



Planning for Development of Nursing in Bangladesh

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Contributors:

Mohd. Muzibur Rahman¹

Dhiraj Kanti Chowdhury²

Dr. Tasnuva Sultana³

¹ Professor, Department of Statistics, Jahangir Nagar University

² Monitoring and Evaluation Specialist, RTM International

³ Research Associate, RTM International

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Executive Director
RTM International
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ACRONYMS

ANC	Antenatal Care
AusAID	The Australian Government's Overseas Aid Program
BBS	Bangladesh Bureau of Statistics
BHW	Bangladesh Health Watch
BNC	Bangladesh Nursing Council
BSMMU	Bangabondhu Sheikh Mujib Medical University
CIDA	Canadian International Development Agency
CMSD	Central Medical Storage Depot
DFID	Department for International Development
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
DHS	Demographic and Health Survey
DMC	Dhaka Medical College & Hospital
DNS	Directorate of Nursing Services
DP	Development Partners
EOC	Emergency Obstetric Care
FGD	Focus Group Discussion
GoB	Government of Bangladesh
GDP	Gross Domestic Product
GTZ	German Technical Cooperation
HNPSP	Health, Nutrition and population Sector Program
HRD	Human Resource Development
HRH	Human Resources for Health
HRM	Human Resource Management
JICA	Japan International Cooperation Agency
KII	Key Informant Interview
MDG	Millennium Development Goal
MOHFW	Ministry of Health and Family Welfare
NIPSOM	National Institute of Preventive and Social Medicine
PSC	Public Service Commission
RTM	Research, Training and Management International
SBA	Skilled Birth Attendant
SBMC	Sher-e Bangla Medical College & Hospital
SSMC	Sir Salimullah Medical College & Hospital
WHO	World Health Organization

EXECUTIVE SUMMARY

Background and objectives

The Government of Bangladesh (GoB) is committed to improve the health of the people and trying to adopt the best health policy for the improvement in the quality, efficiency and access to health services both in public and private sectors. One of the key issues in quality of medical care is the availability of adequate number of trained nurses in the health care facilities. There is an acute shortage of nurses in Bangladesh. The country not only has inadequate stock of nurses for nursing services in hospitals of public and private sectors but also has disproportionate distribution. It is observed that more nurses are working in Dhaka division compared to other divisions. The demand for nurses with quality training is high and sustained in Bangladesh. WHO pointed out that in managing nursing profession, Bangladesh does not have skill mix strategy and it lacks quality nurses in health system. Hence, a planned approach in this regard would serve the interests of the country most effectively and efficiently. In order to plan properly, it is necessary to project the demand for nurses, both locally and internationally. It is observed that currently there are no adequate statistics about how many nurses are required at clinical, administrative and academic levels of the health sector of the country. Again the GoB is not fully aware of the number of nurses required for different facilities. Without a proper development plan for the nurses, improvements in nursing career and promotion of images of nurses will be difficult. Hence, a development plan of nurses is now essential to ensure a global standard quality of nursing services.

Taking the above points into consideration, Bangladesh has taken the policy of preparing the nursing development plan. In this development plan the entire scenario of nursing profession is analyzed, evaluated and monitored to make it effective for changing the level and standard of nursing services. This study takes into consideration the current social position of nurses, their image in the society, level of job satisfaction, reasons of dissatisfactions, and the current situation of curriculum, teaching method and materials. After analyzing the above information an effective and sustainable nursing development plan is recommended for the better health services of the people.

Methodology and Technical Approach

The study of planning of nursing development adopts the qualitative method of data collection through secondary data review, Key Informant Interviews, in-depth interviews and FGDs. For this purpose, different data collection tools and guidelines were developed. Realizing the importance of the proposed study the nursing related top officials, registrar and deputy registrar of BNC, director and deputy director of DNS, nurses of different public and private hospitals, Instructors of public and private nursing institute/colleges and two civil surgeons (Dhaka and Khulna) were interviewed through KII and in-depth interviews. To achieve the objective of the study, the key officials of the development partners such as WHO, CIDA, AusAID, GTZ and JICA were covered under the study for assessing the status of communication and monitoring in the development of nursing services.

Summary Findings

Bangladesh should produce more nurses and should improve the quality of nursing training for three reasons. First, there is a requirement of more nurses in the public and private sector hospitals. To fulfill this unmet demand, more nurses are necessary. Second, nursing may become a source of employment for women and men also in the country and abroad. More employment of women in particular may contribute to their empowerment in the society and at large in the economic development of the nation. Finally, more nurses are necessary to improve the quality of health care in the country. So, the recommendations of this study are the follows.

- Create a job market for nurses in the country because job potentials will encourage more people to join this profession. Government may play a role in job market by increasing the size of nursing manpower in public sector as per the global minimum standard. Vacant posts in the public sector should be filled up soon through recruitments. The government may play another role in the job market as regulator. It is necessary to formulate rules and regulations and impose those strictly on the private sector hospitals so that qualified nurses are recruited in sufficient numbers.
- Upgrade the nursing education system in the country. It is necessary to modernize the syllabus and training procedures for nurses. Government may encourage public sector universities to open nursing faculties where young women and men can receive higher education in nursing. A university degree in nursing will raise the status of nursing profession in the country. There are many short-trained or untrained nurses in the private sector hospitals. Training programs may be arranged for these experienced but unqualified nurses. Some form of formal certificates and recognitions may be arranged for these people. It will give them professional identity and may improve their skill and quality of services.
- It is necessary to develop a career path for the nurses by the government. It encourages HSC passed women and men to come forward to study nursing to build their career. It will ultimately help to change the image of nursing in society in long run when brilliant students enter nursing.
- It is necessary to popularize the nursing profession in the country. Mass campaign is necessary in the electronic and print media and also other social and cultural forums. The campaign should try to focus on the positive sides of the nursing profession.

SECTION 1: INTRODUCTION

1.1 Background

Over the last decades Bangladesh has made remarkable progress in health and development. For example, the per capita income increased from around \$100 during the 1970s to almost \$690 by 2009 (BBS, 2009). The country made significant progress in reduction of infant and child mortality, prevention and control of major communicable diseases, wide coverage of immunization, promotion of oral rehydration saline and increase of contraceptive prevalence rate. The average life expectancy also increased from 49 years in 1984 to almost 65 years by 2007 (DHS, 2008). Despite these achievements, Bangladesh remains vulnerable to vicissitudes of poverty, environmental degradation, unplanned urbanization, climate change, arsenic contamination of ground water and continued population growth. Consequently, persistent inequality between the rich and the poor continues to pervade all major health indicators (Razzaque & Streatfield, 2005). For example, the under-5 mortality rate has declined from 151 per 1,000 live births in 1991 to 62 by 2006. However, the under-5 mortality rate varies from a low of 43 in the highest income quintile to a high of 86 among the lowest income quintile (BHW, 2006).

Clearly, these discomfoting figures underscore some serious weaknesses of the health system in Bangladesh. The health system faces challenges in terms of shortage and mal-distribution of staff, imbalance in skill mix, a negative work environment and weak knowledge base- all the five obstacles identified by the pioneering study conducted by the Joint Learning Initiative (2004). Perhaps the most critical challenge faced by the health system in Bangladesh is in the arena of human resources for health (HRH). The health system in Bangladesh not only suffers from a critical shortage of appropriately trained HRH, but also from a serious mal-distribution of health workforce. Rural areas of Bangladesh are particularly affected by the scarcity of HRH. Bangladesh has only 0.77 physicians, nurses and dentists per 1,000 population. Only 5% of the health care providers are qualified modern practitioners as opposed to 43% traditional providers e.g. kobiraj, fakir, ojha and other faith healers (BHW, 2007). Based on the average of low-income countries", Bangladesh currently has a shortfall of 60,000 physicians and 280,000 nursing staff (Health watch report).

RTM International was commissioned by JICA and Ministry of Health and Family Welfare to conduct this study. Primary health care has been a priority for the government of Bangladesh since its inception. Government has all along been emphasizing the need for building infrastructure for health services as well as increasing the supply of trained and skilled health service providers. As mentioned, Bangladesh has made impressive gains in certain areas of health sector because of targeted interventions e.g. immunization, family planning, nutrition supplementation, oral dehydration solution etc. (Hasima-e-Nasreen, *et al.* 2007).

Despite several achievements made by the health and population sector in Bangladesh, accessibility of the disadvantaged people to quality primary health care services still remains a major challenge (Hasima-e-Nasreen, *et al.*). In order to overcome the situation several programs and strategies have been adopted by the government of Bangladesh so that more health services are available at the door steps of the disadvantaged people. Furthermore, the government has encouraged NGOs to introduce innovative approaches of reaching people with health services.

The key consideration is to improve the level and quality of health care delivery. It is a highly labor intensive process and the pre-requisite of an effective health care system is a sustained supply of required health human resource. Nurses are the key components of human resource in health sector who are directly involved in patient, ward and as a whole hospital management round the clock, which is not recognised by the concerned authority; and they provide such medical and administrative services which facilitate the function of physicians and other health care professionals.

1.2 Overview of Nursing Situation in Bangladesh

Nursing is one of the most essential services for the health system of any country, due to the prevalence of diseases, disorders and need for care. Nurses form the backbone of the care, representing over 50% of the total health profession. It is well accepted that intensive nursing can improve the quality of medical care. One primary reason for which patients in Bangladesh used to doubt the quality of local medical services is the unavailability of adequate nurses in medical establishments and almost entire patient care at hospitals is provided by the attendants of the patients. The international standard for nurse-patient ratio is 1:4 for general care and 1:1 for intensive care. In Bangladesh nurse patient ratio is 1:13 for general patients only in the morning shift; while the doctor nurse ratio is estimated at 1:0.6 instead of 1:4 globally (Aminuzzaman 2007). The public sector produces 1000-1200 diploma nurses every year (BNC 2009). The annual output from the private institutes is not available. However, the number of diploma nurses produced every year is very small in comparison to the growing demand for nurses. Again most of these diploma nurses are absorbed in the government job. There is an enormous demand for trained nurses in the growing private health sector (Aminuzzaman 2007). And it is noted that in some renowned private hospitals of Dhaka City, a number of foreign nurses are now working which is an economic loss for a country like Bangladesh.

The demand for nurses in the private sector is largely met by nurses trained from institutions not recognized or accredited by the government of Bangladesh. It is also important to note that nurses employed in private sector clinics/hospitals are of various categories. Only some senior nurses working in the large private sector clinics/hospitals have nursing diploma accredited by the Bangladesh Nursing Council (BNC). But a large number of them do not have any previous institutional training or have received training from the institutes not accredited by the government. They learn nursing on the job and constitute a large health workforce in the country which cannot be ignored.

In the following table shows the capacity of the country's nursing institutes to turn out nurses in a year (BNC, 2010)

Status of Nursing Institute	No. of Institute	No. of Seats
Diploma:		
Government Nursing Institute	45	1820
Armed Forces Nursing Institute, Dhaka Cantonment	01	50
Private Nursing Institute	26	935
Sub Total:	72	2805
Basic & Post Basic:		
Government Nursing College (Post Basic)	01	125
Government Nursing College (Basic)	04	400
Armed Forces Nursing College, Dhaka Cantonment Nursing (Basic)	01	50
Private Nursing College (Basic & Post Basic)	10	400
Sub Total:	16	975
Grand Total:		3780

Recruitment of nurses in public hospitals is halted for the last 7 years. The last recruitment was done in 2003 when 1850 nurses were recruited. Since then no recruitments were made even though every year around 1500 to 1800 nurses graduated from government and private nursing institutes and colleges and approximately 10,000 nurses are unemployed at the moment. The present government is planning to recruit 6000 nurses soon. Recently about 1445 nurses are recruited in the GoB Health sector in 2010. The ratio of nurses to doctors still remains very small compared to the global standard. As the number of nurses is inadequate and they are busy with hospital ward and patient management work, so it is a general practice to get the duty of nurses performed by the ayas by taking some money from the patients relatives. However, the nurses logically defended themselves by saying that inadequacy in their numbers hinders required services to patients. The nurses also talked about their job dissatisfaction as they are not getting promotion for 15 to 20 years. So, it is necessary to appoint adequate number of qualified nursing personnel.

The current assignment is to formulate a plan of nursing development. The major focuses for the adequate and effective planning of nursing development are (1) the projection for requirement of number and level of nurses (2) Planning for the establishment of institutes to meet the projection and (3) Planning for the preparation of clinically competent faculty and (4) Revising the nursing curriculum and teaching materials to boost up the level and quality of nursing.

1.3 Objectives of the study

The overall objective of the study is to propose an HRD plan in nursing up to 2021 based upon the existing projection models of demand and supply of nurses.

The specific objectives of the study thus stand as:

- To identify the number and level of nurses to be supplied based on the existing projection
- To review who is doing what on HRD in nursing and future plan (mapping of DP's plan and actions)
- To identify the barriers to increase the number of nursing institutes in public and private sectors; and
- To propose ways of integration of various activities of DPs and others in nursing

SECTION 2: METHODOLOGY AND TECHNICAL APPROACH

2.1 Methodology and Sampling

The study of planning for nursing development adopted qualitative method of data collection through secondary data review, Key Informant Interview, in-depth interview and Focus Group Discussions (FGDs). For this purpose, different data collection tools and guidelines were developed. In view of the importance of the proposed study the top officials, instructors and nurses of Nursing Colleges, Institutes and Councils were selected from the Dhaka and also outside the city. KIIs were also conducted with the Civil Surgeons of 4 divisional districts (Dhaka, Chittagong, Rajshahi and Khulna). To achieve the objective of the study, Joint Secretary of HRD unit of MOHFW, Joint Secretary of Hospital of MOHFW, HRM-DGHS of MOHFW, Director of the Directorate of Nursing Services, Registrar of the Bangladesh Nursing Council, Line Directors (Hospital) DGHS, official in charge of nursing in WHO, CIDA, AusAID, GTZ and JICA were covered under the study for assessing the status of communication and monitoring in the development of nursing services.

2.2 Study Team

A core team of 5 members was formed, comprising one Team Leader, Principal Investigator, Co- Principal Investigator and two Research Associates for conducting the study on planning for nursing development.

2.3 Study Implementation Plan

The current assignment followed a step-by-step process as described below:

A. Secondary Data Collection

- Collection and Review of relevant documents

The planning team reviewed all relevant secondary documents relating to the plan and process, toolkits developed, and previous review reports on number and level of nurses. This reviewed information would give us the existing number of nurses and the projected number of nurses would be determined by using the following projecting model.

General Methods of Demand Projection

The demand projection for nurses is possible by using a very simple demographic method where requirement is determined as a ratio of population. If the predetermined ratio of nurses per 10,000 population is r , present level of population in country is P , population growth rate is g , demand for nurses is N in the year t will be as following.

$$N_t = r \left[\frac{P(1+g)^t}{10,000} \right] \quad [1]$$

The second method for determining the demand for nurses may be as the ratio of nurses to doctors. International standard ratio of nurses to doctor is 4 to 1. So, if the present stock of doctors is **D** and it is growing at a rate of **d**, then the demand for nurses is **N** in year **t** will be as following.

$$N_t = 4 \times [D(1 + d)^t] \quad [2]$$

Once we have the projected number of nurses, the assessment of the establishment and the expansion of the nursing institute and colleges will also be determined.

B. Collection & Analysis of Primary Data

• Discussions with the Nursing Council and Directorate of Nursing Services

Key Informants Interviews were carried out with the 15 Instructors of Nursing Colleges/Institutes. The Colleges/Institutes were selected randomly. KIIs were also conducted with the 4 Civil Surgeons of the four Divisional districts (Dhaka, Chittagong, Rajshahi and Khulna). KII of the above professionals will help to evaluate the current level, of nurses, their curriculum and teaching materials. Analysis of this study will help assessing the number and level of nurses existed and required. The recommendations are accommodated to enrich the level and the current numbers are useful for projecting the future number of nurses.

• Focus Group Discussions with Nurses at Facility Level

One FGD per hospital was conducted to assess the level, revision of curriculum, teaching materials and job satisfaction which have the direct effect on changing the quality of health care and services. Thus a total of 4 FGDs were organized in BSMMU, DMC, SBMC and SSMC respectively. The team analyzed the findings to come up with a strategy recommendation for effective revision of curriculum and teaching materials and also for the better Health services.

• Discussions with Nurses at Nursing Council

In-depth interviews were conducted with nurses of Nursing Council and different hospitals to evaluate their current curriculum, method of teaching and teaching materials. This study and related analysis will help place recommendations for revising the curriculum and improving the medical services.

A total of 70 nurses from the different colleges/institutes and hospitals were interviewed in the process. The colleges/institutes and the hospitals were selected randomly.

- **Meetings and discussions at the Central Level**

To understand the top-down communication, coordination and monitoring of the nursing services and their level, the planning team conducted Key Informants Interviews with Joint Secretary of HRD unit, Secretariat, MOHFW, Joint Secretary (Hospital), Secretariat, MOHFW,HRM-DGHS, MOHFW, Director, Deputy Director and Assistant Director of Directorate of Nursing Council, Registrar and Deputy Registrar of Bangladesh Nursing Council and Line Directors, Hospitals-DGHS. KIIs were also conducted with the responsible officials of HRD of World Health Organization (WHO), Canadian International Development Agency (CIDA), AusAID, GTZ and Japan International Cooperation Agency (JICA). Thus a total of 12 KII were conducted with the above persons.

C. Documenting and Report Writing

All study finding are compiled and recommendations are included in the Report on the Final Planning of Nursing Development. The recommendations include suggestions for improvements required for level, revision of curriculum and teaching materials and projection of required number of nurses.

SECTION 3: FINDINGS

3.1 Introduction

Nurses take care of the sick and injured in hospitals and other healthcare establishments to restore health and alleviate suffering. Nurses take care of patients continuously round the clock. Hence the quality of care of any health system is directly related to availability of nurses, their level of nursing, quality of nursing education, nursing curriculum, number and skill of teachers and teaching materials, career path in nursing job, working environment and above all the facilities provided for them to provide quality services. The above components are directly related to the quality of nursing services and are very crucial for developing the nursing development plan. A well structured format for KII and in-depth interview was used to collect the views of nurses, nursing instructors and civil surgeons of different nursing institutes and district hospitals respectively.

3.2 Image crisis of nurses

Although nursing is a noble profession of serving the sick, injured and disordered people yet this profession still suffers from image crisis in the society. It is observed that most of the nurses are female (90%, Figure 1) and most of the people are illiterate and living in the rural area, so they do not recognize the nursing services as good one and consider it as a profession of bad girls. Almost all of the nurses reported that there is strong objection from the family for selecting this profession. The villagers, neighbors and other relatives showed their strong reservation to the parents and some of them stopped visiting their house. Many of them replied that they never visited their home at the time of studying in the nursing. Their brothers, sisters and other close relatives hesitate to introduce them as nursing students with their friends and other close ones.

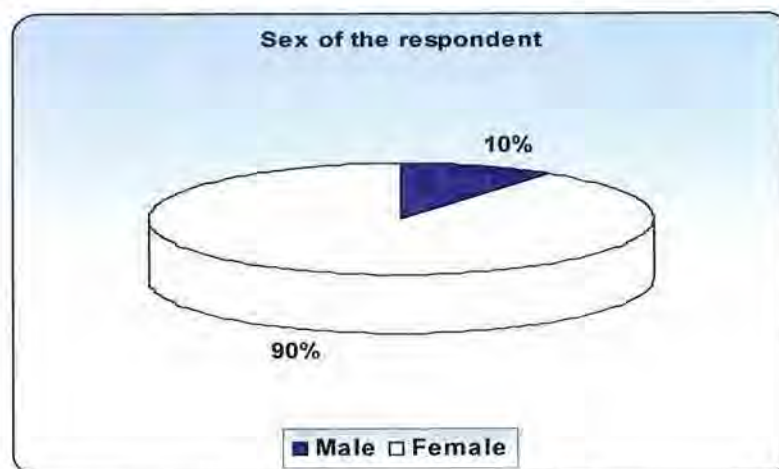


Figure 1: Sex of the respondent

3.3 Professional dissatisfaction of nurses

It is very important to note that 100 percent nurses replied they had selected the nursing profession by themselves inspite of strong objection from parents, brothers, sisters, relatives, villagers and others. But currently they are not satisfied with their profession. There are many

reasons for it. The dissatisfied nurses (43%, Annex A) claimed that the working hour was long compared to other professions (41%) and they were not able to concentrate in patient care over a long period due to shortage in number. The other important causes of dissatisfaction are: sometimes doctor/patients attendants misbehave with them (15%) and there is a shortage of nurses (10%).(Table 1).

Table1: Distribution of reasons of not satisfaction for providing services

Reasons of not satisfaction for providing services	No.	%
Sometimes doctor/patients and attendant of the patients misbehave with us	6	15
There is shortage of the equipment/medicine in the hospital so we can not provide care properly	3	7
We are not evaluated in regard to our experience and skill	5	12
Working hour is longer compared to other job	17	41
Huge shortage of nurses and other manpower	4	10
We do not get the relevant training	2	5
We do not get leave	2	5
There is no residence facility	1	3
Peoples perception for this profession is not good	1	2
Total	41	100

Annex A also indicates that 63 percent nurses reported that they faced problems while discharging their services. As the doctor nurses ratio is very low compared to the global standard, Table 2 indicates that 71 percent nurses informed that they could not deliver their quality services to patients due to shortage of nurses followed by shortage of medicine and equipment (13%) and insufficient number of beds for patients (6%).

Table 2: Distribution problems usually faced in discharging services

Problems usually faced in discharging services	No.	%
Sometimes patients do not cooperate for taking medicine according to doctor's suggestions	2	4
Due to shortage of nurses we cannot provide services properly to patients that causes problems	37	71
There is shortage of medicine and equipment	7	13
Lack of security for us	2	4
There is no sufficient residence facility for providing training	1	2
Insufficient beds for the patients	3	6
Total	52	100

3.4 Upgrading the service status of nurses

As the nursing profession is not well accepted in the society and there is huge image crisis of the nurses, most of the current nursing students come from relatively poor class or middle

lower class families with comparatively less merits. So, it is very important to convert the nursing profession into a cadre service and recruitment of nurses should be taken by the PSC to attract students from well off families with comparatively high merits for providing quality services of the patients. The director of DNS, registrar and deputy registrar of BNC, key personnel of HRD unit of MOHFW and most of DPs agreed that there is no special service and recruitment rules for nurses. They remain in the same post for a long time which makes them disappointed and unmindful in delivering services.

3.5 Involvement in activities other than nursing

As we mentioned earlier, there is a huge shortage of nurses in the hospitals and other health facilities. For that reasons it is not possible to provide quality services to the patients. Another thing is that they are not responsible only to deliver services but also to maintain the accounts of number of bed sheets pillows, thermometer, BP machine and other logistics of health facilities. They have to pay for it in case of misplacement or loss. So, they are always tense lest they should lose the logistics as most of time the hospitals are crowded and the patients have frequent visitors. Again, the nurses are usually trained in particular or specific diseases, but practically they have to work in all the wards of the hospital, which is not favorable to provide quality services. So, to ensure quality services they should be free from the other involvement and assigned only for nursing activities according to the training imparted to them.

3.6 Rules for regular recruitment of nurses

Currently the recruitment of nurses is very irregular. Many nursing positions remain vacant year after year. The present government has taken the initiatives for the recruitment of nurses and other health personnel. But there should be comprehensive rules for the recruitment and promotion of nurses. If they are recruited early in the services, they will provide better services for the patients. It is sometimes observed that when the recruitment was stopped for a long time they became disappointed and at the same time became inefficient.

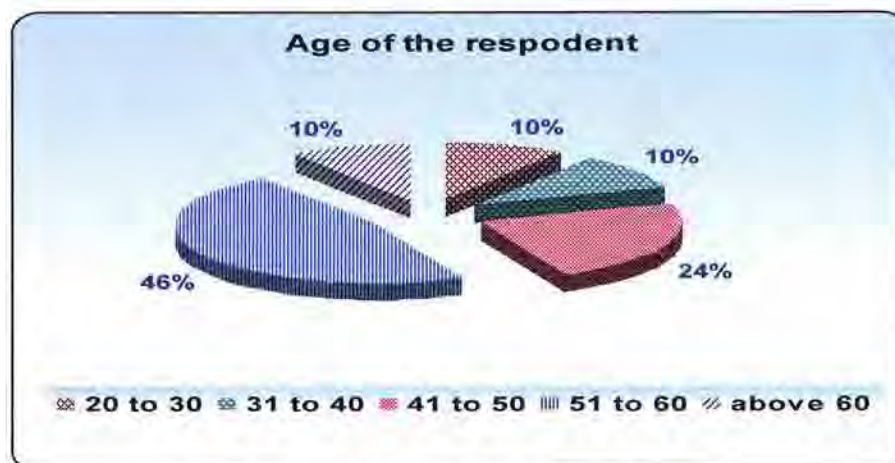


Figure 2: Age of the respondents

Figure 2 show that almost 60 percent of the instructors are over 50 years of age and around 84 percent are above the age of 40 years. It is assumed that quality nursing services can be ensured at a relatively younger age. So, for the sake of better nursing services, recruitment should take place just after completion of nursing education.

3.7 Curriculum and teaching method

It is very important to make the nursing curriculum concise and to the point and teaching method should be set to properly reflect the curriculum. It is observed from Annex A that 57% of the nurses thought that the current curriculum should be revised to make it conform to global standard. Table 3 shows the suggested revisions as sufficient training should be provided for the nurses (33%), there should be more effective practical classes (22%) and adequate topics should be added with revised one to make it consistent with the global standard (19%). Because, if the curriculum is not revised then the present management of disease will be unknown to them which will make it difficult to provide quality service.

Table 3: Distribution of suggested revision in the curriculum

Suggested revision in the curriculum	No.	%
Sufficient training should be provided for nurses	9	33
By increasing the number of nurse teachers	2	7
As new courses develop so it needs to be revised	3	11
They should follow text books rather than following guide books	1	4
Instructor should be present in the practical classes	1	4
There should be consistency in the curriculum with global standard	5	19
There should be practical classes	6	22
Total	27	100

Fifty five percent (Annex A) of the nurses replied that the method of teaching followed in nursing education is not up to the standard. There should be some sort of change in the teaching method. It is observed from Table 4 that improvement can be done through introducing more practical classes (19%), appointing adequate number of skilled teachers (19%) and including computer technology (15%). So, appointment of more skilled teachers and arrangement of practical practices should certainly improve the quality of teaching in the nursing institutes.

Table 4: Areas of improvement of teaching method

Area of improvement of teaching method	No.	%
Should learn new methods	5	9
Should improve more/ should be modernized	6	11
There should be more monitoring and supervision from government/nursing council	2	4
More and skilled teachers should be appointed	10	19

Area of improvement of teaching method	No.	%
Should provide training	3	6
Should include computer technology	8	15
There should be practical classes	10	19
There should be more teaching materials	4	8
The teaching should be in English	2	4
Require digital machine	3	6
Total	53	100

Table 5 reveals that there are lots of reasons that make the curriculum implementation difficult. The suggestions for improvement are to increase the number of materials (33%), the materials should be modern (24%) and arrangement of sufficient instruments for practical classes (10%). So, the laboratories with modern equipment, skilled teachers and computer facilities will make the curriculum useful for quality teaching of nursing.

Table 5: Distribution of suggestions regarding inadequacy of curriculum

Suggestions regarding inadequacy of curriculum	No.	%
The materials should be more developed/ modern	10	24
Should teach all new programs	3	7
Should increase the number of materials	14	33
More teachers should be appointed	1	3
There should be many types of books and CDs available	1	2
There should be arrangement of sufficient instrument for practical	4	10
Computer is required	3	7
Digital machine is required	3	7
The government administration should be more tough	3	7
Total	42	100

The instructors of the nursing institute/colleges claimed that they are playing a vital role in HRD in nursing by delivering quality education and practical practices of the students (33%), participating in the community health services (8%) and also by providing in-service training to nurses and health service related staff (Annex B). For the development of the nurses, it is important to provide them modern teaching based on global standard curriculum (12%) and try to establish the nursing profession as a noble and well accepted profession in the society.

3.8 Steps to raise the nursing education to global standard

As the development of medical sciences take place everyday, nursing education should maintain the global standard to ensure quality nursing. For the development of nursing services, it is important to teach them the nursing education of global standard. We have lot of inadequacy in nursing education. It is observed from Table 6 for elevating the country's

nursing education to global standard, it has been suggested that the arrangement of training be made in the country and abroad and impart higher education (29%), teachers should be trained properly in foreign countries (15%) and number of skilled teachers should be increased (7%) which will certainly improve the standard.

Table 6: Steps to make nursing education global standard

Steps to make nursing education global standard	No.	%
There should be sufficient nurse teachers	7	4
There should be arrangement of resident facility	1	1
Arrange training/ higher education/ training in foreign countries	48	29
Training of teachers/ training from foreign countries	25	15
Regular posting/ arrangement of work opportunity	6	4
Provide quality care/ quality of care should be improved	6	4
Should admit good quality of students	3	2
Should emphasize more on English study	10	6
Computer study	7	4
Should improve the courses more	2	1
Appoint appropriate teachers	4	2
Should appoint more teachers/ skilled teachers	13	7
Global standard curriculum	7	4
The teaching materials should be increased/ should be modernized	5	3
The number of nursing institute should be increased/ should be improved	13	7
Increase salary/ allowance/ stipend	4	2
Provide all benefits to the nurses	3	2
Total	164	100

Most of the instructors opined that if the global standard could be maintained, it could help produce 4 to 5 times more nurses in each year. In public and private sectors the main barrier of establishing new institutes is huge shortage of skilled teaching staff, inadequate laboratory facility and instruments. To solve this problem more nurses should be trained in the country and abroad to make them skilled for teaching and government should allocate enough money to establish sufficient laboratory with modern equipment. The government should also change its policy towards establishing private nursing institute and provide loans with less interest to attract private sector. Most of them replied that the present curriculum was already of global standard and needs no revision, since it was designed with joint effort of experts from Thailand and WHO. But the teaching quality is not of global standard due to lack of subject based preparation of the teachers, shortage of teachers and inadequate laboratory facilities. To make it conform to global standard it is necessary to recruit sufficient number of teachers, ensure their adequate preparation, and laboratory facilities with modern equipment.

3.9 Problems of establishing public nursing institutes

It is already mentioned that there is a huge shortage of nurses in Bangladesh. To overcome the shortage of nurses, it is necessary to produce more nurses every year, which can be done through extending the capacity of nursing institute/colleges and also by establishing new public nursing institutions. In both the cases, there are lots of problems to overcome.

Seventy six percent (Annex A) of the respondent nurses reported that the present public nursing institutes are not able to meet the demand of nurses, for an adequate supply it is essential to improve the quality of nursing and establish new institute/colleges. There are many barriers (Table 7) on the way to establish the public and private nursing institutes. The main causes identified are lack of proper initiatives from the government (18%) followed by shortage of allocation of money (17%), shortage of manpower (10%), political continuity (13%) and shortage of skilled teachers (9%).

Table 7: Barriers of establishing public nursing institutes

Barriers of establishing public nursing institute	No.	%
No initiative from government	29	18
Shortage of money	27	17
Administrative complicacy	7	4
Shortage of manpower	15	10
Shortage of necessary equipment	2	1
Political problem	21	13
Shortage of land	16	10
Late in taking proper decisions	4	3
Local or social problems	6	4
Negligence	12	8
Shortage of skilled teacher	13	10
Not properly evaluated	2	1
Need of proper management	3	2
Total	157	100

It very necessary to take proper steps to overcome the above barriers for the development of nursing services. It seems that the steps (Table 8) required to overcome the above barriers include government should take proper initiatives (28%), continuity of the policies (15%), sufficient allocation of money (11%), increase manpower (10%) and development of skilled teachers (9%). Around 60 percent of the instructors claimed that there is huge shortage of nurses in both public and private sectors. The reason for these imbalances as identified is that the supply of nurses in each year does not meet the demand. The possible way to produce adequate number of nurses is to establish new nursing institute/colleges in public and private sectors, increase the number of seats of the different facilities of nurses and include nursing experts in policy making. The GoB has already decided to establish one nursing institute in each district (38%) and steps are taken to recruit more nurses in the different health facilities.

Table 8: Distribution of steps to overcome the barriers

Steps to overcome the barriers	No.	%
Arrange money	12	11
Remove administrative complicacies	2	2
Increase manpower	10	10
Government should take initiatives	29	26
Relieve from political problems	16	15
Take quick decisions	4	4
Get rid of local problems/ should aware local people	5	5
Skilled teachers should be developed and appointed	9	9
Send for getting training in foreign countries	3	3
Help form foreign/ non government NGO	4	4
Select proper space	7	7
Government should give more preference for health care	2	2
Total	103	100

3. 10 Problems of establishing private nursing institutes

The socioeconomic condition of Bangladesh does not allow production of sufficient number of nurses from the public institutions due to huge establishment needed, long administrative process and ministry level coordination. So, it is important to encourage the private sector to establish nursing institutes/colleges. There are many problems facing the establishment of private nursing institutions. It is observed from Annex A that 61 percent of the nurses do not think that the present private nursing institutes are adequate to supply the needed nurses. The process of establishment of private nursing institute/colleges is slow compared to public institutes. The businessmen are not interested to establish new nursing institutes as they are not economically viable in the short run. The government should therefore encourage the private sector for the establishment. Table 9 represents the barriers for establishing the private nursing institutes which are political influence (13%), financial problem (19%), shortage of manpower (10%), lack of skilled teachers (11%) and sometimes difficult to get permission (12%).

Table 9: Distribution of barriers of establishing private nursing institute

Barriers of establishing private nursing institute	No	%
Political influence	16	13
Risky	2	2
Difficult to get government approval	14	12
Lack of skilled teacher	13	11
Financial problem	23	19
Lack of ownership	20	17

Barriers of establishing private nursing institute	No	%
Lack of initiative/ guideline from government	4	3
Shortage of land	9	7
Shortage of manpower	12	10
Problem in practicing clinical session	1	1
Short duration	1	1
Insufficient books	1	1
No residence facility	1	1
Lack of willingness	1	1
Difference in the quality of private and government sector	1	1
Total	119	100

It is important to encourage the private sector to establish more nursing institutes. The government should take proper initiatives and steps to encourage them and at the same time public private partnership should be developed. The steps needed to overcome the above barrier for private sector include: government should provide all types of assistance (21%), development of skilled teachers (12%) and motivate rich people to invest in nursing sector (13%).

Development of nursing services is very essential for the improvement of the health of the people. But due to economic constraint it is not possible for public sector to make all the developments. So it is important to establish a public private partnership for the desired development of nursing services. The specific recommendations are:

- Career path in nursing job.
- Status of the nurses should be increased by upgrading their status and salary.
- Recruitment of sufficient number of nurses would shorten their duty hours and as a result they will be able to provide quality services.
- Regular training on nursing is very necessary for development of their professional skill.
- Residence facility should be ensured to avoid their family hazards.
- Sufficient medicine and medical equipment and logistics required for patient care should be supplied.
- Curriculum of nursing education should be revised taking into consideration the global standard curriculum.
- Sufficient number of laboratories with adequate and modern instrument should be established for developing practical skills.
- Sufficient number of skilled teachers should be recruited to teach them properly.
- Proper policy should be undertaken to encourage the private sector for investing into the nursing services.
- Public private partnership should be developed for the expansion of nursing services to promote health sector.

- It is necessary to appoint the nurses to different health facilities just after the completion of their study and reduce the span of their service length by giving extra benefits.
- Nursing teachers should be trained properly to conform to global standard nursing teaching.
- Sufficient modern instruments should be supplied to the laboratories for practical practices.
- Necessary revision of curriculum should be done to ensure the best quality education of nursing services.
- Different packages should be introduced to encourage the brilliant students in nursing education to receive quality nursing education.
- Public private partnership should be formed and encouraged to build a strong HRH for the country.

3.11 Development of nursing by Directorate of Nursing Services (DNS)

The Directorate of Nursing Services is the central body and focal point from which all activities relating to nursing are managed. The Directorate of Nursing Services has the similar responsibilities in terms of autonomy, authority and executive power as the other Directorates under the Ministry of Health and Family Welfare. The Director of Nursing Services is a member in all policy making committees at the national level relating to nursing, health and family planning. She is the key decision maker for nursing education and services. The responsibilities of the DNS are the administration and management of all nurses employed within Government sector in the nursing services, education and training, planning and policy development, budget and accounting, maintenance of 46 nursing institutes and 8 nursing colleges, 4 Divisional continuing education centers, 2 rural teaching centres and nursing hostels, coordination with other ministries and health department, and coordination with DGHS, DGFP, other directorates and BNC.

The nursing profession in Bangladesh has grown and reached a sustainable level. This profession has demonstrated its will to succeed as a creditable force in health care. Nurses of Bangladesh are now ready to contribute towards improvement in the quality of care for the achievement the goal of National Health Services. At present there are approximately 25,000 registered nurses of which 14,918 are working in the different levels of nursing as administrator, manager, teachers, monitoring & evaluation officers and care provides in the government and 2,265 posts are still vacant.

Like many countries in the world, Bangladesh is facing an acute crisis of skilled nurses. Although nurses are the essential part of health care system, there are very little initiatives to promote this noble profession. Thousands of people are not getting proper health care due to paucity of skilled nurses and the health condition of the people of the country is declining day by day. With proper attention and suitable program we can help to revive the profession.

DNS is mainly playing its role in administration of nursing s, education and research. The director and deputy director of DNS reported that the number of nurses is inadequate compared to the number of patients and doctors. So, it is very crucial to expand the nursing

education to produce and employ more qualified nurses. In the expansion process it is necessary to train up the instructors/teachers of the nursing institutes and colleges for increasing their efficiency and quality education. Currently 26 B.Sc. completed (diploma holders) nurses have got their masters degree in nursing and 1 is pursuing for Ph.D from Thailand.

Another problem of nurses is their job dissatisfaction. The nursing profession is not socially well accepted still now. The relatives and neighbors of the nurses taunt the parents and close relatives and add that nursing is not the profession for good girls. The most frustrating thing is that they have no promotion or upgradation for a long time even in the entire service life and the job is in third class status. The present government is committed to enhance the status of nurses and has taken several measures to improve their status. Government has already declared their job as second class and other steps are in policy stages.

According to global standard the patient nurse ratio is 1:4 for general patients and 1:1 for serious or critical patients. But the scenario of Bangladesh is the opposite as the patient nurse ratio is 13:1 only in the morning shift. The last recruitment of nurses took place in 2003 and after that no recruitment of nurses has taken place since July 2010. The total number of posts of all level of nurses is 17,183 and currently 14,918 nurses are working in the different public facilities, and 2,265 posts are still vacant. In spite of huge demand of nurses in different facilities, approximately 8000 registered nurses are sitting idle without job due to lack of proper initiatives and policies. It is necessary to recruit them yearly so that they can enter the job after their registration, since at the time of registration they are young and able to serve the patient sincerely and devotedly. But if it delayed then they have frustration about the job, as their ages are close to or over 30years. In the mean time they get married and having kids and have lot of responsibilities which have adverse effect on nursing. The present doctor nurse ratio in public hospitals is higher than that in the private hospitals and clinics. Most of the private hospitals have no registered nurses, except some reputed hospitals (Square, Apollo, United etc.). The private hospital has the tendency not to recruit qualified registered nurses. These types of hospitals are being run by the short trained/ oriented nurses and ayas. There are limitations in nursing teaching. The nursing institutes and colleges suffer from shortage of trained and qualified teachers, insufficient laboratories and lack enough modern instruments and equipment for practices. They added that manikin and phantom types of practicing models are not available in all educational institutions. The current revised curriculum seems to be of global standard but the only limitation is the shortage of prepared subject-based teachers, insufficient number of laboratories and inadequate modern equipment. The faculty of the institutes/ colleges are not trained according to the revised curriculum, for example, computer knowledge is essential but most of the institute/colleges do not have computers and trained computer instructors.

There is another major problem as the representation of directorate of nursing service is completely ignored at the time of framing the nursing policy. In the absence of expert opinion on nursing the policy cannot attain its main objectives. In this type of situation it is very difficult to ensure quality nursing education and services. The specific recommendations are:

- Awakeners program should be taken for the motivation of the people for accepting nursing as a noble profession to serve the suffering humanity.

- Adequate number of posts (according to global standard 1:4 for general and 1:1 for serious patients) of nurses should be created and at the same time regular promotion and other incentives should be offered.
- Regular recruitment of nurses should be continued. If they join nursing at a younger age, they will be able to render quality services. The span of the services should be reduced at one level.
- Higher education and training of the teachers should be arranged for ensuring the quality nursing teaching.
- New institutes and colleges should be established at public and private levels and the existing number of seats of the present institutes and colleges should be also enhanced by expanding those establishments vertically.
- The involvement and participation of the DNS should be ensured in every policy of nursing education and services.

3.12 Development of nursing by Bangladesh Nursing Council (BNC)

In Bangladesh nursing is considered as a second segmental job. That is why the work value and social recognition do not encourage the brilliant boys and girls to join the profession. It creates a negative impression and acts as one of the major causes of shortage. In order to increase the number of nurses and fulfill the actual need both government and private sector should come forward with the initiative to establish more nursing institutes and colleges to attract the new generation to join nursing.

Prior to making effective nursing development plan it is very important to strengthen the Bangladesh Nursing Council (BNC). If BNC works freely and takes the steps independently then they will ensure the quality of nursing education and also provide the registration of quality nurses. The registration is given after successful completion of the nursing education programs and then their license is renewed every five years. It also acts as a regulatory body and sets and reviews the curriculum and the syllabus.

The registrar and the deputy registrar of BNC informed that they were always trying to improve the quality of nursing education by reviewing the syllabus and curriculum and making it close to global standard. In recent years a tremendous development has taken place in nursing education and services in Bangladesh through several initiatives of Bangladesh government with the financial assistance from WHO and DFID. They reviewed the basic nursing curriculum with the help of WHO and took expert opinion from Thailand and Bangladesh nursing services. The curricula of B.Sc. nursing and B.Sc. public health nursing have yet to update by taking into consideration the global standard and in line with recent development of curriculum revision taken place during 2004 to 2006 where giving stronger focus on community health care, modern teaching methodologies and standard care. In-service training has been given to different categories of nurses in different areas (orientation, management, leadership, infection control, women's health etc.) to improve the quality of nursing services. Nursing standards are available only in a few hospitals, it is replicated in other hospitals also by taking proper initiatives and steps. Six textbooks, six teacher's guidelines and two dictionaries in Bangla have recently been published. An educational and

practice network has been established to facilitate the exchange of communication between DNS and BNC nurses in the field and vice-versa.

Taking into consideration the nurse population ratio (1:10000), the overall demand for nurses is 2, 80,000 but the number of exiting registered nurses is about 26000. So, there is a huge shortage of nurses. At the policy level meetings there is little participation of nurses, even if they are included in the policy meetings their opinions are not taken in the policy. So for the effective and sustainable health policy the expert opinion of the nurses should be taken into consideration.

It is observed that in the private nursing colleges the students are not interested to enroll in the above facilities. In these facilities the cost is very high compared to public institutions. So, spending a bit more they try to enroll into private medical college which has a prestigious value in the society for their parents and relatives. The businessmen are also not interested to invest in the nursing development due to some hard rules and slow return from the investment.

The government should give proper attention to nursing sector as it is one of the beneficial sectors of healthcare system of the country. Proper cooperation may be extended to private nursing colleges as well as to the students. The present government has taken various steps for the improvement of the healthcare of the people and taking different measures for ensuring the quality of nursing services. The following are the progress of nursing services under the present government:

- 2000 posts of Staff Nurse have been created
- 1971 Staff Nurses have been employed
- A proposal has been submitted to the MOH&FW for the revision of the salary structure as well the status of nursing professionals.
- A proposal for creation of different categories of posts of nurses has been submitted to the MOH&FW
- The necessary logistics and equipment have been supplied to the Nursing Institutes through DFID
- Two Nursing Officers have joined WHO on lien as Consultant and Program Coordinator respectively
- A proposal for creation of posts of 800 Nursing Supervisors and 2000 Senior Staff Nurses has been submitted to the MOH&FW
- A proposal for changing of designation of Staff Nurse to Senior Staff Nurse has been submitted to the MOH&FW
- Many more Nurses have completed MPH course from NIPSOM
- Four Nursing Officers have undertaken a study tour in Thailand on Regulation on Nursing with special emphasis on accreditation of nursing and education program and effective function of the council. They developed guidelines for accreditation system and quality assurance

- Developed lesson plan for revised Nursing Curriculum is going on
- Preparation of draft guidelines is afoot for management of hospital nursing services for various levels of nursing managers, development a system for quality assurance in nursing services and/or for in-service education for nurses in selected hospitals.
- A meeting of National Network for Senior Nurses in education and Service sectors has been held to improve the quality of services and education
- Trainings/ workshops on Nursing Leadership and Management are going on
- Training/workshops for Orientation/Refresher course for Nursing Supervisors are going on

3.13 Meeting and Discussions with Central Level

For the effective planning it is necessary to understand the top down communication, coordination and monitoring of nursing services. The key personal of HRD unit and hospital of MOHFW were interviewed with structured KII questionnaire and different issues of nursing were discussed. All of them reported that the development of nursing is the burning issue for the improvement of health of people. It is very important to recruit sufficient number of nurses to ensure the adequate quality of nursing care. There is a huge gap between demand and supply of nurses. To meet this demand it is necessary to produce more nurses every year. But there is an image crisis of nurses in the society as they do not have career path in the nursing job. So, the girls from the well off families are not interested in nursing profession. And also the brilliant students have less interest in nursing. Most of the students in nursing have the background of arts or other discipline rather than science. So, they may not acquire adequate knowledge of nursing. To reduce the gap of demand and supply a policy should be taken up for more new institutions of nursing and at the same time seats of every institution should be increased. As nursing is very crucial to improve the health of the people, so it is very important to make proper policy for the nursing professionals. There are many inconsistencies in the health policies. The present nurses are diploma holders having 4years training with entry qualification of SSC certificate. But since 2008, the 3 years diploma nursing training with entry qualification of HSC certificate and 4 year B. Sc. nursing course has been introduced.

At the entry level of nurses' recruitment, 100% posts are reserved for diploma nurses; however, there are opportunities for assistant nurses to be promoted as senior staff nurses if they completed diploma nursing education. Beside this, after having graduated with 4 year B.Sc. in nursing course, their status and recruitment rule will be decided. The present government has already declared the diploma nursing as second class. So it is not possible to recruit B.Sc. nurses as second class. On the other hand if the B.Sc. nurses are recruited as first class then there is a conflict with the doctors. In the nursing planning, the people who are directly working in nursing are not included. The other acute problems of nursing are that the nurses are not responsible for the condition of or care for the patients but they are responsible if all the bed sheets and other things and accessories remain unchanged. This has two implications on nursing services, one is that the nurses can not give 100% attention to the patients due to the fear of losing the above items and secondly they think that their prime duty is to maintain the number of supplies and not the nursing. So, the recruitment of nurses

according to global ratio can not be done in its entirety. For the improvement of nursing the following steps are recommended.

- Planning of nursing services should be developed with the active participation of the persons who are actively working with nursing.
- Recruitment and other policy matters should be taken from the bottom to top by taking into consideration the academic qualification and efficiency.
- The promotion/up gradation should be considered by taking into consideration both seniority and academic achievement and efficiency.
- They should be 100% responsible for nursing service and keeping the records of the utilities should not their priority.
- Public private partnership should be built to encourage the private sector in nursing service.
- As the nursing professionals have to conform to standards, so recruitment should be through the PSC.

3.14 Meeting and discussion with development partners

It was mentioned earlier that there is a huge shortage of nurses in the health facilities coupled with the poor quality of nursing. The number of nurses and the quality of nursing would be better in the public health facilities but in private health facilities it is poor too, except few cases. The development partners (DPs) of Bangladesh are taking different types of initiatives. Among all the sectors, the DPs give priority to health sector, specially on HRD in nursing. The development of nursing is one of the major programs that is given emphasis by the DPs.

3.14.1 Japan International Corporation Agency (JICA)

JICA started to provide assistances to the different development programs since 1974. JICA is not a funding agency. It is a technical agency which provides volunteers and logistic support to HRH and other prioritized sectors. Actually, Japan has two organizations one is JICA and the other is JBIC. Usually JBIC provides funds for different development activities, whereas JICA is responsible for technical assistance. JBIC was merged with JICA in 2008 and from then JICA started to fund a few priority projects in Bangladesh. The Project "Safe Motherhood Promotion" is being run by JICA with other DPs in Narsingdi. JICA focuses on three prioritized goals: (i) economic growth (ii) social development with social security and (iii) governance.

It is difficult for them to mention the exact allocated percentages on HRH out of the total. It is approximately around 10 to 20 percent for both finance and logistics together. JICA does not give support to specific project, but it provides coordination and supervision of DPs with GOB. JICA provides technical support to ministry. Ms Shoko Sato is working as an advisor in the ministry since last January for the next three years. She is working for the coordination of GOB activities with DPs and is trying to develop an effective and sustainable health policy for Bangladesh. There is a task group for HNPSP, Joint Secretary is the head of this task group. Usually the Joint Secretary has a lot of agenda and it is not possible for him to coordinate the project work properly. As the coordination is not functioning well, Ms. Shoko

Sato trying to coordinate it with Joint Secretary of HRD and the DPs members (WHO, CIDA, GIZ, DF1D, JICA and AusAid).

Japan's debt cancellation is an ODA loan. A certain amount of money that Bangladesh government is supposed to return to JICA is utilized in the priority field every year with the consent of JICA. GoB and Japan sides agreed to establish two nursing colleges in Sher-e-Banglanagar and Khilgaon under the project "Extension and Quality Improvement of Nursing Education" and strengthening the Mohakhali nursing college and upgrading it into teachers training college.

At this moment JICA has no specific plan for funding HRH activities. JICA initially agreed to run the second phase of the Norsingdi project. but it did not fund HRH on nursing. JICA sent 2 to 3 nurses to Japan for professional training and expertise along with the members from other developing countries. WHO and CIDA are working for the development of nursing. Bangladesh recruited 1000 nurses in one year and stopped the recruitment for the next 3 to 4 years. The recruitment should be carried out every year for the development of nursing. There are many training programs in HNPSF but how many of these for nurses and how these trained persons are utilized remains a question. There is no supervision or monitoring after the training. The incentive for the training is also very poor.

It is very important to strengthen the DNS which should ensure the expected development of nursing. It is observed that the delivery of services is not patient friendly. Services should be customer oriented but should not be commercial, Service must be ensured first. So, trained personnel both at field level and central level should not be transferred early for better service and coordination.

As mentioned earlier JICA is providing financial as well as the technical support to different prioritized areas. In HRH financial support is very small compared to others areas. Most of the time JICA provides technical and logistical support through recruiting consultant and experts for training the health personnel.

Currently the Joint Secretary for administration is the head of the HRD unit, who has a lot of tasks. So, he cannot concentrate fully on HRD activities, which has adverse effect on coordination and supervision of the projects. Again, the position of Joint Secretary of the ministry changes frequently, so it is very difficult to coordinate a work at the middle part for a completely new person. As a result, information sharing and coordination are hampered which are very essential for HRH development. Ms. Shoko Sato is trying to work together with GoB and DPs for management of the projects through sharing of information and coordination. It is recommended that the ministry should give the full responsibility to a senior official and keep him/her free from other agenda. And another suggestion is to strengthen the DNS and BNC to take leadership of HRH development activities regarding nursing.

It is not possible to develop the HRH by the government independently. The private sector should come forward to take part in the development of HRH maintaining its quality. Recently Professor Yunus of Gramen Bank visited Japan and showed his interest to work for the development of nursing.

3.14.2 World Health Organization (WHO)

WHO is one of the major development partners in different areas of development in Bangladesh for a long time. Among the different DPs, WHO has given more emphasis to HRD than to other areas. They have taken the initiatives on HRD nursing by building the capacity of teachers through training and higher education. An evaluation unit may be developed in the DNS for evaluation and monitoring of the nursing activities, problems and limitations of nursing services and comparative assessment with other countries. The quality of nursing service depends on the curriculum of nursing, quality of teachers, teaching methods, teaching materials and availability of modern teaching equipment. So, it is very important to review the implementation process of curriculum of nursing in order to produce quality nurses. In 2010-2011, they will support DNS and BNC to make them capable in planning, education and management of nursing to provide quality nursing. DPs also help to develop new and improved current cadres of nursing to enhance the capacity to improve maternal, neonatal and child health.

The demand for nurses is very high as against their very low supplies. Ten nurses received overseas training for 3 months in Thailand in the trauma nursing, critical care nursing, oncology nursing and mental health nursing. JICA supported 26 nurses to receive 2 year master degree and 1 nurse for Ph.D from Thailand. Recruitment rule should be changed so that a DG in nursing is created instead of Director of DNS. The image of nursing should be improved through including the B.Sc. nursing officials in cadre service. It is essential to reduce the nurse patient ratio and duty hours should be similar to other profession. The span of their service should be reduced.

The reasons for not producing enough nurses are lack of NI/colleges, lack of skilled teachers, delay in promotion, new position are not being created and B.Sc/M.Sc. nursing have no position in recruitment policy. The GoB has taken various steps to reduce the gaps of demand and supply. Infrastructure wise vertical expansion has already started to enroll more students. Nurses have been declared as second class officer by GoB and the revision of other policies are in the process for the improvement of HRH.

3.14.3 The Australian Government's Overseas Aid Program (AusAid)

AusAid does not fund HRH directly but they have indirect projects and activities to promote HRH. They provided half a million Australian dollars in the three projects of ICDDR'B on HRH up to 2007 and there is no nursing project in these three. The School of Public Health of BRAC University organized their field work in the 10 project upazilas with assistance of AusAid to evaluate the project through the field work. The school of public health of BRAC University arranged two month training for upazila and district health and family planning officers. Now the training has been reduced to 1 month. Due to some unavoidable circumstances AusAid was not interested in project based funding in ICDDR'B, they have taken the policy of core funding of 1 million Australian dollars annually for HRH for the period of 2007-2010. They had a total allocation of 20 million Australian dollars up to 2007 which was enhanced to 60 million A\$ for the period of 2007-2010 and very soon it will be enhanced to 100 million A\$. other than HRH, AusAid is working on maternal health,

morbidity and mortality, neonatal and infant mortality through financing BRAC and ICDDR'B. AusAid is not interested in HRH in nursing, because it will take a lot of time for changing the value of the indicators but in case of maternal and child health it will take less time. The government field health officials are transferred to other places at the beginning or middle of a project, so it is very difficult to share the information, coordinate and monitor the activities which affects the fate of the project. However AusAid is an active member of the task group of the project HNPSP along with JICA, WHO, CIDA, GTZ and DFID. AusAid has already started a few voluntary works such as arranging the visit of a group of young boys and girls aged 25-30 and share their health related expertise with the health personnel. Another group of people with expertise in radiology and therapy have trained the above health personnel. AusAid started to work on nursing in CRP at Savar upazila.

3.14.4 Canadian International Development Agency (CIDA)

CIDA does not fund HRH directly but they are planning to promote HRH. They have started the process of planning and visited many institutes. After the situation analysis they will start a project of capacity building of the training institutes. Although there is a huge demand of nurses yet there is no specific recruitment rule in Bangladesh. The nurses should be recruited annually. It is very essential to empower and strengthens the DNS. Incentives for training and supervision are small. Which should be enhanced for proper supervision and monitoring.

3.14.5 Department for International Development (DFID), UK

The program coordinator could not recall the exact time for how long DFID is funding the GoB health sector. DFID started funding the GoB health sector before HNPSP in 2002-2003. In HRH development, DFID provides pool fund with other DPs which is managed by World Bank. DFID is one of the task group members of HNPSP. It allocated the total fund of 63 million pounds in the health sector but the percentage of this allocation out of the total allocation in HRH was not exactly known to her. Currently DFID is providing funding for SBA training, nursing training, midwifery training, EOC training etc. In addition to financial assistance, DFID hires trainers from overseas for capacity building of GOB officials.

In future, funding in HRH development in public sector will remain the same and emphasis will be given in development of HRH in private sector. Capacity building of trainers and organizing training focused on ANC will be given priority. From next July family planning and safe abortion will be focused. DFID has no specific financial support for HRD in nursing but provides pool support which covers the development of nursing sector also. DFID finances DSF from pool fund and will provide further support. Another project is being run by Population Council from funding of DFID.

The system efficiency can be improved without cost if those who have EOC training can be posted where EOC service exists. Now 80 persons are under going midwifery course. They will become trainers for the next sessions. But it will take 1 and half years. It is too long to meet the MGDs. The allocation of resources is mostly in line with HNPSP policy. In most of the cases the resource allocation matches with the WHO recommendations. DFID wants to give emphasis on safe abortion. SBA might be deployed in those community clinics where

safe delivery room is available. To cover all unions of the country 20,000 SBA are required whereas the existing number of SBA is 5500.

WHO and UNFPA are utilizing DFID fund. They are trying to build the capacity of BNS.

Funding is mostly in financial terms. But in some cases DFID provides technical assistance for capacity building. Frequent changes of persons in senior level positions are a hindrance to smooth running of a program. Joint Secretary (HRD) the leading person of the unit has been changed three times in one year. So it becomes difficult to work in a coordinated way to run the program smoothly. There should be an online system in place where the number of existing posts, number of vacant posts etc. will be available. Every six months a semi annual review should be done. DFID is mostly satisfied with the progress of their programs. The new government of UK promulgated a rule which has created the scope for review of the country program. Now DFID is thinking to start work for the development of private sector which was postponed earlier. They are trying to involve civil society in the development of health sector.

Policy should be changed in deployment of nurses. To meet the effective utilization of nursing services, the Government should have a policy for entertaining the private sector for producing quality nurses. Grameen Bank has started to produce quality nurses for overseas employment. If GoB makes it binding for the nurses to discharge their duties at least one or two years in Bangladesh, the country would be benefited.