNM) and the Bangladesh Nursing and Midwifery Council (BNMC), play important roles in nursing administration, regulation, education, and professional development. However, effective implementation of nursing sector initiatives often requires coordination among multiple organizations and stakeholders. Maintaining alignment between policy direction, institutional implementation, and professional development remains a continuing challenge in some areas of nursing sector management.

During the implementation of CBNS-II, variations in institutional capacity and operational coordination were observed among nursing colleges and collaborative hospitals. Differences in leadership engagement, committee functioning, operational follow-up, and resource availability influenced the extent to which institutions were able to implement and sustain improvement activities.

The project experience also highlighted limitations in routine monitoring, supervision, and institutional support mechanisms. In several cases, implementation progress depended heavily on the initiative and commitment of individual institutions, while opportunities for systematic monitoring, supportive supervision, and continuous follow-up remained limited.

In addition, the weak linkage between nursing colleges and collaborative hospitals continued to affect communication, coordination, and the integration of classroom learning with clinical practice. Strengthening practical coordination mechanisms between educational and clinical institutions remains important for supporting competency-based nursing education and continuous quality improvement.

These experiences highlight the importance of strengthening institutional capacity, monitoring and support mechanisms, operational coordination, and college-hospital collaboration to sustain implementation and continuous improvement within nursing education and clinical practice systems.

2.2 Challenges in Nursing Education and Clinical Practice

Challenges related to the quality and practical implementation of nursing education and clinical practice continue to affect nursing institutions in Bangladesh. Although nursing education has expanded significantly in recent years, variations remain in teaching quality, practical learning opportunities, and institutional capacity among nursing colleges. As a result, learning experiences and opportunities for competency development may differ across institutions.

The implementation experiences of CBNS-II also highlighted continuing gaps between theoretical learning and practical clinical experience. In several institutions, opportunities for students to apply classroom knowledge in clinical settings remained limited, contributing to challenges in bridging the gap between nursing education and clinical practice. In addition, clinical supervision systems were often limited or inconsistent. Variations in the availability of clinical guidance, supervision practices, and learning support mechanisms affected the quality of practical learning experiences and competency development among students.

The project experience further highlighted the importance of active learning methodologies, learner-centered teaching approaches, and structured practical learning opportunities in strengthening nursing education. However, such approaches have not yet been fully institutionalized across nursing education institutions.

These challenges suggest the need for practical and institution-based approaches that can strengthen the linkage between classroom learning and clinical practice while promoting continuous learning and quality improvement within nursing education institutions.

2.3 Human Resource Development and Professional Challenges

Human resource development and professional advancement remain important challenges in strengthening nursing education and clinical practice in Bangladesh.

Although opportunities for higher education and professional development have gradually increased, continuing professional development (CPD) systems and institutional learning mechanisms remain limited in some areas. Opportunities for structured in-service training and practical competency development also vary among institutions.

In addition, career paths and professional advancement mechanisms for nurses are largely obsolete and inconsistent. Opportunities for promotion, specialization, and career progression remain limited, and recognition of advanced qualifications is often insufficient within existing career structures. Limited opportunities for leadership development and specialist nursing roles may also affect motivation, retention, and effective utilization of qualified nursing personnel.

The implementation experiences of CBNS-II further highlighted the importance of strengthening institutional systems that support continuous learning, professional growth, leadership development, and practical competency development within nursing institutions and collaborative hospitals.

These challenges underscore the need for sustainable human resource development mechanisms that can support continuing professional development, career advancement, and long-term strengthening of the nursing profession in Bangladesh.

3. Key Achievements and Lessons Learned from CBNS-II

Considering the operational realities of implementing activities across geographically dispersed nursing colleges and collaborative hospitals, CBNS-II adopted a set of practical and institution-based approaches designed to promote continuous learning, institutional ownership, and sustainable implementation. Given the limited resources available for supporting multiple institutions simultaneously, the project emphasized approaches that could be implemented and sustained within institutions themselves. These included cascade training, college-hospital collaboration, active learning methodologies, and mutual learning among institutions, all supported by institution-based implementation and operational engagement. The following sections summarize the key achievements and lessons learned from the implementation of these approaches.

3.1 Strengthened Institutional Collaboration

One of the major achievements of CBNS-II was the strengthening of institutional collaboration among nursing colleges and collaborative hospitals. The implementation of activities across geographically dispersed nursing colleges and collaborative hospitals in different divisions of Bangladesh required continuous coordination, communication, and operational engagement among participating institutions and stakeholders.

To support institutional collaboration, the project promoted regular communication, joint planning, monitoring activities, and coordination mechanisms between nursing colleges and collaborative hospitals. In particular, college-hospital coordination committees provided a formal platform for communication and coordination related to clinical practice, student supervision, and institutional collaboration.

Implementation experiences demonstrated considerable variation in the effectiveness of these coordination mechanisms across institutions. While some institutions were able to maintain regular communication and collaborative activities, others faced operational and organizational constraints that limited implementation continuity.

Box 1: Committee Functioning Requires Continuous Operational Engagement

CBNS-II introduced several committees at nursing colleges and collaborative hospitals, including faculty development committees, quality assurance committees, research committees, hospital internal committees, and college-hospital coordination committees. These structures were expected to support institutional planning, monitoring, quality improvement, and coordination of educational and clinical activities.

However, implementation experiences demonstrated that establishing committee structures alone

was not sufficient to ensure regular functioning. Committee performance varied considerably among institutions, and many committees experienced difficulties related to limited participation, competing priorities, communication challenges, and operational constraints. In some cases, committee meetings were conducted irregularly or remained largely administrative in nature.

The project experience suggested that committee activities became more active when linked to ongoing operational activities such as training implementation, accreditation preparation, clinical practice management, monitoring activities, and follow-up discussions. Institutions with stronger leadership engagement, active MT and CNT involvement, and regular operational communication generally demonstrated higher levels of committee functionality.

These experiences highlighted that continuous operational engagement, supportive monitoring, and institutional leadership are important factors for sustaining committee functioning and promoting institutional collaboration and quality improvement.

At the institutional level, collaboration between nursing colleges and hospitals was strengthened through committee-based coordination, joint supervision activities, and regular communication related to clinical practice and student support. The project also promoted greater involvement of nursing instructors and hospital nursing personnel in implementation and improvement activities. These efforts contributed to more regular communication and coordination between educational and clinical institutions.

The project experience further suggested that formal coordination mechanisms alone were not sufficient to sustain institutional collaboration. Rather, collaboration was strengthened when coordination mechanisms were linked to regular implementation activities, training programs, mutual visits, and collaborative planning processes. These experiences highlighted the importance of continuous operational engagement in supporting communication, collaborative problem-solving, and institutional ownership among participating institutions.

3.2 Improved Capacity for Nursing Education and Clinical Practice

CBNS-II contributed to strengthening the capacity of nursing instructors, clinical teachers, and nursing personnel through various training and implementation activities.

The project developed Master Trainers (MTs), Clinical Nurse Teachers (CNTs), and faculty members who played important roles in faculty development, clinical practice guidance, in-service training, and practical teaching activities. Through the cascade training approach, training activities were gradually expanded within institutions through the utilization of MTs, CNTs, and other local human resources. MTs and CNTs increasingly took active roles in planning, conducting, and facilitating training activities within nursing colleges and collaborative hospitals. The implementation process also highlighted the

importance of utilizing existing human resources and institutional mechanisms to support continuous learning and capacity development.

The project also contributed to strengthening practical learning and competency-based education through improved clinical practice guidance, practical teaching approaches, and strengthened collaboration between nursing colleges and hospitals. Faculty development activities promoted improvements in teaching methodologies and practical instruction, while clinical practice guidance activities supported more structured supervision and bedside teaching during clinical practice. In collaborative hospitals, the deployment and activities of CNTs contributed to improving support for nursing students during clinical practice and to strengthening the capacities of clinical nurses.

Implementation experiences also demonstrated that training approaches often required adaptation to local operational realities, available human resources, and institutional priorities. While the degree of implementation varied across institutions, the utilization of MTs, CNTs, and other local trainers contributed to strengthening practical teaching and training capacities within participating institutions. In several institutions, efforts were observed to integrate training activities into routine institutional practices and utilize existing human resources for continued implementation. Although these efforts remained at different stages of development, they demonstrated the potential for more sustainable and institution-based approaches to capacity development.

3.3 Promotion of Continuous Learning and Quality Improvement

CBNS-II promoted continuous learning and quality improvement through active learning methodologies, committee activities, mutual learning opportunities, and quality assurance-related activities.

The introduction of learner-centered teaching methodologies encouraged greater participation, interaction, and practical learning among students and faculty members. Approaches such as role play, demonstrations, group discussions, and practical exercises were utilized during training and educational activities. These approaches contributed to strengthening practical competency, communication, and critical thinking among participants.

The project also promoted continuous learning through faculty development activities, in-service training, and collaborative research initiatives. In addition, debriefing sessions and reflective discussions were conducted during various training activities to review implementation experiences and identify areas for improvement.

Mutual visits among institutions provided opportunities for peer learning, sharing of operational experiences, discussion of institutional challenges, and exchange of good practices among nursing colleges and collaborative hospitals.

Box 2: Mutual Visits as a Platform for Practical Learning and Adaptation

During the mutual visits, participants had opportunities to observe institutional practices directly, discuss implementation experiences with colleagues, and reflect on how selected approaches could be adapted within their own institutions.

One example emerged from the visit to Rajshahi Nursing College, where participants observed the college's research cell, including the systematic preservation of student research dissertations and the organization of research-related materials. The initiative attracted considerable interest among visiting institutions and stimulated discussions on strengthening research-related activities and documentation practices within their own colleges. Similar discussions occurred around other practical initiatives observed during mutual visits, including laboratory management, learning facilities, student support arrangements, infection prevention measures, and clinical training practices. Participating institutions subsequently identified a range of practices for possible adaptation and incorporated them into their own improvement plans.

These experiences demonstrated that mutual visits functioned not only as opportunities for observation but also as practical mechanisms for peer learning and contextual adaptation. Rather than replicating practices exactly, institutions reflected on observed experiences, selected approaches relevant to their own circumstances, and explored ways to integrate them into existing institutional systems. This process contributed to the gradual diffusion of practical ideas and fostered a culture of continuous learning among participating institutions.

Support for accreditation-related activities, committee functions, and subject-based teaching discussions also contributed to strengthening awareness of educational quality and institutional improvement among participating institutions.

Several activities were implemented through existing institutional structures and routine operational processes, which helped promote continued participation and practical engagement among faculty members and clinical nurses. Implementation experiences suggested that continuous learning and quality improvement activities were more actively promoted when they were incorporated into routine institutional activities and operational practices.

3.4 Strengthened Ownership and Institutional Capacity

Another important achievement of CBNS-II was the strengthening of institutional ownership and local implementation capacity within nursing colleges and collaborative hospitals.

Through the project implementation process, MTs, CNTs, faculty members, and nursing administrators gradually took more active roles in planning, conducting, and monitoring various

activities. In several institutions, training activities and committee functions were increasingly implemented using institutional human resources and locally adapted approaches. The gradual increase in institutional involvement was supported through continuous operational engagement, routine coordination activities, and repeated practical implementation experiences during the project period.

Box 3: From Capacity Development to Institutional Ownership at ShSMCH

Shaheed Suhrawardy Medical College Hospital (ShSMCH) provides an example of how project-supported capacity development contributed to institutional ownership and continuous improvement efforts.

Following the completion of MT training, a group of MTs at ShSMCH became actively involved in CNT training, in-service training, committee activities, and other capacity development initiatives within the hospital. Through repeated experience in planning and facilitating training activities, organizing meetings, and supporting implementation processes, MTs gradually developed greater confidence and leadership capacity.

Building on these experiences, MTs began identifying operational challenges within their own working environment and working with hospital management and colleagues to develop practical improvement initiatives. These efforts included reviewing workload distribution, improving communication and coordination mechanisms, strengthening training opportunities for nursing staff, and introducing locally adapted approaches to address workplace challenges. Rather than simply replicating practices observed through project activities or external training opportunities, MTs explored ways to adapt ideas to the operational realities and available resources of their own institution.

The experience at ShSMCH demonstrated that capacity development can contribute not only to individual competency improvement but also to the emergence of local leadership and institution-driven improvement efforts. It also highlighted the importance of teamwork among MTs, support from hospital management, and continuous operational engagement in sustaining learning and improvement activities beyond formal project interventions.

The project also encouraged practical adaptation of activities according to institutional contexts and operational realities. As institutions gained implementation experience, they gradually adapted activities, utilized available resources, and addressed local challenges through their own initiatives. These experiences contributed to strengthening institutional ownership and promoting more context-appropriate implementation approaches within participating institutions.

One example was observed at the College of Nursing, Sher-E-Bangla Nagar (CONSBN), where

faculty development activities increasingly focused on institution-led learning and improvement. During a series of faculty development sessions, faculty members discussed the adaptation of the Clinical Practice Guideline developed under CBNS-I to align with the current curriculum and explored practical applications within their own institution. Additional training on the use of online forms for student assessment and clinical practice monitoring was subsequently followed by hands-on practice sessions, enabling faculty members to apply the tools in their own teaching and evaluation activities. These experiences illustrated how project-supported activities could evolve into institution-led learning, adaptation, and continuous improvement efforts.

In addition, dissemination activities, mutual learning opportunities, and the sharing of practical experiences contributed to expanding institutional networks and generating wider interest in the CBNS approaches beyond target institutions. The project experience suggested that institutional ownership was strengthened not only through direct participation in project activities, but also through opportunities for reflection, exchange, and practical application of lessons learned across institutions.

4. Overview of the CBNS Model

4.1 Rationale for the CBNS Model

The implementation experiences of CBNS-I and CBNS-II demonstrated that isolated training activities or fragmented interventions alone are not sufficient to sustainably strengthen nursing education and clinical practice. While individual capacity-building activities can improve knowledge and skills, sustained improvement requires broader institutional mechanisms that support continuous learning, collaboration, implementation, and quality improvement.

The project experiences highlighted the need for integrated approaches that simultaneously strengthen nursing education, clinical practice, institutional collaboration, faculty development, and continuous learning mechanisms. They also underscored the importance of institution-based approaches that promote ownership, sustainability, and continuous quality improvement within nursing colleges and collaborative hospitals.

In addition, the implementation process demonstrated that operational coordination, peer learning, and context-appropriate adaptation play important roles in strengthening institutional capacity and supporting practical implementation. These elements contribute not only to the effectiveness of individual interventions but also to their long-term sustainability within participating institutions.

Drawing on these experiences and lessons learned, the CBNS Model was developed as an integrated framework for strengthening nursing education and clinical practice in Bangladesh. The model brings together a set of practical, institution-based, and mutually reinforcing approaches that can support continuous capacity development, institutional ownership, collaboration, and quality improvement. The following section describes the concept and key components of the CBNS Model.

4.2 Concept of the CBNS Model

The CBNS Model is an integrated and institution-based framework for strengthening nursing education and clinical practice. Derived from the implementation experiences and lessons learned from CBNS-I and CBNS-II, the model brings together practical approaches that support continuous capacity development, institutional ownership, collaboration, and quality improvement within nursing colleges and collaborative hospitals.



Figure 1: CBNS Model

As illustrated in Figure 1, the model consists of four interrelated components: Cascade Training, Active Learning Methodology, College–Hospital Collaboration, and Inter-Institutional Mutual Learning. These components function as a mutually reinforcing system rather than as standalone interventions. Active Learning Methodology provides a common educational approach that guides teaching and learning practices across the model, while Inter-Institutional Mutual Learning serves as a foundation for knowledge exchange, peer learning, and continuous improvement across institutions.

The model emphasizes practical application within participating institutions rather than one-time interventions. Through institution-based implementation led by MTs, nursing instructors, CNTs, nursing administrators, and other key stakeholders, the model promotes continuous learning, collaboration, coordination, and quality improvement.

By integrating the four components into routine educational and clinical practices, the CBNS Model supports the gradual strengthening of institutional capacity, practical competency, ownership, and sustainability. The ultimate goal of the model is to contribute to improved quality of nursing education and clinical practice through continuous institutional development.

4.3 Cascade Training

Cascade Training is a core component of the CBNS Model that promotes institutional capacity development through the systematic preparation and utilization of local trainers. The approach aims to establish a sustainable learning system within nursing colleges and collaborative hospitals by enabling trained personnel to transfer knowledge, skills, and practical experiences to others within their institutions.

As illustrated in Figure 2, the cascade structure follows a multi-layered training process designed to facilitate the continuous dissemination of knowledge and skills within nursing colleges and collaborative hospitals. MTs serve as the primary resource persons and facilitate Faculty Development (FD) Training and CNT Training. Faculty members and CNTs subsequently apply and disseminate their knowledge and skills through classroom teaching, clinical supervision, bedside instruction, and in-service training activities. Through this process, learning is progressively embedded within institutional practices and ultimately contributes to improved learning experiences for nursing students and strengthened clinical competencies among frontline nursing personnel.

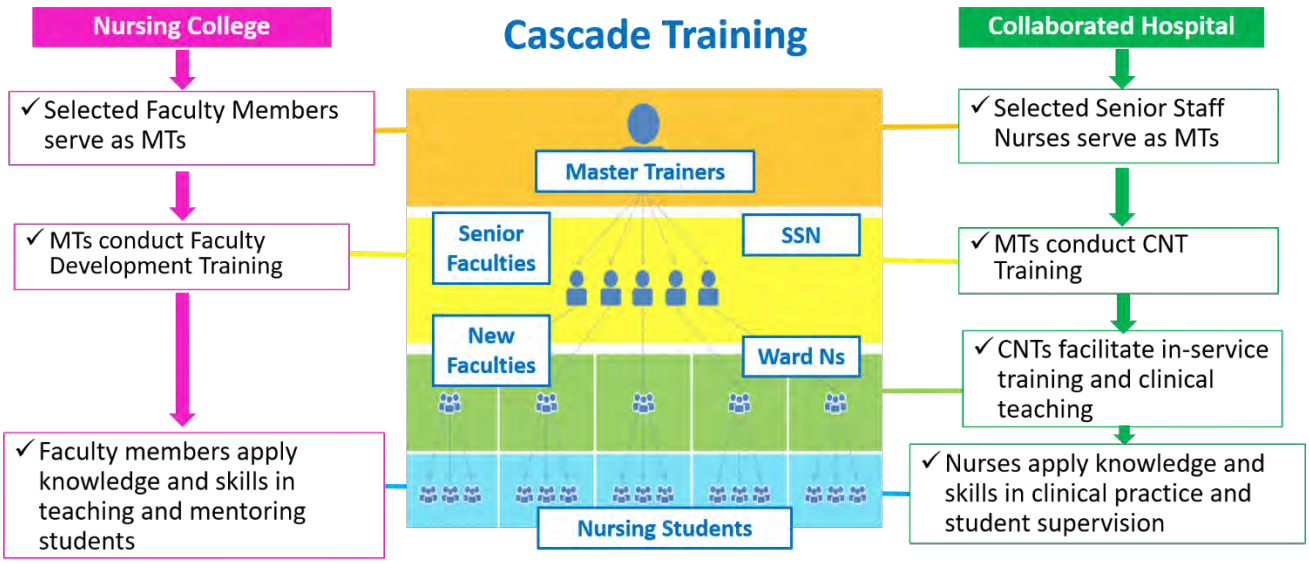


Figure 2. Conceptual Structure of Cascade Training in the CBNS Model

Beyond knowledge transfer, the approach emphasizes localization and institution-led implementation. Training needs are identified locally, training activities are organized by institutional staff, and learning content is adapted to local contexts and operational realities. By enabling trained personnel to serve as resource persons within their own institutions, the cascade structure supports the gradual expansion of learning opportunities and the integration of capacity development into routine

educational and clinical practices.

The approach also promotes continuing professional development through a combination of FD Training, CNT Training, and in-service training activities. By linking learning with day-to-day educational and clinical practice, Cascade Training helps foster a culture of continuous learning and improvement within participating institutions.

In addition, the approach contributes to the empowerment of MTs, CNTs, and other nursing personnel by creating opportunities for teaching, mentoring, knowledge sharing, and institutional learning. Through these roles, participants strengthen their confidence, leadership, and professional competencies while supporting learning and improvement within their institutions.

As a result, Cascade Training functions not only as a capacity development mechanism but also as a practical strategy for strengthening institutional ownership, sustainability, and continuous professional development. By gradually expanding local training capacity and encouraging institutions to utilize their own human resources as drivers of learning and change, the approach supports the establishment of self-sustaining learning cycles within nursing colleges and collaborative hospitals.

4.4 Active Learning Methodology

Active Learning Methodology is a core educational component of the CBNS Model that promotes learner-centered, interactive, and competency-based approaches to teaching and learning. The methodology encourages active participation by learners and emphasizes the practical application of knowledge and skills within both classroom and clinical settings.

As illustrated in Figure 3, the approach utilizes a variety of teaching and learning methods, including case-based discussions, scenario-based learning, role play, demonstrations, group work, simulation exercises, and reflective discussions. Rather than relying primarily on one-way knowledge transmission, the methodology encourages learners to engage actively in problem-solving, communication, critical thinking, and decision-making processes. Through the use of multiple teaching methods, the approach accommodates different learning needs while reinforcing practical competency development.



Figure 3. Examples of Interactive Teaching and Learning Methods Used in the CBNS Model

An important feature of the approach is the close integration of learning and practice. Faculty members, trainers, and clinical instructors are encouraged to create learning environments in which participants can apply knowledge, practice skills, receive feedback, and learn from experience. This helps strengthen competency-based learning and supports the development of practical skills required in educational and clinical settings.

The methodology also promotes reflective learning through the use of debriefing sessions and structured feedback processes. Debriefing provides opportunities for participants to review learning experiences, identify strengths and areas for improvement, and translate lessons learned into future actions. By embedding reflection and feedback into routine learning activities, the approach supports continuous learning and quality improvement.

Box 4: Debriefing for Continuous Improvement

Debriefing is a structured reflection process conducted after a training session, practical exercise, or learning activity. It provides an opportunity for trainers, facilitators, and organizers to review the implementation process, identify strengths and challenges, capture lessons learned, and determine actions for future improvement. By encouraging systematic reflection and discussion, debriefing supports continuous learning, adaptive implementation, and quality improvement.

Within the CBNS Model, debriefing serves as an important mechanism for strengthening active learning and institutional learning processes. Rather than focusing solely on whether an activity was completed successfully, debriefing encourages training teams to examine what worked well, what challenges emerged, why they occurred, and how future activities can be improved. In this

way, learning is generated not only from training content but also from the implementation experience itself.

Under CBNS-II, debriefing sessions were routinely conducted following FD Training, CNT Training, workshops, and other learning activities. Discussions commonly focused on the following questions:

- What happened?
- How was the activity experienced by participants and facilitators?
- What worked well and what could be improved?
- What lessons were learned?
- What actions should be taken next time?

Through these discussions, trainers and facilitators were able to identify operational issues, exchange experiences, and agree on practical actions for subsequent activities. For example, debriefing sessions often resulted in improvements to training preparation, facilitation approaches, time management, participant engagement strategies, and logistical arrangements.

By systematically incorporating reflection, lesson learning, and action planning into routine activities, debriefing helps transform individual experiences into institutional learning and contributes to continuous improvement within nursing colleges and collaborative hospitals.

Overall, Active Learning Methodology supports a gradual shift from teacher-centered instruction toward more participatory, practice-oriented, and learner-centered approaches. By promoting active engagement, practical application, and reflective learning, the approach contributes to the development of competent, confident, and self-directed nursing professionals.

4.5 College-Hospital Collaboration

College-Hospital Collaboration is a key component of the CBNS Model that aims to strengthen the linkage between nursing education and clinical practice. The approach promotes structured collaboration between nursing colleges and collaborative hospitals to create a more supportive learning environment for students and to improve the quality of both education and clinical practice.

As illustrated in Figure 4, College-Hospital Collaboration is supported through a structured coordination mechanism that links nursing colleges and collaborative hospitals. Within this structure, institutional committees serve as platforms for planning, communication, monitoring, and quality improvement, while the Coordination Committee functions as a joint forum for collaboration between educational and clinical institutions.

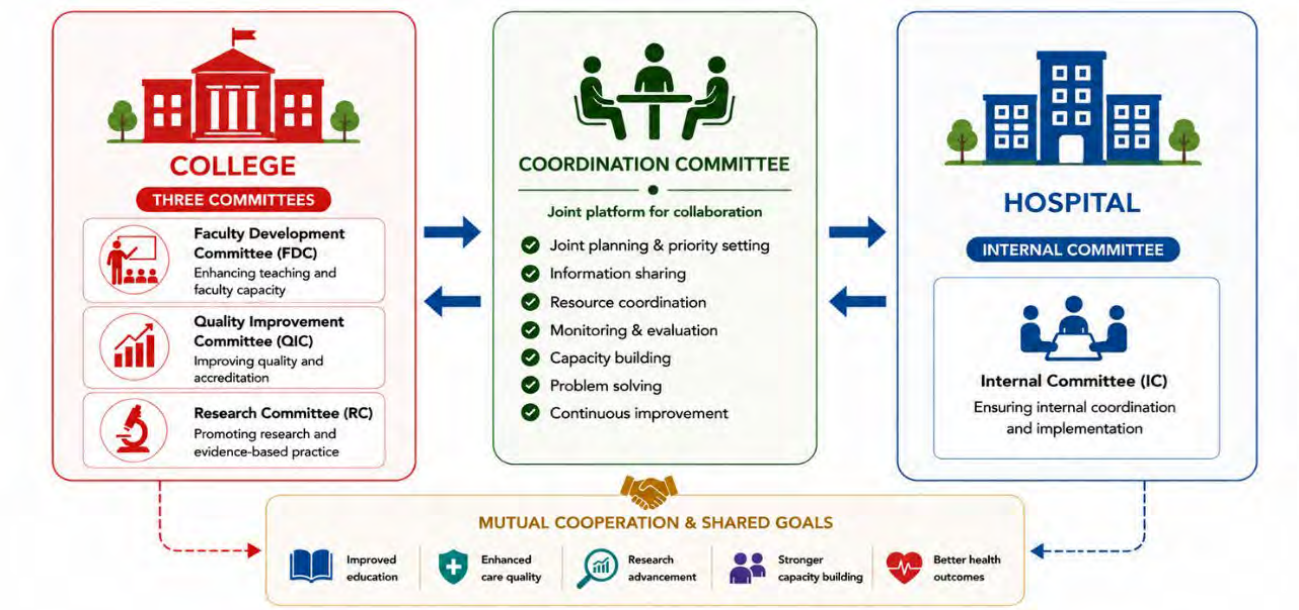


Figure 4: Conceptual Structure of College-Hospital Collaboration in the CBNS Model

Through regular communication, joint planning, information sharing, and collaborative problem-solving, the mechanism helps align educational objectives with clinical learning opportunities and supports the implementation of shared institutional goals. The approach is intended not only to strengthen operational coordination but also to foster long-term academic-clinical partnerships that contribute to improved nursing education, clinical practice, research activities, and institutional capacity development.

The approach also supports closer collaboration in the planning, supervision, and monitoring of clinical practice. Through regular coordination and shared engagement in student learning, nursing colleges and hospitals are better able to address operational challenges, strengthen student support systems, and promote more consistent clinical learning experiences.

Beyond operational coordination, College-Hospital Collaboration contributes to the development of long-term academic-clinical partnerships. By establishing regular communication channels and collaborative working relationships, institutions are able to strengthen mutual understanding, enhance accountability, and support continuous improvement in both educational and clinical settings.

Box 5: Strengthening Clinical Practice through College-Hospital Collaboration

Clinical practice is one of the most important components of nursing education, requiring close collaboration between educational institutions and clinical facilities. However, effective clinical learning does not occur automatically simply because students are placed in hospitals. It requires ongoing communication, coordination, and shared responsibilities among faculty members, clinical instructors, hospital staff, and students.

Within the CBNS Model, College-Hospital Collaboration supports clinical learning through regular communication and coordinated supervision mechanisms. Faculty members, MTs, and CNTs work together to plan, monitor, and support students' clinical practice experiences. Coordination Committees provide a platform for discussing practical issues related to student supervision, learning objectives, scheduling, and clinical learning environments.

Under CBNS-II, collaborative practices included pre-clinical conferences, faculty participation in clinical supervision, regular communication between colleges and hospitals, and bedside teaching conducted by CNTs. These mechanisms helped strengthen consistency between classroom learning and clinical practice while providing students with more structured supervision and support.

The experience demonstrated that effective clinical learning depends not only on the quality of teaching in classrooms or hospitals, but also on the quality of collaboration between educational and clinical institutions. By strengthening communication, joint supervision, and shared responsibility for student learning, College-Hospital Collaboration contributes to a more supportive and practice-oriented learning environment.

4.6 Inter-Institutional Mutual Learning

Inter-Institutional Mutual Learning is a key component of the CBNS Model that promotes peer learning, experience sharing, and institutional improvement among nursing colleges and collaborative hospitals. The approach recognizes that many practical solutions and innovations already exist within institutions and can be shared and adapted through structured exchange and collaboration.

A central mechanism of this component is the Inter-Institutional Mutual Visit. Under CBNS-II, representatives from nursing colleges and collaborative hospitals, including principals, nursing superintendents, MTs, CNTs, and faculty members, visited peer institutions to observe practices, exchange experiences, discuss operational challenges, and identify practical solutions. The visits provided opportunities for participants to learn directly from the experiences of other institutions and explore how successful practices could be adapted to their own contexts. Other mutual learning opportunities included subject-based teaching workshops, quality improvement activities, and collaborative exchanges related to institutional development. Further details on the Mutual Visit approach, including a model schedule and examples of tools used during the visits, are provided in

Annex 2.

Through these exchanges, participants reviewed a wide range of institutional practices, including teaching and learning approaches, clinical supervision systems, committee activities, quality improvement initiatives, and institutional management practices. Rather than relying solely on external guidance, the approach encouraged institutions to learn from one another and to identify practical improvements based on peer experiences.

The mutual learning approach also strengthened networking and professional relationships among nursing educators, administrators, and clinical practitioners across participating institutions. By creating opportunities for dialogue, reflection, and collaborative problem-solving, the approach helped foster a broader learning community within the nursing education system.

Implementation experiences suggested that direct observation of practices, open discussion of challenges, and peer exchange were particularly valuable for stimulating institutional reflection and encouraging the adaptation of practical and locally feasible improvements. The approach therefore served not only as a mechanism for knowledge sharing but also as a means of strengthening institutional motivation, collaboration, and continuous improvement.

Box 6: Adapting Good Practices through Inter-Institutional Learning: Experience of Rajshahi Nursing College

As part of the CBNS-II inter-institutional mutual learning activities, faculty members from Rajshahi Nursing College participated in a subject-based nursing education workshop where nursing colleges exchanged experiences and discussed approaches to faculty management, teaching organization, and quality improvement.

During the workshop, participants reviewed faculty profiles, educational backgrounds, and teaching experience, and learned how other institutions organized teaching responsibilities according to subject specialization. Through group discussions and practical exercises, participating institutions developed criteria for subject allocation and explored approaches for assigning faculty members based on their academic background, expertise, and teaching experience.

Following the workshop, Rajshahi Nursing College reviewed its existing teaching arrangements and identified challenges related to faculty assignment and workload distribution. The college subsequently introduced a more structured subject-based teaching system by assigning faculty members to specific subject areas according to their qualifications and experience.

According to the college, the new approach improved the alignment between faculty expertise and teaching responsibilities, strengthened subject-specific knowledge among faculty members, and created opportunities for less experienced faculty to learn from senior colleagues within the same subject area. The experience demonstrated how inter-institutional learning activities can support

practical institutional improvements by enabling participants to adapt ideas and approaches learned from peer institutions to their own contexts.

4.7 Toward Institutionalization and Sustainable Expansion of the CBNS Model

The implementation experiences of CBNS-II demonstrated that institution-based and operationally grounded approaches can contribute to strengthening nursing education and clinical practice in Bangladesh. Across the four components of the CBNS Model, participating institutions developed practical mechanisms for capacity development, active learning, college-hospital collaboration, and inter-institutional learning that were embedded within existing institutional structures and processes.

The project experience suggested that future efforts should focus first on sustaining practical approaches that demonstrated positive implementation results. Rather than introducing entirely new systems, continued use and refinement of effective practices may provide a more feasible pathway toward institutionalization and long-term sustainability.

The experience also highlighted the importance of strengthening institution-based continuous improvement processes. Regular reflection, peer learning, coordination, and adaptation were important features across all components of the CBNS Model and supported ongoing learning and improvement within participating institutions.

At the same time, sustainable implementation requires a stronger linkage between operational activities and broader system-level support mechanisms. While many improvements were initiated and implemented at the institutional level, their long-term sustainability depends on supportive policies, coordination mechanisms, quality assurance systems, and leadership structures that can reinforce and sustain institution-led efforts.

Finally, the project experience suggested that future expansion of the CBNS Model should be implemented progressively according to institutional readiness and local contexts. The model was not intended as a fixed framework to be replicated uniformly across all institutions. Rather, its implementation should allow flexibility and adaptation while maintaining the core principles of institutional ownership, continuous learning, collaboration, and practical problem-solving.

Based on these perspectives, the following chapters present a set of operational and system-level recommendations to support the institutionalization, sustainability, and possible expansion of the CBNS Model within the Bangladeshi nursing context.

5. Operational Recommendations for Implementation and Scale-up of Effective CBNS Approaches

5.1 Cascade Training

The continued utilization of MTs is recommended as a practical mechanism for sustaining faculty development, clinical teaching capacity, and continuous professional learning within nursing colleges and collaborative hospitals. Rather than relying primarily on external training inputs, institutions should strengthen the use of locally available human resources by engaging MTs in FD, CNT training, in-service training, and other institution-based learning activities.

To support sustainability, nursing colleges and collaborative hospitals are encouraged to develop institution-based training plans that align training activities with institutional priorities, available human resources, and operational needs. Training activities should be incorporated into routine institutional practices and annual operational plans wherever possible, thereby promoting continuous learning rather than one-time training events.

The CBNS-II experience demonstrated that MTs can play multiple roles beyond the delivery of training sessions. In many institutions, MTs contributed to mentoring junior faculty members, supporting practical classroom facilitation, conducting in-service training, guiding clinical learning activities, and promoting the application of competency-based approaches. Continued utilization of MTs may therefore contribute not only to knowledge transfer but also to the strengthening of institutional learning systems and professional development processes.

The regular use and updating of training materials is also recommended. Training modules, lesson plans, skills demonstration materials, and other learning resources should be reviewed periodically and adapted according to institutional experiences, curriculum updates, and emerging educational needs. Maintaining practical and contextually relevant training materials can help ensure that training activities remain responsive to local realities and implementation challenges.

Implementation experiences further suggest that cascade training approaches are most effective when supported by institutional commitment, management support, and appropriate workload arrangements. Institutions should therefore consider allocating sufficient time and opportunities for MTs and CNTs to conduct training and mentoring activities. Peer support among MTs, periodic review meetings, and opportunities for sharing implementation experiences may also help maintain motivation and strengthen the quality of training activities over time.

Ultimately, the cascade training approach should be viewed not merely as a training delivery mechanism but as a strategy for strengthening institution-based continuous learning and capacity development. Sustained implementation of MT-led activities can contribute to building a culture of professional learning, practical problem-solving, and continuous improvement within nursing colleges and collaborative hospitals.

5.2 Active Learning Promotion

The continued promotion of active learning approaches is recommended to strengthen competency-based nursing education and support the development of practical clinical competencies among nursing students. Nursing colleges should continue to encourage learner-centered and practice-oriented teaching approaches through regular FD activities, the systematic use of lesson plans, and opportunities for peer learning and reflection among faculty members.

The CBNS-II experience demonstrated that active learning methodologies contributed to improving student participation, classroom interaction, critical thinking, and practical skill development. Approaches such as group discussions, scenario-based learning, role plays, demonstrations and re-demonstrations, analytical exercises, question-and-answer sessions, and debriefing activities encouraged students to engage more actively in the learning process. These methods also supported the application of competency-based educational approaches by creating opportunities for students to practice, reflect, and apply knowledge in realistic learning situations.

To sustain and strengthen the quality of implementation, nursing colleges should continue to invest in faculty capacity development related to active learning methodologies through regular FD activities. While active learning approaches are already incorporated into the Bachelor of Science (BSc) nursing curriculum, implementation quality may vary across institutions and individual faculty members. Continuous opportunities for practical skill enhancement, peer exchange, and reflective learning can help educators strengthen their facilitation skills and maintain the effective use of active learning approaches in routine teaching practice.

The use of lesson plans and structured teaching guides should continue to be promoted to support consistent implementation across courses and instructors. Faculty members should also be encouraged to share teaching experiences, discuss implementation challenges, and exchange practical facilitation techniques through regular peer learning and reflection activities. Such mechanisms can support continuous improvement and help prevent active learning approaches from becoming routine but largely teacher-centered classroom exercises.

The project experience further highlighted the importance of maintaining active learning as an integral part of routine educational practice rather than as a requirement to be complied with. Institutions should continue to apply active learning approaches in classroom teaching, laboratory sessions, clinical preparation activities, and student assessment processes while regularly reviewing how these approaches are implemented in practice. Periodic review of lesson plans, teaching materials, and classroom experiences can help ensure that active learning methodologies remain practical, participatory, and aligned with competency-based educational objectives.

Particular attention should be given to strengthening reflective learning processes, including debriefing, feedback, and guided discussion, which were found to be important for translating learning activities into meaningful educational outcomes.

Sustaining active learning approaches requires continued institutional commitment, faculty engagement, and supportive learning environments. Future implementation should take into account faculty workload, available teaching resources, class size, and institutional capacities. Gradual and context-appropriate integration of active learning methodologies, combined with continuous faculty development and peer support, may help strengthen teaching quality and support long-term improvement in nursing education.

5.3 College-Hospital Collaboration

Collaboration between nursing colleges and collaborative hospitals should be sustained and strengthened through regular communication, joint planning, and practical coordination mechanisms related to clinical practice and student supervision. Rather than focusing solely on maintaining formal committee structures, institutions should prioritize mechanisms that support routine collaboration, shared problem-solving, and continuous communication between educational and clinical stakeholders.

The CBNS-II experience demonstrated that effective clinical practice management requires ongoing collaboration between nursing colleges and hospitals. Through coordination committee meetings, joint supervision activities, and routine communication, participating institutions were able to improve coordination related to student placement, clinical supervision, learning environments, and implementation of educational activities. These experiences reinforced the importance of maintaining academic–clinical linkages as a foundation for competency-based nursing education.

The project also showed that collaboration was most effective when it addressed practical operational issues faced by both institutions. Regular interaction between faculty members, MTs, CNTs, nursing administrators, and hospital personnel helped strengthen mutual understanding and facilitated timely problem-solving related to clinical practice implementation. In several institutions, coordination mechanisms served not only as communication platforms but also as practical tools for addressing issues directly affecting student learning and clinical training quality.

To sustain these achievements, institutions should integrate coordination activities into routine operational processes rather than treating them as additional project-related activities. Regular communication between colleges and hospitals should be maintained through feasible and context-appropriate mechanisms, including coordination meetings, joint planning sessions, supervisory visits, and other existing institutional platforms. Joint activities related to clinical practice management should continue to be promoted, particularly those related to student supervision, clinical learning environments, faculty engagement in clinical practice, and communication between faculty members and clinical instructors.

Implementation experiences also highlighted that maintaining collaboration can be challenging.

Experiences following CBNS-I suggested that coordination mechanisms often became inactive after project support ended, while communication was reduced to ad hoc contacts related mainly to student placement and clinical practice arrangements. Similar challenges were observed during CBNS-II, where the level of committee functioning varied considerably among participating institutions. Factors such as competing institutional priorities, staff workload, limited human resources, and logistical constraints often affected the regular implementation of coordination activities.

The project experience suggests that establishing committees alone is insufficient to ensure sustained collaboration. Coordination mechanisms are more likely to be maintained when they are linked to practical operational needs and provide clear value to participating institutions. Future implementation should therefore take into account workload constraints, staffing availability, communication capacities, and institutional resources. Coordination activities should focus on addressing issues directly related to clinical practice management, student supervision, and institutional problem-solving, rather than functioning primarily as administrative requirements.

Where appropriate, existing institutional facilities, communication channels, and operational platforms may be utilized to support collaboration and reduce the administrative burden associated with organizing separate activities. Embedding coordination within routine institutional processes may help maintain college–hospital partnerships beyond project-supported periods and contribute to the long-term sustainability of clinical education improvements.

5.4 Mutual Learning

Inter-institutional mutual learning and networking should be maintained as mechanisms for promoting continuous improvement, peer learning, and dissemination of practical implementation experiences across nursing colleges and collaborative hospitals. Institutions are encouraged to continue sharing implementation experiences, practical solutions, and lessons learned in order to support contextual adaptation and institutional improvement.

The CBNS-II experience demonstrated that mutual learning activities provided valuable opportunities for participants to observe practices directly, exchange experiences, discuss operational challenges, and reflect on their own institutional practices. Through mutual visits, subject-based teaching workshops, dissemination activities, and other exchange opportunities, nursing educators, MTs, CNTs, nursing administrators, and clinical practitioners were able to learn from one another and identify practical approaches that could be adapted within their own institutional contexts.

The project also demonstrated that peer learning can support institutional improvement in ways that are difficult to achieve through formal training alone. Direct observation of practices, discussion with peers facing similar challenges, and exposure to different operational approaches helped stimulate reflection, strengthen motivation, and encourage practical problem-solving. Importantly, successful

activities were not simply replicated but adapted according to local needs, capacities, and institutional realities.

To maintain these benefits, institutions should continue to promote communication and networking among nursing colleges and hospitals. Mutual learning opportunities may include periodic mutual visits, subject-based workshops, dissemination events, exchange sessions, or other practical platforms for sharing experiences. Institutions are encouraged to document and share implementation experiences, innovations, and lessons learned in order to support wider dissemination and adaptation of effective practices.

At the same time, implementation experiences highlighted the importance of considering financial and operational feasibility. While mutual visits were highly valued by participants, large-scale exchange activities may be difficult to sustain without external support. Future implementation should therefore explore flexible and cost-effective approaches, including integration with existing meetings and training activities, regional exchange mechanisms, virtual communication platforms, and targeted learning visits focused on specific themes or institutional needs.

The sustainability of mutual learning activities is likely to depend not on the frequency of exchanges but on their practical relevance and perceived value to participating institutions. Mutual learning should therefore be viewed as a mechanism for supporting continuous institutional improvement, contextual adaptation, and professional networking rather than as a stand-alone project activity. Maintaining opportunities for peer exchange and collaborative reflection may help sustain the broader learning community established through CBNS-II.

5.5 Expected Roles of Nursing Colleges and Collaborative Hospitals

The sustainability of the approaches introduced through CBNS-II will ultimately depend on the extent to which nursing colleges and collaborative hospitals assume ownership of implementation and integrate these approaches into their routine operations. While external support may facilitate implementation, long-term sustainability requires institution-led efforts to maintain continuous learning, collaboration, and quality improvement processes. The roles of nursing colleges and collaborative hospitals are therefore critical for sustaining and further strengthening the practical approaches developed through the project.

Nursing Colleges

Nursing colleges are expected to play a leading role in sustaining educational improvement efforts, including the continued utilization of MTs, implementation of FD activities, promotion of active learning methodologies, and periodic review of teaching materials and educational practices. Colleges are also encouraged to integrate these activities into annual work plans, routine academic processes, and

institutional quality improvement efforts.

In addition, nursing colleges are expected to continue strengthening collaboration with collaborative hospitals and to actively participate in coordination, mutual learning, and accreditation-related activities. These mechanisms can support continuous improvement of educational quality and clinical learning environments.

Particular attention should be given to reducing dependence on individual champions and ensuring continuity during leadership transitions and staff turnover. Institutional mechanisms for knowledge sharing, mentoring, documentation, and succession planning may help sustain implementation efforts beyond the tenure of specific faculty members or institutional leaders.

Collaborative Hospitals

Collaborative hospitals are expected to maintain supportive clinical learning environments for nursing students and to continue utilizing MTs, CNTs, and other nursing personnel to strengthen clinical supervision, practical learning, and workplace-based capacity development. Hospitals are also encouraged to integrate clinical teaching, student supervision, and nursing workforce development activities into routine operational and management processes.

Sustaining clinical learning activities will require continued support from hospital leadership, including nursing administrators, department heads, and hospital management. The experience of CBNS-II demonstrated that active engagement and commitment from hospital leadership were important factors in facilitating coordination, supporting committee activities, and creating opportunities for student learning and staff development. Continued institutional commitment will therefore be essential for maintaining these functions beyond the project period.

Expected Roles & Succession Planning:

Institutions should strengthen documentation, mentoring, and succession planning mechanisms to maintain continuity during staff turnover.

Joint Responsibilities

Nursing colleges and collaborative hospitals are jointly expected to maintain shared ownership of clinical education, continuous learning, and quality improvement processes. Continued collaboration should focus on addressing practical issues related to clinical practice management, student supervision, learning environments, and institutional problem-solving rather than solely maintaining formal coordination structures.

Both institutions are encouraged to embed coordination, learning, and improvement activities within existing institutional systems and routine operations. Sustained implementation is more likely when responsibilities are institutionalized and supported through organizational processes rather than depending primarily on specific individuals, project-supported arrangements, or external assistance.

By maintaining communication, shared ownership, and institution-based implementation processes, nursing colleges and collaborative hospitals can play a central role in sustaining and further developing the approaches introduced through CBNS-II.

6. System-Level Recommendations for Institutionalization and Sustainable Expansion of Effective CBNS Approaches

6.1 Human Resource Development and Support Systems

Strengthening human resource development and support systems is recommended to sustain and expand the practical improvements introduced through CBNS-II. In particular, future efforts should focus on establishing mechanisms that support CPD, strengthen nursing career paths, and institutionalize educational and clinical leadership functions within nursing colleges and collaborative hospitals.

The CBNS-II experience demonstrated that improvements in nursing education and clinical practice depended not only on training activities themselves but also on the availability of individuals who could function as trainers, mentors, facilitators, and change agents within institutions. Through the project, MTs and CNTs played important roles in supporting faculty development, clinical supervision, in-service training, active learning methodologies, and competency-based education. These functions contributed to strengthening institutional implementation capacity and promoting continuous learning within participating colleges and hospitals.

At the same time, the project experience highlighted that many of these functions remain dependent on project-supported arrangements and have not yet been fully institutionalized within the nursing system. MT and CNT roles currently operate primarily as functional responsibilities rather than formally recognized positions within existing career structures. In addition, while discussions on nursing career paths have advanced in recent years, the proposed reforms have not yet been fully institutionalized. Similarly, CPD remains at an early stage of development, and existing training opportunities are not yet systematically linked to professional licensing, relicensing, career progression, or performance management systems.

System-Level Recognition:

Consider recognizing educational and clinical leadership functions performed by MTs and CNTs within future nursing career development frameworks.

To strengthen long-term sustainability, ongoing efforts to develop nursing career paths should consider how educational and clinical leadership functions, including those performed by MTs and CNTs, can be recognized and incorporated into institutional and professional development structures. The ongoing policy discussions led by MOHFW and related institutions provide an important opportunity to establish clearer career progression paths, strengthen professional recognition, and support the continued utilization of trained personnel within the nursing workforce.

Development of CPD systems should also be pursued in close coordination with broader nursing

workforce reforms. Rather than functioning solely as a collection of training activities, CPD should gradually evolve into a mechanism that supports continuous competency development throughout a nurse's career. Consideration may therefore be given to strengthening linkages between CPD, career advancement, professional regulation, institutional performance improvement, and workforce development policies.

The project experience suggested that sustainable human resource development requires more than periodic training opportunities. Long-term sustainability depends on whether trained personnel are recognized, supported, and able to continue performing educational and clinical leadership functions within their institutions. Future reforms should therefore focus not only on expanding learning opportunities but also on creating supportive institutional and regulatory environments that enable trained personnel to apply, maintain, and further develop their competencies over time.

6.2 Quality Assurance and Institutional Improvement

Strengthening quality assurance and institutional improvement mechanisms is recommended to sustain improvements in nursing education and clinical practice. In particular, accreditation processes should be further promoted not only as a mechanism for formal recognition but also as a practical tool for institutional self-assessment, continuous quality improvement, and leadership development within nursing colleges and collaborative hospitals.

The CBNS-II experience demonstrated that accreditation-related activities helped institutions identify gaps in educational quality, learning environments, clinical practice arrangements, documentation, leadership, and institutional management. Through self-assessment, evidence collection, working group activities, and follow-up discussions, participating nursing colleges strengthened their awareness of quality standards and engaged more actively in institutional improvement efforts. These processes also helped link accreditation with other CBNS approaches, including faculty development, active learning, college-hospital collaboration, and clinical practice strengthening.

At the same time, accreditation in nursing education remains a relatively new and evolving process in Bangladesh. The project experience showed that institutions often require practical guidance to understand standards, prepare evidence, conduct self-assessment, and translate identified gaps into feasible improvement actions. Therefore, continued support from BNMC, DGNM, and relevant stakeholders will be important to strengthen the implementation, standardization, and practical use of accreditation processes.

Leadership and operational management capacities should also be strengthened as part of quality assurance and institutional improvement. The CBNS-II experience suggested that institutional improvement depends not only on technical standards but also on the ability of nursing administrators, principals, nursing superintendents, and managers to organize activities, coordinate stakeholders,

mobilize staff, monitor progress, and follow up on improvement actions. Practical management approaches, including 5S, action planning, documentation, and routine monitoring, can support institutions in translating quality standards into day-to-day improvements.

Future efforts should therefore strengthen the linkage between accreditation, institutional quality improvement, and leadership development. Nursing colleges should be encouraged to use accreditation standards as a regular reference for reviewing educational quality and institutional performance. Collaborative hospitals should also be engaged where accreditation standards relate to clinical practice, student supervision, and learning environments. In addition, training and support for nursing administrators and managers should be further developed to strengthen their role in leading and sustaining quality improvement efforts.

In light of broader developments in medical education accreditation in Bangladesh, future alignment between nursing education accreditation and national quality assurance systems may also be considered. Any such alignment should ensure that the specific characteristics of nursing education, clinical practice learning, and college-hospital collaboration are adequately reflected.

Sustainability will depend on whether quality assurance processes are embedded into routine institutional management rather than treated as one-time preparation for accreditation visits. Continued implementation should therefore focus on practical, phased, and context-appropriate approaches that enable institutions to review their own situation, identify priority gaps, implement feasible improvements, and monitor progress over time.

6.3 Governance

Strengthening governance, coordination, and institutional support mechanisms is recommended to sustain the implementation of CBNS approaches beyond the project period. In particular, routine monitoring, supportive supervision, coordination among relevant institutions, and practical use of CBNS-II training modules and tools should be strengthened as system-level support functions for nursing colleges and collaborative hospitals.

The CBNS-II experience demonstrated that institution-based implementation requires continued administrative and technical support. Many activities, including committee functions, cascade training, accreditation preparation, clinical practice strengthening, and mutual learning, depended on regular follow-up, communication, and coordination among DGNM, BNMC, MOHFW, nursing colleges, hospitals, and development partners. Where such support was available, institutions were better able to maintain implementation momentum and address operational challenges.

At the same time, the project experience highlighted important governance challenges. Routine monitoring by DGNM was not fully institutionalized, and follow-up of target institutions often depended on specific opportunities such as trainings, visits, mutual visits, or project-supported activities.

Frequent personnel changes, unclear decision-making channels, competing administrative priorities, and changes in the policy and planning framework also affected implementation continuity. These experiences suggest that sustainable implementation requires governance mechanisms that are not overly dependent on individual commitment or project-based arrangements.

To support future implementation, DGNM and relevant authorities should strengthen practical monitoring and institutional support mechanisms using existing opportunities and feasible approaches. Monitoring should not be limited to inspection or reporting, but should function as supportive supervision that helps institutions identify challenges, share experiences, and receive practical guidance. Existing meetings, institutional visits, online communication, training events, accreditation processes, and mutual learning activities may be used as opportunities to understand institutional progress and provide follow-up support.

Governance & Monitoring:

Consider designating a focal point within DGNM to coordinate monitoring, follow-up, and dissemination of effective CBNS approaches.

The training modules, practical tools, implementation manuals, and lessons learned developed through CBNS-II should also be utilized as common resources for future implementation and adaptation. These resources can support standardization, reduce duplication of effort, and provide practical references for institutions seeking to continue or adapt CBNS approaches according to their own contexts.

Future governance arrangements should also strengthen coordination among MOHFW, DGNM, BNMC, nursing colleges, hospitals, and development partners. Clearer roles, communication channels, and follow-up responsibilities will be important for maintaining continuity, especially in a context where administrative structures, policy priorities, and planning frameworks may continue to change.

Sustainability will depend on whether governance functions are embedded into routine administrative systems rather than maintained as project-specific arrangements. A realistic and phased approach should therefore be adopted, combining formal mechanisms such as monitoring systems and official meetings with practical and flexible communication channels that can support timely problem-solving and institutional learning.

6.4 Resource Allocation

Continued resource allocation and operational support are recommended to sustain training, continuous learning, and implementation activities introduced through CBNS-II. While many CBNS

approaches can be implemented using existing institutional human resources and locally available resources, their continuity requires practical budget planning and administrative support at the institutional and system levels.

The CBNS-II experience demonstrated that training and capacity development activities can be implemented in a relatively practical and cost-conscious manner when standardized training materials, trained personnel, existing facilities, and locally adapted implementation approaches are effectively utilized. While MT training required central-level coordination, trainer deployment, and operational resources, subsequent CNT training, FD activities, and in-service training were increasingly implemented by participating institutions using trained personnel and existing institutional resources. This experience suggests that sustainable implementation will require an appropriate balance between central-level support and institution-based implementation. Examples of operational resource requirements for selected MT and CNT training activities are presented in Annex 3 for reference.

At the same time, the project experience also highlighted that sustainable implementation cannot depend solely on individual institutional efforts or temporary project-based support. Even when activities are designed to be low-cost, operational resources are still required for training preparation, venue arrangements, materials, communication, transportation, monitoring, and follow-up. Without predictable resource allocation, institutions may find it difficult to continue training activities, mutual learning opportunities, coordination meetings, and other implementation processes on a regular basis.

Future implementation should therefore consider how key CBNS-related activities can be incorporated into institutional annual plans, operational budgets, and relevant government planning and budgeting mechanisms. If broader sector planning and operational planning mechanisms are strengthened or re-established in the future, opportunities should be explored to include training, monitoring, coordination, and continuous learning activities within such frameworks.

Resource allocation should also be guided by feasibility and prioritization. Rather than attempting to continue all activities at the same scale as during the project period, institutions and relevant authorities should identify priority activities that are most essential for sustaining educational quality, clinical practice improvement, and institutional learning. Cost-effective approaches, such as using existing institutional facilities, local trainers, regional exchange mechanisms, online communication, and integration with existing meetings or training events, should be considered where appropriate.

Sustainability will depend on whether financial and operational support mechanisms are aligned with realistic implementation capacities. Continued budget allocation, planning support, and administrative commitment from relevant institutions will be important for maintaining the practical gains achieved through CBNS-II and supporting the gradual expansion of effective CBNS approaches.

6.5 Expected Roles of Key National Stakeholders

The sustainability and gradual institutionalization of the CBNS approaches will require continued leadership, coordination, and support from key national stakeholders. While nursing colleges and collaborative hospitals are responsible for day-to-day implementation, national-level institutions play important roles in providing the policy, regulatory, technical, and organizational environment necessary to sustain continuous improvement efforts across the nursing sector.

Ministry of Health and Family Welfare (MOHFW)

The MOHFW is expected to provide overall policy direction and strategic leadership for strengthening nursing education, clinical practice, and nursing workforce development in Bangladesh. Continued support for the development of nursing career paths and broader policies related to nursing workforce strengthening, deployment, and professional development may contribute to the long-term sustainability of nursing sector reforms and CBNS-related approaches.

The Ministry is also expected to facilitate coordination among relevant government agencies and stakeholders and promote the integration of effective nursing education approaches into broader health sector planning, policy development, and budgeting processes. In addition, continued engagement from the MOHFW will be important for supporting institutionalization efforts related to nursing education quality improvement, human resource development, and collaboration among relevant institutions.

Given that several key issues identified through CBNS-II, including several cross-cutting issues such as nursing career paths, CPD, monitoring systems, and quality assurance mechanisms, require policy-level discussion and coordination beyond the mandate of individual institutions, continued leadership from the MOHFW will remain important for advancing these agendas and creating an enabling environment for sustainable implementation.

Directorate General of Nursing and Midwifery (DGNM)

The DGNM is expected to play a central role in providing technical leadership, implementation support, and operational coordination for nursing education and clinical practice improvement initiatives. Building on the experiences of CBNS-II, the DGNM may further strengthen its role in supporting nursing colleges and collaborative hospitals through technical guidance, dissemination of good practices, supportive supervision, and follow-up of institutional improvement efforts.

Particular attention should be given to strengthening routine monitoring and support mechanisms that help institutions identify challenges, share experiences, and maintain implementation momentum. Building on the CBNS-II experience, the DGNM is expected to support the continued implementation

and expansion of MT, CNT, FD, and in-service training activities through the utilization of existing training modules, trained personnel, and institutional networks. Continued development of trainer capacity and periodic updating of training materials may also contribute to maintaining the relevance and sustainability of these approaches over time.

Bangladesh Nursing and Midwifery Council (BNMC)

The BNMC is expected to continue strengthening professional standards, accreditation processes, and quality assurance mechanisms within nursing education. Ongoing review and refinement of accreditation guidelines, tools, and implementation processes may help ensure that accreditation serves not only as a regulatory function, but also as a practical mechanism that supports continuous institutional improvement and quality enhancement within nursing education institutions.

The BNMC may also play an important role in maintaining and periodically updating nursing curricula, competency frameworks, educational standards, and other regulatory and educational tools necessary to support quality nursing education. Continued efforts to align educational requirements with evolving health service needs and professional expectations may help strengthen the relevance and quality of nursing education over time.

Continued strengthening of institutional capacity, operational systems, and resource availability within the BNMC will also be important to ensure effective implementation of accreditation, quality assurance, and regulatory functions. As national accreditation arrangements continue to evolve, including potential future roles of broader health professional accreditation bodies, attention should be given to maintaining the quality, continuity, and nursing-specific relevance of accreditation and quality assurance processes.

Bangladesh Nursing Association (BNA)

The BNA is expected to contribute to professional dialogue, networking, and advocacy related to nursing education, clinical practice, and professional development. As a professional organization representing nurses, the BNA may help facilitate communication among policymakers, educators, administrators, and frontline nursing professionals and support the dissemination of good practices and lessons learned across the profession.

The BNA may also contribute to ongoing discussions related to career development, CPD, professional recognition, and broader nursing workforce issues, thereby helping to strengthen professional engagement and ownership within the nursing sector.

Shared Responsibilities

The sustainability of the CBNS approaches will depend not only on the efforts of individual institutions but also on effective collaboration among key national stakeholders. Continued coordination among the MOHFW, DGNM, BNMC, BNA, nursing colleges, and collaborative hospitals will be important for advancing common priorities related to nursing education quality, clinical practice improvement, human resource development, and institutional strengthening.

Sustained progress will require alignment between policy development, regulatory functions, implementation support, quality assurance mechanisms, and professional development efforts. Strengthening communication, coordination, and shared ownership among these stakeholders may help create a more supportive environment for the sustainability, institutionalization, and gradual expansion of effective CBNS approaches within Bangladesh.

7. Proposed Roadmap for Sustainability, Institutionalization, and Scale-up of Nursing Education and Clinical Practice

Based on the implementation experiences and recommendations discussed in the previous chapters, Figure 5 presents one possible pathway for the future sustainability, institutionalization, and gradual expansion of effective CBNS approaches.

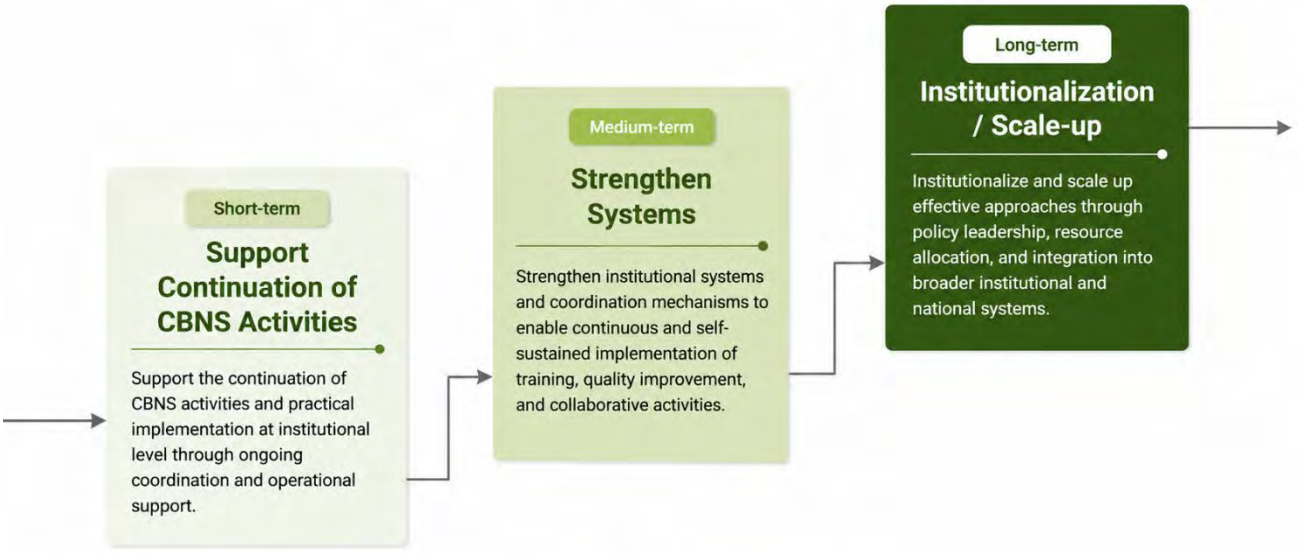


Figure 5: Roadmap for Sustainability, Institutionalization, and Scale-up

As discussed throughout this recommendation paper, many of the improvements introduced through CBNS-II have already been adopted by participating nursing colleges and collaborative hospitals. However, sustaining these achievements and expanding their benefits beyond the project period will require continued efforts at multiple levels. In particular, institutional implementation, system strengthening, and policy support need to evolve in a complementary and sequential manner.

In the short term, priority may be given to supporting the continuation of key CBNS-related activities and maintaining implementation momentum within participating institutions. In the medium term, efforts may focus on strengthening institutional systems, coordination mechanisms, quality improvement processes, and support structures that enable more sustainable implementation. Over the longer term, effective approaches may be further institutionalized and integrated into broader national systems through policy support, resource allocation, regulatory mechanisms, and organizational strengthening.

While actual implementation pathways will depend on future policy priorities, institutional capacities, and resource availability, the experiences of CBNS-II suggest that gradual progression from activity continuation to system strengthening and ultimately institutionalization may provide a practical

approach for sustaining and expanding effective nursing education and clinical practice improvement efforts in Bangladesh.

7.1 Short-term Actions

In the short term, priority should be given to maintaining the momentum, institutional ownership, and collaborative relationships established through CBNS-II. The immediate focus should be on supporting the continuation of key CBNS-related activities and ensuring that effective practices introduced during the project period remain embedded within routine institutional operations.

Particular attention should be given to sustaining the core implementation components of the CBNS Model. This may include continued utilization of MT and CNT training resources, implementation of FD, in-service training and clinical teaching activities, continuation of college-hospital coordination mechanisms and committee functions, and maintenance of mutual learning and experience-sharing opportunities among institutions. Where possible, these activities should be incorporated into existing institutional plans, routine operations, and annual implementation schedules.

In addition, relevant national stakeholders may support the dissemination and utilization of training modules, practical tools, implementation manuals, and other resources developed through CBNS-II. Continued use of these resources may help institutions maintain implementation quality while adapting activities to their local contexts and available capacities.

During this transition period, emphasis should be placed on practical and feasible implementation rather than replication of project-supported activities at the same scale. Flexible approaches that make use of existing institutional resources, trained personnel, and established coordination mechanisms may help maintain continuity while allowing institutions to gradually assume greater responsibility for implementation.

7.2 Medium-term Actions

In the medium term, priority should shift from the continuation of individual activities towards the strengthening of institutional systems and support mechanisms that enable sustainable implementation. The focus should be on embedding effective CBNS approaches within routine organizational processes and creating the conditions necessary for long-term sustainability.

Key priorities may include further development of CPD systems, strengthening accreditation and quality assurance mechanisms, improvement of routine monitoring and supportive supervision systems, and enhancement of coordination mechanisms among relevant institutions. Continued efforts to strengthen faculty development, clinical teaching and supervision systems, and collaboration between nursing colleges and collaborative hospitals will also remain important for supporting

competency-based nursing education and practical learning.

Particular attention should be given to institutionalizing functions that were initiated through CBNS-II. This may include strengthening mechanisms for trainer development and utilization, promoting routine implementation of FD, CNT, and in-service training activities, integrating quality improvement processes into existing committee structures, and encouraging the incorporation of relevant activities into institutional plans and operational procedures.

The CBNS-II experience also demonstrated the value of mutual learning, practical exchange, and dissemination of implementation experiences. In the medium term, these approaches may be further expanded through institutional networks, regional collaboration, and professional platforms, thereby supporting wider adaptation of effective practices across different institutional contexts.

While priorities and implementation pathways may differ among institutions, gradual strengthening of systems, coordination mechanisms, and institutional capacities may help create a more supportive environment for sustainable implementation. These efforts can serve as an important bridge between the continuation of project-supported activities and the longer-term institutionalization and scale-up of effective CBNS approaches.

7.3 Long-term Actions

In the long term, the focus should move beyond the continuation of individual activities and institutional systems towards the institutionalization and broader scale-up of effective CBNS approaches within the national nursing education system. The ultimate objective is to ensure that key approaches introduced through CBNS-II become part of routine policy, regulatory, educational, and administrative systems rather than remaining project-derived initiatives.

Priority actions may include the integration of CBNS-related approaches into national policies, regulatory frameworks, educational standards, quality assurance systems, and human resource development strategies. Areas such as faculty development, clinical teaching and supervision, accreditation, continuing professional development, quality improvement, and supportive monitoring may be further strengthened through their incorporation into existing national systems and institutional mandates.

The CBNS-II experience demonstrated that sustainable improvement requires alignment between policy leadership, regulatory functions, implementation support, institutional capacity, and resource allocation. Long-term efforts should therefore focus on strengthening linkages among these functions and ensuring that responsibilities for implementation, quality assurance, monitoring, and professional development are clearly embedded within the mandates of relevant national institutions.

Where appropriate, effective approaches developed and tested through CBNS-II may also be adapted and expanded beyond the original participating institutions. Future scale-up efforts should build on

lessons learned from implementation experience and promote flexible adaptation rather than uniform replication. Expansion should be guided by institutional readiness, available resources, and local priorities while maintaining the core principles of collaboration, continuous improvement, and practical learning.

Institutionalization will ultimately depend on sustained commitment from national stakeholders, including the MOHFW, DGNM, BNMC, BNA, nursing colleges, and collaborative hospitals. Continued leadership, coordination, and investment from these stakeholders may help ensure that effective approaches developed through CBNS-II contribute to the long-term strengthening of nursing education and, ultimately, to the quality of nursing services in Bangladesh.

8. Conclusion

The CBNS-II experience demonstrated the importance of institution-based continuous improvement approaches for strengthening nursing education and clinical practice in Bangladesh. Through the introduction and strengthening of cascade training systems, active learning methodologies, college-hospital collaboration mechanisms, quality improvement processes, and mutual learning opportunities, the project supported practical changes in teaching, learning, clinical practice, and institutional collaboration across participating institutions.

At the same time, the project experience highlighted that sustainable improvement depends not only on technical interventions, training activities, or individual institutional efforts, but also on the broader systems that support their implementation. Leadership, coordination, human resource development, quality assurance, monitoring, and resource allocation all play important roles in enabling institutions to sustain and build upon improvement efforts over time.

The experiences of CBNS-II also demonstrated that meaningful change can be achieved through practical, context-appropriate, and collaborative approaches. Rather than relying on externally driven models, the project emphasized institutional ownership, adaptation to local realities, and continuous learning through implementation. These principles remain important for future efforts to strengthen nursing education and clinical practice in Bangladesh.

Looking ahead, the sustainability and expansion of effective CBNS approaches will depend on the continued commitment and collaboration of nursing colleges, collaborative hospitals, government institutions, professional bodies, educators, nursing leaders, and practitioners. By building on the foundations established through CBNS-II and continuing to strengthen systems, institutions, and partnerships, Bangladesh has the opportunity to further advance the quality of nursing education and contribute to the long-term development of a competent, confident, and professional nursing workforce.

It is hoped that the experiences, lessons learned, and practical approaches documented through CBNS-II will serve as a useful resource for future policy development, institutional strengthening, and continuous improvement efforts within the nursing sector. Ultimately, the value of CBNS-II will not be measured solely by the activities completed during the project period, but by the extent to which its approaches continue to be adapted, sustained, and expanded by Bangladeshi institutions in the years ahead.

Annexes

Annex 1: Overview of CBNS-II

Annex 2: Mutual Visit Model Schedule and Points to be Considered

Annex 3: Examples of Operational Resource Requirement for Selected Training Activities

Annex 1: Overview of CBNS-II

Project Information

The Project for Capacity Building of Nursing Services Phase II (CBNS-II) was implemented from March 2022 to June 2026 as a technical cooperation project supported by the Japan International Cooperation Agency (JICA).

The project was implemented under the supervision of the Ministry of Health and Family Welfare (MOHFW), including the Health Services Division (HSD) and the Medical Education and Family Welfare Division (MEFWD). The Directorate General of Nursing and Midwifery (DGNM) and the Bangladesh Nursing and Midwifery Council (BNMC) served as the principal counterpart organizations.

The project targeted eight public nursing colleges and eight collaborative medical college hospitals located across Bangladesh.

Target Institutions

Nursing College	Collaborative Hospital
College of Nursing, Sher-E Bangla Nagar	Shaheed Suhrawardy Medical College Hospital
Mymensingh Nursing College	Mymensingh Medical College Hospital
Chattogram Nursing College	Chattogram Medical College Hospital
Sylhet Nursing College	Sylhet MAG Osmani Medical College Hospital
Rajshahi Nursing College	Rajshahi Medical College Hospital
Rangpur Nursing College	Rangpur Medical College Hospital
Barisal Nursing College	Sher-e-Bangla Medical College Hospital
Shaheed Tajuddin Ahmed Nursing College (Gazipur District, Dhaka Division)	Shaheed Tajuddin Ahmad Medical College Hospital

Project Framework

The overall goal of CBNS-II was to improve the quality of nursing education in Bangladesh.

To contribute to this goal, the project aimed to strengthen the implementation, monitoring, and evaluation systems of nursing education through interventions in nursing administration, nursing education, clinical practice, and dissemination and networking.

Project Framework

Overall Goal	The quality of nursing education is improved in Bangladesh.
Project Purpose	The implementation, monitoring, and evaluation system of nursing education is strengthened.
Outputs	Output 1: Management capacity for nursing administration is strengthened. Output 2: The implementation system of nursing education for BSc is strengthened at target nursing colleges. Output 3: The implementation system of clinical nursing practice is strengthened at collaborative hospitals. Output 4: Networking of nursing colleges and related organizations is strengthened.

Major Components

CBNS-II was implemented through four mutually reinforcing areas:

Output 1: Nursing Administration

- Support for nursing career path discussions
- Support for accreditation processes
- Promotion of training for nurse managers and administrators
- Contributions to discussions on CPD systems

Output 2: Nursing Education

- Master Trainer (MT) development
- Development of MT training materials and practical tools
- Faculty development (FD)
- College-hospital collaboration
- Nursing research and subject-based nursing education promotion

Output 3: Clinical Practice

- MT development
- Clinical Nurse Teacher (CNT) development
- Peer support and collaborative facilitation among MTs
- In-service training

Output 4: Dissemination and Networking

- Mutual visits among institutions
- Support for seminars and professional development activities
- MT module approval and policy discussions
- Dissemination of practical approaches for strengthening nursing education

The figure below illustrates the relationship between the major activities implemented under CBNS-II and the components of the CBNS Model. The model was developed based on the implementation experiences of the Project and reflects the key approaches and lessons learned that contributed to strengthening nursing education and clinical practice.



Illustrative Relationship between Major CBNS-II Activities and the Components of the CBNS Model

Selected Achievements

Key achievements of CBNS-II included:

- 64 Master Trainers (MTs) trained from nursing colleges and hospitals
- 472 Clinical Nurse Teachers (CNTs) trained through 19 training batches
- MT training modules and practical training materials developed and approved
- Faculty development activities expanded across target nursing colleges
- Four nursing colleges supported in accreditation application processes
- Accreditation review processes conducted for four nursing colleges
- Eight mutual visits conducted among participating institutions
- Dissemination seminars and networking activities implemented with participation of nursing

institutions nationwide

- Practical recommendations and implementation experiences compiled for future institutionalization and scale-up

Annex 2: Mutual Visit Model Schedule and Points to be Considered

Purpose of the Mutual Visit

The CBNS-II Mutual Visit (MV) was developed as a practical peer-learning approach to promote continuous institutional improvement, mutual learning, and networking among nursing colleges and collaborative hospitals.

The MV combines structured observation, peer-to-peer exchange, reflection, and joint problem-solving activities. Rather than focusing solely on the transfer of knowledge, the approach encourages participants to identify good practices, discuss common challenges, and explore feasible solutions that can be adapted within their own institutional contexts.

Through repeated implementation under CBNS-II, MVs contributed to strengthening communication and collaboration among nursing colleges, hospitals, faculty members, clinical nurses, and nursing administrators while supporting practical learning beyond formal training activities.

Suggested Mutual Visit Schedule

The CBNS-II experience suggests that a two-day format provides sufficient time for observation, discussion, reflection, and action-oriented learning.

Day 1: Observation and Information Sharing

Activity	Purpose
Opening session and introduction	Clarify objectives and expectations
Presentation by the host nursing college	Share achievements, challenges, and institutional initiatives
Observation of nursing college facilities	Observe teaching methods, learning environments, and institutional systems
Presentation by the host hospital	Share clinical practice initiatives and improvement activities
Observation of hospital facilities and practicum sites	Observe clinical learning environments and nursing practices
Initial group discussions	Reflect on observations and identify issues for further discussion

Day 2: Reflection and Collaborative Learning

Activity	Purpose
Mixed group discussions	Identify good practices and common challenges
Presentation of discussion results	Share lessons learned and recommendations
Plenary discussion	Promote broader institutional learning
Way forward discussion	Explore practical application within participating institutions
Closing session	Consolidate key messages and commitments

This structure combines observation, dialogue, reflection, and practical application, which were identified as important elements contributing to mutual learning during CBNS-II.

Suggested Observation Areas

Nursing Colleges

Participants may observe and discuss:

- Teaching methodologies and active learning approaches
- Student engagement and classroom participation
- Assessment and feedback mechanisms
- Learning resources and educational facilities
- Faculty development systems
- Mentorship and peer support mechanisms
- Library and laboratory facilities
- Student support services

These areas were included in the observation checklist used during CBNS-II mutual visits.

Collaborative Hospitals

Participants may observe and discuss:

- Patient safety systems
- Infection prevention and control practices
- Clinical teaching and supervision systems
- In-service training activities
- Continuing professional development opportunities
- Staffing and nurse deployment
- Resource management and equipment availability
- Good practices and innovation in clinical settings

These areas were included in the observation checklist developed for participating hospitals.

Points to be Considered

Based on the CBNS-II experience, the following considerations may help maximize the effectiveness of future mutual visits.

Preparation

- Host institutions should prepare concise presentations highlighting achievements, challenges, and lessons learned.
- Observation tools and guiding questions should be shared in advance.
- Participants should be encouraged to identify specific learning objectives before the visit.

Active Participation

- Participants should actively engage in discussions and ask questions.
- Attention should be given not only to strengths and good practices but also to operational challenges and practical solutions.
- Participants should consider how observed practices could be adapted within their own institutions rather than simply replicated.

Reflection and Application

- Structured group discussions should be conducted to facilitate reflection and problem-solving.
- Participants should identify practical actions that can realistically be implemented within their own institutional contexts.
- Follow-up discussions after the visit may help support implementation of lessons learned.

Sustainability

- Mutual visits do not necessarily require large-scale resources.
- Future visits may be implemented through regional networks, existing institutional partnerships, or integration with routine meetings and training activities.
- Online follow-up sessions may complement face-to-face visits and support continued exchange among institutions.

The CBNS-II experience suggests that mutual visits are most effective when they are viewed not as study tours, but as structured opportunities for collaborative learning, continuous improvement, and institutional networking.

Annex 3: Examples of Operational Resource Requirement for Selected Training Activities

Purpose of This Annex

This annex provides illustrative examples of operational resource requirements for selected training activities implemented under CBNS-II. The examples are intended to support planning and budgeting discussions for future implementation and should be adapted according to institutional needs, available resources, participant numbers, and local cost conditions.

The examples presented below are based on implementation experiences of the CBNS-II project and are provided for reference purposes only.

Example 1: Master Trainer (MT) Training

Typical Training Profile

Item	Example
Training type	Master Trainer (MT) Training
Duration	12 days
Participants	Nursing college faculty members and hospital nurses
Venue	National or regional training venue
Training methods	Lectures, active learning sessions, group work, practical exercises, simulation training, presentations
Main objective	Development of institutional trainers capable of conducting faculty development, CNT training, and in-service training

Typical Resource Requirements

Category	Examples
Training venue	Training hall and breakout rooms
Training equipment	Skills laboratory equipment, simulation materials, audiovisual equipment
Training materials	Manuals, worksheets, participant handbooks
Human resources	Facilitators, resource persons, administrative support staff
Participant support	Accommodation, meals, transportation
Logistics	Printing, communication, certificates, training supplies

Illustrative Cost Scenario

Cost Category	Approximate Share
Training equipment and simulation materials	Approximately 55-60%
Participant support and logistics	Approximately 20-25%
Training materials and administration	Approximately 10-15%
Facilitators and other operational costs	Approximately 10-15%

The first MT training implemented under CBNS-II required an overall investment of approximately BDT 4.0-4.5 million. A substantial proportion of the cost was associated with procurement of training

equipment and simulation materials required for practical skills training.

Cost Considerations

Initial MT training may require relatively higher investment due to the establishment of training infrastructure and procurement of equipment. However, these resources can subsequently be utilized for repeated training activities, reducing future implementation costs.

The establishment of a pool of qualified MTs may also reduce long-term dependence on external facilitators and contribute to institutional sustainability.

Example 2: Clinical Nurse Teacher (CNT) Training

Typical Training Profile

Item	Example
Training type	Clinical Nurse Teacher (CNT) Training
Duration	6 days
Participants	Approximately 20-26 clinical nurses
Venue	Collaborative medical college hospital
Trainers	Hospital-based MTs and nursing college MTs
Training methods	Lectures, group work, role play, clinical demonstrations, skills practice, presentations
Main objective	Strengthening clinical supervision and student support during clinical practice

The training model is based on the CNT training approach developed and implemented under CBNS-II. Training content typically includes student supervision, communication skills, nursing leadership, nursing ethics, infection prevention and control, and fundamental nursing skills.

Typical Resource Requirements

Category	Examples
Training venue	Hospital conference room or training room
Training materials	Training manuals, handouts, checklists, stationery
Human resources	MT facilitators and resource persons
Participant support	Meals and refreshments
Logistics	Printing, certificates, communication costs
Skills practice materials	Existing hospital equipment and clinical training supplies

Illustrative Cost Scenarios

Implementation Model	Approximate Cost
Initial implementation with intensive external support	BDT 0.8-1.0 million
Standard implementation using institutional MTs	BDT 0.6-0.8 million
Minimum-cost institutional implementation	BDT 0.4-0.5 million

Actual costs may vary depending on participant numbers, venue arrangements, use of external facilitators, and local operational conditions.

Cost Considerations

During the initial implementation phase of CBNS-II, CNT training required additional resources due to intensive project support and involvement of external facilitators. As institutional MTs gained experience and assumed greater responsibility for training management and facilitation, implementation costs gradually decreased.

- Major cost items typically included:
- Training materials and stationery
- Meals and refreshments
- Transportation and accommodation for external facilitators
- Printing and administrative support
- Limited training consumables for practical sessions

Because CNT training primarily utilizes existing hospital facilities and equipment, capital investment requirements are generally lower than those required for MT training.

Lessons from the CBNS-II Experience

The CBNS-II experience suggests that initial investment in MT development can create a foundation for subsequent faculty development, CNT training, and in-service training activities. Once a pool of qualified MTs is established and training materials become available, many capacity development activities can be implemented using institutional resources and local facilitators.

This cascading approach may improve cost-efficiency, strengthen institutional ownership, and support the long-term sustainability of nursing education and clinical practice improvement efforts.