

Section 4: Current Situation of HRH

4.1 HRM at the central level of the country

Health human resources have been produced from both public and private sectors through different human resources development institutions. Specialized doctors, graduate doctors, nurses, paramedics, midwives, technicians of different types etc are being turned out every year. However, in public sectors the numbers of institutions who develop human resources are known along with the number of human resources but in private sector this is still not clear. In private sector, there are some HR development institutions which are not properly recognized by the government or if the institution is recognized, the courses offered by them may not be recognized by the proper authority of the government. Therefore, it is very difficult to get the exact scenario of HR countrywide. Even the government has very poor data about the authorized institutions due to lack of a proper system.

In the public sector, HR is being managed on a piecemeal basis e.g., separate HRDM unit for MoH&FW and DGHS, DGFP have different HR management systems anyway which are yet to be clear and organized. To oversee the overall HR working in the health sectors a system is yet to be established under a single umbrella. However, the different HRDM and MIS units under different directorates and ministries have the information only for them relating to those working under public sector but no information is available for the private sectors because of poorly managed HMIS. However, in a public sector the HR is managed by the following system –

In the health sector, there are 3 Line Directors (LD) and 7 Directors Admin for HRM
Three LDs-

1. LD, HRM, HoH&FW – works in ministry
2. LD, HRM, DGHS – works in DGHS
3. LD, HRM, DGFP – works in DGFP

Seven Directors Admin-

1. Director (Admin), MoH&FW
2. Director (Admin), DGHS
3. Director (Admin), DGFP
4. Director (Admin), Drug Administration
5. Director (Admin), CMMU (Construction Management and Maintenance Unit)
6. Director (Admin), DNS (Department of Nursing Services)
7. Director (Admin), NPP (National Nutrition Program)

There are such positions in DGHS with the designation of PM, HRD and DPM, HRD which are mostly project based positions and they perform project related activities rather than HRD related functions. Through discussion it was revealed that the functions of the LD, Director

(admin) and all other positions are not clearly mentioned anywhere and what they are doing is hardly HR related job rather those are mostly appropriate for administrative function. Within the Directorates it seems that a clear perception about human resource development and management is absent due to lack of a system. Qualified staff development process for holding the key positions related to HR is not in practice. For example persons holding the positions mentioned above including Program Manager, HRD and Deputy Program Manager, HRD are not clear about their functions.

Observation of the Key informants about HRM

1. Reportability and responsibility of the Directors are not clearly mentioned anywhere.
2. Confusions exist between both groups about who is reportable to whom and whose responsibilities are what?
3. There are 3 LDs and 7 Directors Admin for HRM but the reportability, accountability and responsibility are not clearly mentioned anywhere. Political influences affect the performance.
4. Quality and quantity of work are not maintained due to this non transparent situation.

4.2 HRH information in the public sector

Currently no appropriate mechanism is in place in the health sector to get exact HRH information countrywide like production, distribution, placement, migration and employment. The DGHS has its own MIS the function of which is limited to collection and management of some information related to the employed staff. To manage this system the Directorate has a Personal Data Sheet (PDS) system which is not functional to even provide that limited information.

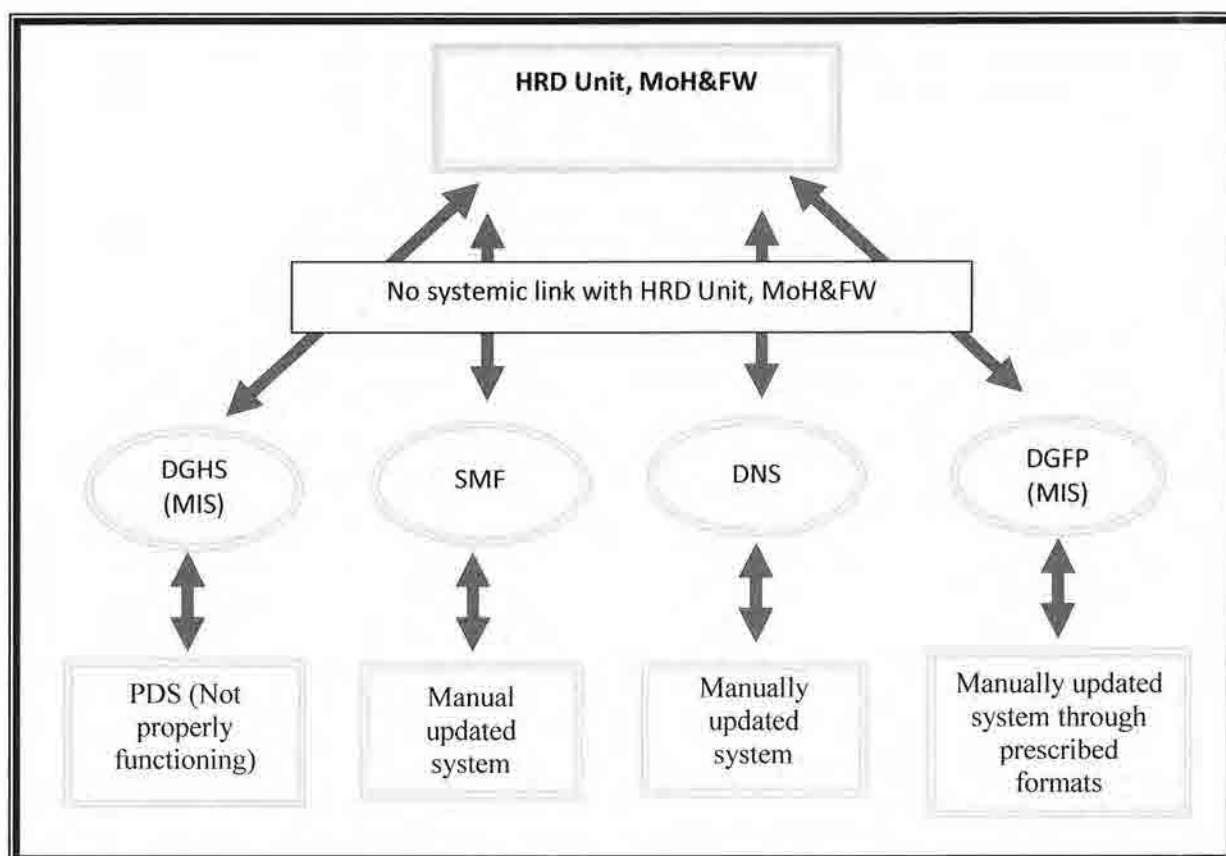
The DGPF has also its own MIS but that is also limited within the Directorate and its employed staff. The MoH&FW has no such formal system to get any type of HRH information rather the ministry depends on ad-hoc information as and when necessary supplied by the different Directorates and divisional and district level offices. Even there is no proper system to validate the available data what they have received from the different sources.

The BMDC is alone maintaining the information on the number of graduate doctors produced and completed post graduation degrees but they have no other information about HRH like transfer, posting, employment, migration, death etc.

The State Medical Faculty (SMF) and the Directorate of Nursing Services (DNS) have the information on the production of Medical Technologists and Diploma and B.Sc Nurses respectively but no other systemic information like employment, migration etc is available rather than what is manually done.

There is no system to oversee and manage the whole health workforces in light of HR and get specific information. The health regulatory bodies have no specific information about the current HR information or any projected health workforce of the country. A coordinated body needs to be established to get all available information. The HRD unit of the MoH&FW can be the central coordinating body in this regard.

Flow chart indicating the collection of current HRH information in public sector



The above flowchart is indicative of the fact that there is no coordinated system for the collection, preservation and updating of HRH information. The above flowchart also indicates that there is no system to get any information from private health sector in anyway.

The key informants also have emphasized the following observations regarding information on HRH.

Observation of the Key informants about HRM

1. There is no established or recommended system to collect and manage HRM related data and information from both public and private sectors.
2. There is no established reporting system, and while the reporting practice is irregular and ad-hoc, it depends on the senior person on chair.
3. No computer database or informed and informative filing system on HRM for health exists in both public and private sectors.
4. The entire health system of the country is affected due to lacking of this system.

4.3 HRH information with HRD unit, MoH&FW

In the backdrop of the limited system and constraints mentioned above, the HRD unit, MoH&FW has done an excellent job by collecting HRH related information with the help of some enthusiastic persons working in the unit. The information depicts the HRH information of the year 2009. The information was manually collected over telephone from the relevant sources. This information suggested that a database of an information system could be established to get regular information on HRH from both private and public sectors.

A. Human Resources for Health

Sl. No.	Number of Workforce	Total
1.	Total number of Registered Doctors	50004
2.	Estimated total number of doctors now available in the country	38537
3.	(a) Percentage of doctors working under the MOHFW (b) Percentage of doctors working under the Ministries (Home, Police, Railway, Civil Aviation, LGED, Social Welfare and Labour).	35% 3%
4.	Percentage of doctor working under the private sector	62%
5.	Total number of medical officers (MCHFP) under the FP, Directorate	540
6.	Total number of registered nurses in the country	23732
7.	Estimated total number of nurses currently available	15023
8.	Total number of Dental Surgeons	3484
9.	Total number of Family Planning Officer (TFP)	546
10.	Total number of assistant Family Planning Officer (ATFPO)	1440
11.	Total number of registered Medical Technologists produced up to 2002 (a) Sanitary Inspector (b) Dentists (c) Laboratories Technicians (d) Pharmacists (e) Physical Therapists	952 454 2220 7622 1054 139
12.	Number of Medical Assistants	5598
13.	Total number of Health Assistants (HA) (Sanctioned)	21016
14.	Total number of Assistant Health Inspector (Sanctioned)	4202
15.	Number of Family Welfare Visitors (Sanctioned)	5705
16.	Number of Health Inspectors	1401
17.	Number of Family Planning Inspector (Sanctioned)	4500
18.	Total Number of Family Welfare Assistants (Sanctioned)	23500

Source: HRD unit, MoH&FW, 2009

B. Total number of HRD –institutions in Health and Population Sector

1.	Number of Medical University	1
2.	(a) Number of Government Medical Colleges	18
	(b) Number of Medical Colleges in Private Sector	39
3.	(a) Number of Dental Colleges/ Units at the Medical Colleges (Govt.)	3
	(b) Number of Dental Colleges/ Units at the Medical Colleges (Private)	9
4.	(a) Number of Nursing Institutions in public sector (including one in the Arm forces)	51
	(b) Number of Nursing Schools in the private sector	19
5.	Number of Institutes of Medical Technology(including 2 of the Government)	32
6.	National Institute of Population Research and Training (NIPORT)	1
7.	Number of Medical Assistant Training School (MATS)- MATI	5
8.	National Institute Preventive Health and Social Medicine	1
9.	Number of Institute of Cardiovascular Disease	1
10.	Number of Institutes of Chest Disease Control	1
11.	Number of Institute of Public Health	1
12.	Institute of Health Economics, Dhaka University	1
13.	Department Population Science, Dhaka University	1
14.	Institutes of Nutrition and Food Science, Dhaka University	1
15.	National Institute of Ophthalmology	1
16.	Number of College of Nursing	3
17.	Number of Institute of Public Health Nutrition	1
18.	Number of Regional Training Centers (RTC-under NIPORT)	20
19.	Number of Family Welfare Visitors' Training Institutes (FWVTI-under NIPORT)	12

Source: HRD unit, MoH&FW, 2009

C. Basic Data on Nursing Education

1.	Number of Nursing Institutes (Public + Private)	69
2.	Duration of Courses	4 years
3.	Annual enrolment of nurses in the Nursing Institutes	2395
4.	Annual production/turnout of the Nursing Institutes	1900
5.	Annual Post Basic B. Sc. nursing + B. Sc. Public Health enrolment	765
6.	Degree holders in B.Sc. Nursing	855
7.	Number of Registered nurses	23732
8.	Teacher student ratio	1:27
9.	Teacher student ratio in the Nursing Institutes attached to the Dhaka medical College Hospital	1:89
10.	Percentage of male students (Basic nursing) in the Nursing Institutes attached to the Medical College Hospitals	10.1

Source: HRD unit, MoH&FW, 2009

D. Basic Data on Dental Institutions

1.	Number of Dental Colleges	1
2.	Dental Units Attached to the Chittagong and Rajshahi Medical Colleges	2
3.	Private Dental Colleges	9
4.	Specific areas having no Dental Specialists (i) Leaser Treatment Specialist (ii) Implantologist (iii) Specialist in Metallic Denture (iv) Fixed Appliances (v) Clinical Dental Experts	

Source: HRD unit, MoH&FW, 2009

E. Some Key HRD Indicators

1.	Annual Enrolment Capacity of Doctors: (a) Government Medical Colleges (b) Private Medical Colleges	2410 2556
2.	Average Cost of Producing a Doctor (a) Government Medical Colleges (b) Private Medical Colleges	Tk. 5.98 Lakh Tk. 14.92 Lakh
3.	Annual Production of Dental Surgeons (both Public and Private Dental Colleges together)	192
4.	Teacher-students ratio in the Medical Colleges	1:17
5.	Total number of Teachers in 13 Government Medical Colleges (Prof. +Associate Prof. +Asst. Prof.)	1237
6.	Total number of students in the Government Medical Colleges	14682

Source: HRD unit, MoH&FW, 2009

F. Providers-Population Ratio in the Health and Population Sector

1.	Doctor- Density per one thousand population	0.26
2.	Nurse- Density per one thousand population	0.14
3.	Dentist- Density per one thousand population	0.02
4.	Doctor-Nurse Ratio	1:0.54
5.	Medical Assistant- Density per one thousand population	0.06
6.	Laboratory Technician- Density per one thousand population	0.03
7.	Radiographer- Density per one thousand population	0.04
8.	Pharmacist- Density per one thousand population	0.04
9.	Health Inspector and Assistant Health Inspector- Density per one thousand population	0.03
10.	Family Planning Inspector- Density per one thousand population	0.03
11.	Family Welfare Assistant(CHWs)- Density per one thousand population	0.31
12.	Family Welfare Visitors and Reproductive Women- Density per one thousand population	0.04
13.	Trained Birth Attendant and Reproductive Women- Density per one thousand population	0.02

Source: HRD unit, MoH&FW, 2009

Table-4.3.1: Number of Public and Private Medical Colleges with their seat capacity

Public Category	Total Number of Public Medical Colleges:18	Total Number of Seats in the Public Medical Colleges:2410
Private Category	Total Number of Private Medical Colleges:39	Total Number of Seats in the private Medical Colleges:2556

Source: HRD unit, MoH&FW, 2009

Table 4.3.2: Suggested norms for health personnel in Bangladesh

Category of Personnel	Norms Suggested
Doctor: Nurse: Paramedics (all categories)	1:3:5

Source: HRD unit, MoH&FW, 2009

Table 4.3.3: Nursing Colleges under the Directorate of Nursing Services

Government Nursing Colleges: 6 and seat: 650	Private Nursing College:7 and seats: 215
Total Public Nursing Institute: 51	No. Seat: 1820
Total Public Nursing Institute: 19	No. Seat: 575

Source: HRD unit, MoH&FW, 2009

Table 4.3.4: Institute of Health Technology under Directorate of Health Services

Sl.	Category and number	Laboratory	Radiography	Physiotherapy	SIT	Dentistry	Radiotherapy	Dip-in-Pharmacy	Occupational	Total
1	Public Institute of Health Technology:3	168	158	153	153	158	63	158	0	1011
2	Private Institute of Health Technology:29	1153	155	150	0	1001	0	866	50	3375
		1321	313	33	153	1159	63	1024	50	4386

*6 new institutes of Health Technology (IHT) are under construction

Source: HRD unit, MoH&FW, 2009

Table 4.3.5: Institutes having B. Sc. Course in Medical Technology

Sl.	Category and number	Laboratory	Radiography	Physiotherapy	SIT	Dentistry	Radiotherapy	Dip-in-Pharmacy	Occupational	Nursing	Total
	Public Institute of B. Sc. Courses:3	0	0	25	0	0	0	0	0	0	25
	Private Institute of B. Sc. Courses:3	80	0	80	0	30	0	0	15	50	255
		80	0	105	0	30	0	0	15	50	280

Source: HRD unit, MoH&FW, 2009

4.4 HRH information in the private sector

From the HRD information sheet it is clear that a large number of health human resources are being generated by the private institutions and considerable number of health workforce are working over there without having any proper guideline, regulation and without any linkage with a coordinated HRH information system. From the findings, the following key observations from the private health sectors are noted below:

1. For private health sector, there is no effective and visible or recognized formal system of collecting information on HRH and other health services except very few information provided during the time of yearly renewal.
2. No or very little data are available with the government about private health sector. In the office of DGHS, only the information about the total number of country's clinic/hospital is available. It was emphasized that the documents submitted by the clinic owners to the office of the Line Director (Hospital & Clinic), DGHS do not contain original information but orchestrated information. The office preserves these non-validated and non-reliable HRH information based on the document submitted by the clinic/hospital owners, because in the existing system, the strength of manpower is not quite enough to monitor the information.
3. The attrition rate in HRH has not been calculated and considered as no such system exists in Bangladesh.
4. There is no formal system to get any report in any form from the private health sector except very few non-validated information during the time of yearly renewal.

4.5 Capacity Building

Capacity building of the existing health workforce both in the public and private sector is essential to cope with the increasing health needs of the country and to execute the non-technical, administrative and other jobs in health sector. Systematic and formal in-service capacity building support also works as an appraisal for the staff working in health sector. The following information are elicited from the key informants regarding capacity building.

1. There is no effective long-term strategic vision and plan for developing and deploying human resources for health system to protect and preserve the health of the people of the country.
2. So far, there is no plan to bring the doctor-nurse-allied health workforce ratios to a rational level to run the health system.
3. Very short-term, project based, instant need based small trainings are being provided to the staff rather than a holistic and long-term career oriented capacity building planning.
4. There is no effective strategic plan to increase the number of specialized doctors, develop their areas of specialization, number of medical doctors, number of nurses, and number of allied health work force like technologists, paramedics etc.
5. The reporting and record keeping system on capacity building of HRH for public and private sectors is poor.
6. The staffing, which includes necessary training of the staff, should focus particularly to the need of the country. Post-graduate training has become highly corrupt in the recent years due to political influence as reported by the daily newspapers. Hence, a graduate medical doctor takes the training wherever he gets a chance irrespective of his area of interest, expertise and even the need of the country.

4.6 Reporting System

The existing reporting systems of DGHS and DGPF are service centered but do not focus on the HRH issues. This conventionally practiced reporting system is based on service statistics and immediate output evaluation. It does not focus on HR development relating to awarding, promotion and career planning and individual performance. So, this system does not help in HR development and enhancement of effective decision making based on HRH. The key informants re-enforced this weakness through the following observations -

1. There is a very weak reporting and recordkeeping system to track HRM in HRH both in public and private sectors.
2. There are no appropriate formats for collection of HRH related data from public or private sector to see the monthly, quarterly, six monthly and yearly HRH status and other health statuses.
3. A PDS (Personal Data Sheet) has been devised by the office of Line Director, MIS, DGHS and also by DGFP for getting and managing the health workforce related information to maintain complete record of HRH but nobody has completed that format so far even after repeated reminders to all concerned.
4. PDS updating is the responsibility of Line Director, MIS, DGHS office. However, PDS has not yet received formal approval for mainstreaming. As there is no formal system development on PDS, no updated data are available in MIS department.

5. Any person working in health system even beyond the public system can fill-in the PDS but no single response so far has been received by the department of MIS.
6. Due to a lack of availability of HRH information, HMIS, faces serious problems with staffing and absenteeism among the healthcare providers.
7. Clinical Auditing is a process to evaluate health professionals' performance which is absent in our country.

4.7 Plan of MoH&FW for HRM

An Operation Plan for HRM was started as a development plan during 2003-2011, and a new plan will be developed soon. The strategic objective of the government under HNPSp was that "The human resource strategy commits the MoH&FW to the full achievement of six priority objectives during HNPSp; (i). Accountability and performance management (ii) workforce deployment (iii) improving human resource information (iv) improving the role of HR support functions (v) constructive engagement of professional and staff associations and (vi) workforce planning.

There was a considerable budget for workforce planning, workforce deployment, improvement of capacity through training, HR support functions and performance management. So, far no progress report is found available to justify that the strategic objectives have been met.

Observation of the Key informants about Operation Plan for HRM

1. Project based operational plan has been practiced that does not represent the total health sector including public and private.
2. Very little budget is allocated for the LDs to manage HRM in all respect
3. There is no system to develop qualified human resources to run the HRM system and for that 7 Directors Admin and 3 LD are not qualified enough to develop OP and oversee its implementation.
4. There is no visible plan for developing human resource for health system based on the requirement and population proportion of the country.
5. There is no effective system for the health professionals working in the public sectors for documenting their transfer, posting and promotion.
6. The existing practice of transfer, posting and promotion of health professionals is mostly biased through political influence and personal consideration.
7. Least recordkeeping system is being followed in case of selection for higher education, training, foreign tour, transfer, posting promotion etc.

4.8 Development partners (DPs) support

JICA has no direct funding involvement in health and other sectors generally. It collaborates with a project in Norsindi and provides technical assistance to the ministry. A resource person of JICA is working as advisor in the ministry for coordination of GoB activities and is trying to develop an effective and sustainable health policy for Bangladesh. Current HNPSP has a task group. Joint secretary is the head of this task group. JICA is working in HRD unit with the Joint Secretary. WHO, CIDA, GTZ, DFID, JICA, AusAid are the members of this task group.

GoB and Japan agreed on a project of establishing two nursing colleges one in Shar-e-Banglanagar and another is in Khilgaon under “Expansion and Quality improvement of nursing education project” in addition to strengthening the Mohakhali nursing college and upgrading it into teachers training college. In nursing WHO is providing some policy level strategic support. CIDA is going to support in strengthening midwifery but it is not yet started. JICA is providing financial as well as the technical support. In HRH financial support is very small. Most of the time technical and logistical support is provided through recruiting consultant, experts for training, giving technologies and training up local health personnel in Japan with other countries.

Certainly, the Joint Secretary of administration is the head of HRD unit and he has lot of agenda daily. So, he can not concentrate fully on HRD activities. Besides, the position of head is changing frequently and it is very difficult to coordinate a work from middle for a completely new person. This has an adverse affect on the project performances.

In future, funding in HRH development in public sector will remain the same and emphasis will be given to development of HRH in private sector. From next July family planning and safe abortion will be focused. DFID has no separate financial support for HRD in nursing but provides pool support which covers the development of nursing sector also. DFID finances DSF from pool fund. Another project pay for performance is being run by Population Council from our funding. We will also retain this. In most of the cases the resource allocation matches with the WHO recommendations. But 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 20000 SBA are required whereas the existing number of SBA is 5500.

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 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. In every six months semi annual review should be done. Government should have a policy for entertaining the private sector for producing quality nurses. Greemee Bank has started to produce export quality nurses for overseas employment. If GoB can impose a bond for discharging their duties at least one or two years in Bangladesh, the country would be benefited.

Development partner’s contribution to HNPSP (2003-2010) has been estimated at Taka 107935 million (US\$ 1799 million).

- a. Development Partners expected support during approved PIP period of 2003-2006

An amount of Taka 24145 million (US\$ 402) has been expected from the development partner's for 2003-2006 is in the HNP sector as shown in the table below:

Table 4.8.1: The source of DP funding in the approved PIP of HNPS (Jul 2003- Jun 2006) projected are as follows:

Sl. No.	Source	in million US\$	in million Taka
1.	Through Contingency plan of HPPP credit no. 3101 -BD	74	4440
2.	Islamic Development Bank (IDB)	3	180
3.	WB/ CIDA/ Netherlands (allocations against NNP)	71	4260
4.	Unspent balance with UNFPA (IDA and Pooled fund)	16	960
5.	CIDA	66	3960
6.	DFID (non-pool through SHAPLA)	4	240
7.	UNDP (for blood transfusion)	0.4	25
8.	JICA (for EOC)	2	120
9.	IDA (for HIV/AIDS)	8	480
10.	WHO biennium	9	540
11.	USAID (for NSDP)	108	6480
12.	SIDA (HIV/AIDS)	1	60
13.	GFATM (for combating AIDS &TB)	23	1380
14.	IDB 9for construction of 125 UHFWCs)	10	600
15.	GAVI (for immunization, vaccine, accessories)	7	420
	Total	402	24145

(1 US\$ =Tk. 60)

b. Development partners support from 2005-2010:

An amount of Taka 83340 million (US\$ 1389) of Development Partners (DPs) support is likely to be channeled to the HNPS of MOHFW from January 2005, as shown in the table below:

Table 4.7: Likely sources of Development Partners (DPs) support from 2005 onward:

Sl. No.	Sources	In million US\$		Total	
		pooled	Non- pooled	In million US\$	In million Taka
1.	IDA	300		300	18000
2.	DFID	188.7		188.7	11322
3.	EU	130.1	0	130.1	7806
4.	The Netherlands	53.1	0	53.1	3186
5.	SIDA	74.6	3.8	78.4	4704
6.	CIDA	12	64	76	4560
7.	GTZ/KFW	49	15.9	64.9	3894
8.	UNFPA	1	35	36	2160
9.	UNICEF		48.5	48.5	2910
10.	WHO		46	46	2760
11.	Japan Govt.		160	160	9600
12.	USAID		100	100	6000
13.	GFATM		11.71	11.71	702.6
14.	GAVI		95.6	95.6	5736
	Total	808.5	580.51	1389.01	83340.6

An amount of US\$ 306.5 million (ADB and co-financier support of US\$ 50 million; SIDA-Sweden US\$ 5 million, DFID US\$ 28.3 million USAID US\$ 210 million and EU US\$ 13.2) for urban health, NGO and social marketing and family planning activities will be implemented through MOLGRD and Ministry of Finance (USAID). For the HNP sector under the MOHFW will receive a partial amount of estimated US\$ 100 million. An amount of US\$ 100 million will be available from Japanese debt cancellation fund (JBCF).

The credit agreement equivalent to US\$ 300 million who signed with the IDA on May, 17 2005 for implementation of HNPSP (2003-2010). GOB also signed the Agreement/MOU with Swedish SIDA and KFW of Germany and the negotiations with other DPs are in different stages of development.

Section 5: Utilization of HRH Information

5.1 Problems of utilization of HRH information in the public sector

In public health sector there is no formal system of collecting and gathering information. One key informant said “even within the secretariat, it requires at least one week’s time for any information to travel from one building to another building within the same ministry”. The following observations are found in this regard -

1. A huge lack of integration exists among the different directorates of health sector itself regarding information collection, management, recordkeeping, dissemination of HRH information.
2. Because of weak HMIS system, the integration gap is very wide. A system of central database on HRH should be developed to minimize the gap and to strengthen the health system.
3. Transfer, posting, promotion:
 - a. Assistant Professor and Junior Consultant and above: transfer, posting, promotion are done by the ministry.
 - b. DGHS office can do the same for the personnel below the grade of Assistant Professor, Junior Consultant and below except the 3rd and 4th class staff. The same job can be done by the Divisional Director. So, the duplication of responsibility causes unnecessary administrative problems.
 - c. The Civil Surgeon also can carry out deputation of the staff below the rank of Assistant Professor and Junior Consultant.
 - d. The UH&FPO also can do some deputation. Therefore, a huge gap and mismanagement exist in HRH system from top to bottom because of this anomaly.
 - e. Staff of grade III and IV are non transferable and managed by the local office without providing any information to the DG office and/or ministry, So, the central level health planning is badly affected for this non-integrated mechanism.
 - f. Because a large gap between DGHS and DGFP, no information is available to each other about HRH.
 - g. BMDC, BMA, State Medical Faculty, DNS etc are being separately instead of following any coordinated way.
4. Due to unavailability of proper HRH information, monitoring and supervision, the drugs and medical devices supplied to the public hospitals find their way to the private healthcare dormitories through dubious ways.

Current difficulties of getting information at present

- Lack of accountability and system
- Lack of regulatory control
- PDS must be filled in

- Frequent visits must be ensured
- Assigned person to visit for logistics
- Professional control mechanism of services

5.2 Problems of utilization of HRH information in the private sector

There is no policy regarding the HRH information system as there is no existing mechanism to collect this information from private sectors. So, there are no formats and tools and it is not clear whom to submit report. In private sector there are many medical colleges, technical institutions etc generating health workforces but due to lack of formal system it is not under proper surveillance of the government. The system should be developed to establish HRH mechanism and information flow in private sector.

5.3 Proposed mechanism for effective utilization of HRH information

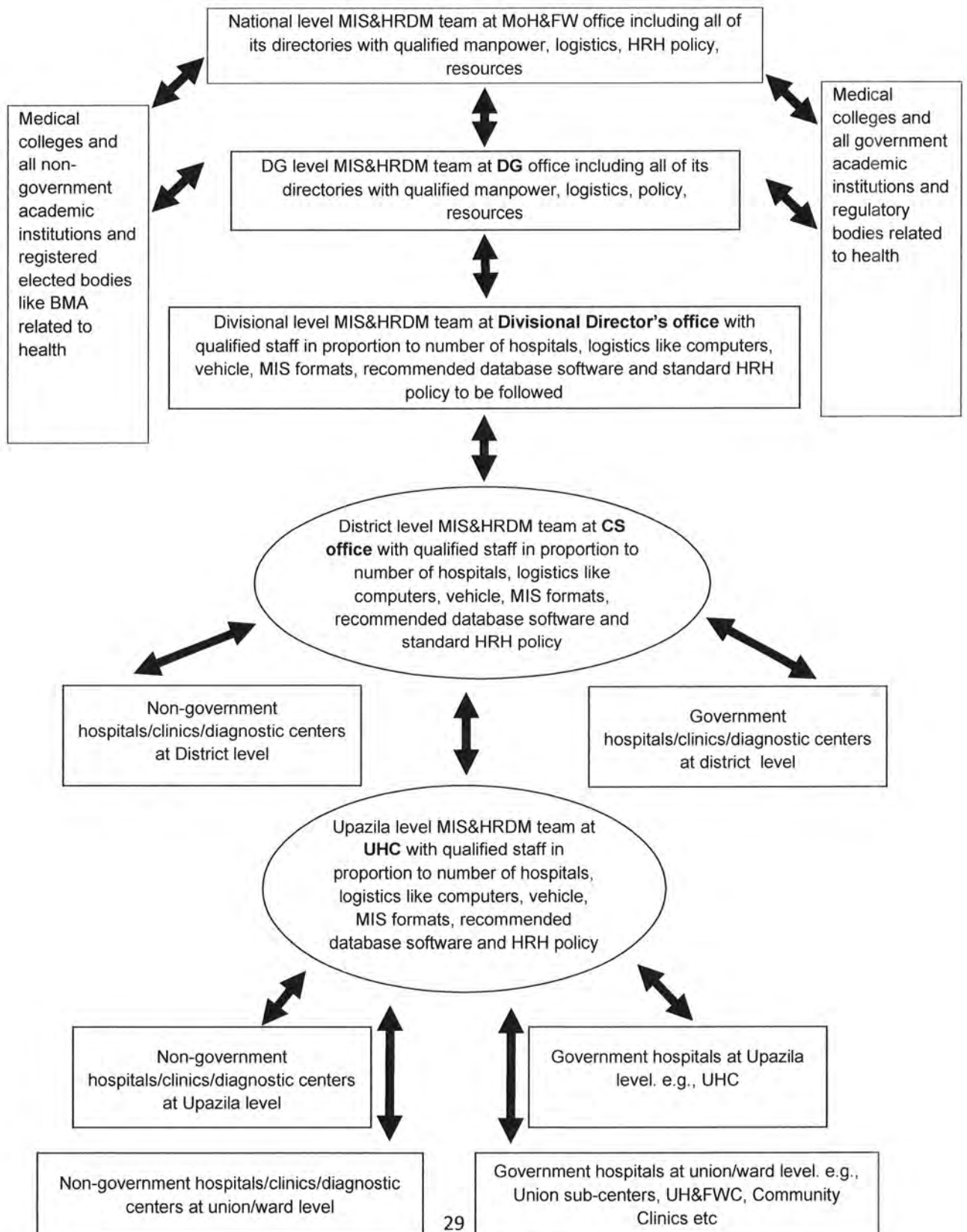
A formal system should be established to systematized the private health sector and avoid double standard between the public and private sectors. Because for private hospital, there are some instructions which are loosely followed but for public hospital no such information is available so, a double standard is existing. To get quick information and calculation of projected workforce based on the country's upcoming health needs it is very necessary to develop a central database system with grass root extension to provide information. Distribution of health workforce, development of proper strategic planning, production, distribution, employment, and migration can be calculated depending on the proposed data base. An appropriate MIS with logistic and equipment can be established and qualified manpower can be deployed for getting the targeted output. Countrywide planned health workforce distribution can decrease the rural-urban imbalance in workforce distribution with the help of the database system. Transfer, posting, capacity building support can be brought under a proper planning if the data based system is developed.

Proposed Conceptual Framework for HRH information

The HRD unit, MoH&FW, can work as an apex coordinating body on HRH information system for both public and private sectors. To do this initiative establishment of an e-database system is essential from central level to grassroots level for both private and public health sectors with available access and updating mechanism. The following conceptual framework may be proposed for collecting information in this regard.

Formal reporting format as well as reporting system should be developed for both public and private sectors of health services with proper accountability and legal binding. A central database system on HRH can be developed with extended link down to the grassroots level of health service facilities to get accurate and up to date information. Qualified HMIS staff with necessary support can be deployed from central level to the lowest level of health facilities to oversee the HRH and other health information for both public and private sector.

Proposed Conceptual Framework for HRH information



5.4 Suggestions and recommendations for development of HRH information

1. BMDC should develop a continuous monitoring system to track HRH related information including attrition of health human resource.
2. MoH&FW should have the system of proper planning on HRH like
 - a. The development plan of qualified medical doctors vis-a-vis the total population should be taken up.
 - b. Proper plan for development of Specialist Medical Doctors should be taken up based on ground reality.
 - c. Development plans for Nurses', technologists and other allied health workforce should be taken up to augment the health status of the people of the country.
3. The integrated system of transfer, posting and promotion should be made more transparent and logical with a strong professional base to support the health system.
4. Long-term strategic planning is necessary for providing continuous capacity building support to the human resources working in health sectors and for maintaining a strong HMIS for HRH.
5. PDS system can be formalized by adding other necessary means and supports.
6. Proper security measures are needed to protect the assets of the health facilities as well as the health professionals working in the facility.
7. Double standard in treatment and care for the people existing in private and public sector should be done away with.

All the above recommendations should be based on the country's present needs and projected requirement so that the upcoming health demand of the country will be managed.

Section 6: Findings from in-depth interview

6.1 Types of Services

Table 6.1.1: Types of services (General treatment) provided from the hospitals where the respondents worked

	Frequency	Percent
Fever/ cold/ cough	8	17.8
Diarrhoea	7	15.6
STI	1	2.2
Post abortion care	1	2.2
All types of general treatment	30	66.7
No general treatment	6	13.3

Multiple responses were accepted.

Most of the studied hospitals provided general treatment rather than specialized ones. The findings show that 6 hospitals did not provide any general treatment.

Table 6.1.2: Types of services - Specialist treatment provided from the hospitals where the respondents worked

	Frequency	Percent
Surgery	19	42.2
Gynae	17	37.8
Heart diseases	5	11.1
Medicine	8	17.8
Cancer	1	2.2
Neuro	1	2.2
Orthopedics	3	6.7
Maternal	12	26.7
No special department	7	15.6
Eye	2	4.4
Child	4	8.9
All	7	15.6

Multiple responses were accepted.

The hospitals provided all types of essential treatment rather than any specific and specialized type of service.

Table 6.1.3: Types of services - Diagnostic tests provides from hospitals where the respondents worked

	Frequency	Percent
Blood	25	55.6
Urine/ stool	22	48.9
Ultrasnogram	10	22.2
ECG	7	15.6

	Frequency	Percent
X-ray	13	28.9
Pregnancy test	2	4.4
Blood test	4	8.9
No diagnostic test	5	11.1
All types of test	8	17.8

Multiple responses were accepted.

All the hospitals provided multiple investigation facilities for the service seekers.

6.2 Distribution of facilities by number of beds and patients

Table 6.2.1: Distribution of facilities by number of beds, admitted patients & daily average patients at emergency department

Number	No. of bed		Admitted patients		Patients at emergency department	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<50	20	44.4	22	48.9	22	48.9
50-250	9	20.0	6	13.3	12	26.7
> 250	11	24.4	14	31.1	7	15.6
NA	5	11.1	3	6.7	4	8.9
Total	45	100.0	45	100.0	45	100.0

Most of the hospitals had the admission facilities that were indoor facilities. Only 5 hospitals under study had no admission facility because these were probably diagnostic centers.

6.3 Availability of skilled manpower for providing services

Table 6.3.1: Opinion about the skilled manpower for providing service from the facilities

	Frequency	Percent
Yes	25	55.6
No	20	44.4
Total	45	100.0

About 45% of the hospitals were being run having shortage of manpower.

Table 6.3.2.: Description of the existing manpower at the facilities

Filled up manpower	Doctor		Nurse		Technician		Medical Assistant		Paramedics	
	n	%	n	%	n	%	n	%	n	%
0%	-	-	1	2.2	3	6.7	2	4.4	1	2.2
1-50%	11	24.4	5	11.1	7	15.6	2	4.4	2	4.4
50-75%	8	17.8	9	20.0	3	6.7	1	2.2	2	4.4
75%+	23	51.1	22	48.9	27	60.0	13	28.9	6	13.3
NA	3	6.7	8	17.8	5	11.1	27	60.0	34	75.6
Total	45	100.0	45	100.0	45	100.0	45	100.0	45	100.0

Most of the hospitals were being run with acute shortage of manpower and allied health staff of all level

6.4 Record keeping system and procedure for educational qualification and training of the staff at the facilities

Table 6.4.1: Record keeping system of educational qualification and training of the staff at the facilities

	Frequency	Percent
Yes	37	82.2
No	7	15.6
Don't know	1	2.2
Total	45	100.0

Table 6.4.2: Record keeping procedure of educational qualification and training of the staff at the facilities

	Frequency	Percent
Computer database	5	13.5
File	28	75.7
Both	4	10.8
No record keeping system	8	21.6
Total	45	100.0

6.5 Institutional support for staff willing to take higher education/training on his/her own responsibility

Table 6.5.1: Institutional support for staff willing to take higher education/training on his/her own responsibility

	Frequency	Percent
Yes	37	82.2
No	6	13.3
Don't know	2	4.4
Total	45	100.0

Table 6.5.2: Institutional provision for staff encouragement.

	Frequency	Percent
Leave with pay	25	67.6
To pay course fee	6	16.2
Promotion after completion of course	3	8.1
To pay new pay-scale after completion the course	3	8.1
Other	7	18.9

Multiple responses were accepted

6.6 Submission of any report to the government on the performance of the institution

Table 6.6.1: Submission of any report to the government on the performance of the institution

	Frequency	Percent
Yes	42	93.3
No	2	4.4
Don't know	1	2.2
Total	45	100.0

Table 6.6.2: Place for submitting report on institutional performance

	Frequency	Percent
Civil surgeon office	22	52.4
Deputy Director office	5	11.9
Don't know	15	35.7
Total	42	100.0

Table 6.6.3: Frequency of submitting report on clinic/hospital performance

	Frequency	Percent
Monthly	0	0
Quarterly	0	0
Yearly	1	2.4
Don't know	41	97.6
Total	42	100.0

Table 6.6.4: Availability of reporting format

	Frequency	Percent
Yes	35	83.3
No	6	14.3
Don't know	1	2.4
Total	42	100.0

The respondents' mentioned the yearly renewal format as the reporting format

Table 6.6.5: Opinion about the present reporting system

	Frequency	Percent
Good	34	75.6
Bad	2	4.4
No comment	5	11.1
Others	4	8.9
Total	45	100.0

Most of the respondents did not know about the reporting system, so comment on this system does not seem relevant.

6.7 Government official assigned for collection and maintenance of HRH data

Table 6.7.1: Government official assigned for collection and maintenance of HRH data

	Frequency	Percent
Yes	37	82.2
No	8	17.8
Total	45	100.0

Most of the respondents did not know about the reporting system, so comment on this system does not seem relevant.

6.8 Obstacles for recruiting skilled manpower

Table 6.8.1.: Obstacles for recruiting skilled manpower

	Frequency	Percent
Don't get	12	26.7
Need high salary	10	22.2
Posted but do not work at office	5	11.1
Other	11	24.4
No problem	6	13.3
Can't stay	1	2.2
Total	45	100.0

Chapter 7: Discussion

Our country does not yet have the required number of specialists even in the urban areas. The picture in the rural and remote areas is even a more bleak. Referral system for specialist consultation is an important issue for better HRH planning. Specialist's referral system will definitely reduce the vast pressure on our specialists rendering their service available to those who really need it.

The Track Flow is an important bargain point in HRH development. Posting and transfer of health professionals should match their previous professional training and experience. A cardiac registrar with three years experiences should not be posted as an orthopedic registrar. Similar protocol should be followed for other health professional categories as well.

Career planning and professional interest should also be considered in the context of HRH, and this process should start at the very beginning of the career. Our national need in the health sector should also be crucially considered in such planning process. Clinical auditing is a process to evaluate health professionals' performance. In certain cases, it is also applied to standardization or grading of a health facility. This is a very efficient statistical tool which is hardly used in our country either for clinicians' individual aptitude rating or for service evaluation. Health cadre promotion and need for skill upgrade training must be based on professionals' clinical auditing to give a big push to HRH development. Clinical audit should be a part of ACR (Annual Confidential Report) for health professionals employed within the public sector. Clinical auditing if applied to a health facility will prioritize the areas of urgent attention and it is an integral part of strategic planning process.

Workplace safety for healthcare professionals is another sensitive area of HRH development. The rapid increase in social stress, political violence and drugs pose a serious threat to the HRH development. This threat has increased manifold in psychiatric facilities, irrespective of the size of the facility. Proper security measures are mandatory to protect not only the assets of the facility but also to give a sense of security to the health professionals working in the facility. Doctors and nurses very often become the victims of physical assault or verbal abuse. Sometimes such issues escalate to an alarming state affecting the service of the entire health facility. Such a scenario is common in both public health facility and private clinic. Most of the times security people are utilized to regulate the visitor mobs or to perform as a night guard.

Retaining health professionals in rural and remote area is another problem in health service management— both in private and public hospitals. Centralized national development strategy is the main contributing factor for such miserable condition. Many western Governments suffer similar problem too. They have unique policy strategy known as RRRP (Rural and Remote Retention Policy) to overcome this shortage in the rural and remote areas. All categories of health professionals are paid higher wages, annual leave, travel allowance etc in RRRP. Such models have proved successful; in rural and remote areas Australia-RDN (Rural Doctors Network) keeps the families of doctors connected and involved in many social activities. Decentralization of administration and developing built civil infrastructure will solve the problem in the long run.

The current pattern in the private and public sector is quite different creating a double standard in treatment and care for the people. Low salary and other incentive wages, non flexible working hours, uncertainty of jobs, lack of authority, poor job satisfaction, low social esteem, exploitation at workplace by the owners, absence of career planning etc. discourage efficient and skilled healthcare professionals in the private sector. This menace is the outcome of poor policy and management, supervision, and monitoring by the reasonable bodies.

Nations are now aware that Public to Private Partnership (PPP) is crucial for any development of the county including health. Keeping that in mind HRH experts need to explore strategies and tactics to further the ties between these two parallel systems. Reviewing the present HRH policy for the private health sector and routine periodic supervision and monitoring of HRH data using proper statistical tools will upgrade the situation and contribute to better care and treatment of the people.

Corruption in HRH management is another crucial issue mainly in the Government Health System. Corruptions in the form of unregulated promotion, posting, transfers due to political pressure or financial gain is destroying the morale and spirit of HRH in the Government Sector. Since HRH in the Government Sector are recruited through PSC (Public Service Commission), proper action cannot be taken against them. This is less of a problem in the private health sector. Corporate giant hospitals like Apollo, Square etc. are purchasing doctors from the Government institution thereby making their services unavailable to the common people. They are also importing less qualified doctors from overseas creating a serious challenge and threat to our patients and our state registration authority BMDC.

Only regulatory control by the Government will not improve the HRH situation in the private sector. Rather the situation deserves a more cooperative and nurturing attitude. The responsible authorities must listen to the HRH problems faced by the private sector and come forward to solve them. Public health professionals may be deputed to the private sector in cases of extreme urgencies. Private clinic owners can be offered different technical and managerial training to increase their capacity. Free-service and non-profit clinics can be offered different kinds of tax cuts and financial packages. The HRH problem in the private health industry will prevail until it becomes sustainable. Entrepreneurs in the private health sector coming from diverse background lack sufficient skills, attitude and expertise to run the business initially coupled with the fact of slow return to their investment which puts them in a chaotic situation. This initial phase is very crucial for resource injection, supervision and monitoring by the government. Career planning and access to higher medical training is very restricted for HRH in the private sector. This needs urgent attention too.

It is generally well accepted that most of the private entrepreneurs do not have any HR department. Staff migration is very high due to poor salary structure and abuse. The "Salary Register Book" serves the entire purpose of Human resources Information. They do not care about the quality of care or clients' satisfaction, which is the ultimate goal in the service industry. The quality of HRH data available from the Salary Register is very poor in quality compared to a well-set HRD. Since staff retention period is low, sometimes 3-4 months, the clinic owners do not retain staffs' CV, which could serve as a source for data retrieval regarding qualification and experience of the staff.

Acute shortage of health professionals makes them render services to many clinics at a time. While doing so, they intentionally conceal their employment at other clinics. This is another crisis and challenge to HRH. Corruption and tax legislation also induce medical experts to involve in such malpractices. When a medical expert working with DGHS consults patients in his private clinic, he hides that information too.

Private clinic owners must be legislated to maintain HR information properly and someone must be designated to keep such records and information and look at other issues relating to HR development, planning and management. The best outcome will be achieved if this is done in virtual horizon using Management Information System (MIS). Such information may be centrally collected, updated and compiled by DGHS on a continuous basis.

An efficient and integrated continuous reporting of HR will enable the central bodies to monitor closely the HRH Management countrywide. Such mandatory continuous reporting system will help planners to identify root causes and factors of HR Situation and develop future policy and strategy. The present situation of periodic and annual system of non-digital fractionized reporting system has many deficiencies. Stress should be given to the need for urgent digitalization of all HRH information assuring strict security of information access and utilization. Rate of health personnel movement within the Govt. infrastructure and also the private health sector has clear strategic implication to determine frequency of information collection and system upgrading. For private health sector, HRHI is suggested to be integrated with the Govt. MIS creating one stop information source.

Supervision and monitoring in more remote location is a challenge for the limited administrative staff at DGHS. At the current situation, Bangladesh has widespread internet facility and digitalization of HRH reporting is not a big problem. However, any HRI must be scrutinized and verified before compiling. Under the local Government Health Administrators like THA, UH & FPO, Civil surgeon can do it as part of their routine activity. Otherwise, serious over-reporting will result.

The Bangladesh Medical and Dental Council (BMDC), established under the Medical and Dental Council Act of 1980, is empowered to look after the public interest by maintaining proper standards of services and education. It has the authority to take disciplinary actions, including temporary suspension or permanent removal of the practitioner from the register for misconducts like issuing false certificates, disregard to personal responsibility to patients etc. However, due to the absence of a monitoring system on the activities of the practitioners, it is very difficult to implement, and there is no such evidence until now of a practitioner's name being removed from the register [13].

Directorate General of Health Services (DGHS) of Government of the People's Republic of Bangladesh has managed to extend internet connection and mobile phone service facility across the country with the alignment of current government's vision of Digital Bangladesh. Now this has become much easier to maintain information on HRH, and convenient to implement a comprehensive strategy for effective decision making based on that information [22].

DGHS and DGFP have initiated MIS (Management Information System) recently. They have recently developed PDS (Personal Data Sheet) for all categories of health work force employed with them for collection of HRH information on a periodic basis. Nevertheless, such system has proved to be very unproductive due to lack of cooperation by the employees and lack of accountability. The MIS office is thinking to make such self reporting mandatory by imposing regulatory mechanism like making PDS mandatory during monthly salary withdrawal and during any transfer / posting order. PDS self reporting of health workplace in the private sector was indicated by a section of discussion participants and such reporting was advised to be brought under strict regulatory control with provision of penalty.

Section 8: Conclusions and Recommendations

8.1 Conclusions

HRH planning experts need to consider the valid factors during the time of developing an effective policy. Regular psychosocial evaluation, special wage incentive, paid leave and slicing long working hours can help to break through such barriers.

A system of service accreditation or standardization is required to run private/ public health facilities like (ISO/JCI etc). The medical administration and record keeping are very much neglected in the private sector, whereas such information is very vital not only for planning and incremental service development but also for feeding research activities and for protecting patient's right.

Availability of systematic HRH information will be of immense importance to the health policy makers to formulate a practical strategy to satisfy the unmet medical needs across nations. Such policy would minimize the gap between public and private healthcare facilities and the same would help to establish a strong monitoring and evaluation device for both the sectors of Bangladesh.

8.2 Recommendations

The main agenda for better HRH planning and policy development is to provide better health care to the people at large. To ensure this, effective health care services, should review the present poorly developed and practicing HRH policy. A complete and up-to-date HRH policy can ensure the expected health services from both public and private health sector by imposing all types of routine and periodic supervision and monitoring mechanism by using proper HMIS tools. *Therefore, development of an effective policy for health sector management should take into account for the effective HRH management system.*

The apex health institutions of the government like MoH&FW, DGH, DGFP and all of its directories have no effective plan on HRH to manage the health human resource both in public and private sectors. *To manage these huge human resources working in health sectors an effective HRH plan is need to be developed with the participation of all relevant stakeholders. A strategic planning based on the projected demand of country's health need and retirement of the existing manpower should be considered to develop the propose HRH plan to cope up with the raising demand of health needs.* The propose HRH plan should be a holistic plan that should enclose both public and private sectors and work as a guideline for the total health sectors rather not to be a piecemeal one.

The regulatory/statutory bodies may be strengthened for the interest of the people; and patients' rights along with the rights of the service providers should be uphold through a well established Management Information System (MIS). *Government regulatory bodies can be reformed and activated to provide up-to-date information regarding the registered health workforce of the nation. Any information on HRH provided by the practitioners or institutions should be*

adequately scrutinized and verified by such bodies. Therefore, the information should be quite reliable.

Transfer, posting, promotion and rewarding of health professionals should be based on the professional background and experience of the staff, where career planning and professional interest should also be in consideration in this context. Clinical auditing process should be applied to evaluate health professionals' performance and the performance standard should be considered to offer any type of award to the health professional. This clinical audit should be a part of ACR (Annual Confidential Report) for health professionals working in both public and private health sector.

Rural and Remote Retention Policy (RRRP) can be applied to balance the health professionals between remote areas and urban areas. In this system, the health professionals who work in remote areas can enjoy more financial and other facilities.

Health professionals working in public health sector may be deputed to the private health institutions to improve the HRH statuses by close monitoring, supervision and assistance. Private clinics/hospitals and other health institutions should be under strict legislation to maintain HR information properly. Appropriate penalty can be imposed on the individual health professional, private and public health institutions for failure to maintain the set-standard of health services in private level institution. Someone must be designated to maintain HRH related records and other health service issues related to HR development, planning and management as set by the regulatory bodies or policies.

The key weakness of the present reporting system is that there is no effective reporting system is working for both public and private health sectors. *A mandatory and frequent reporting system on HRH from the health institutions irrespective of private or public should be formalized to help the planners to identify any gaps relating to HR situation to support the present situation and develop future policy and strategy.* The system should ensure that immediate cross checking and validation of the submitted report is possible. Reverse accountability and penalty mechanism through HRH policy between the regulatory bodies and public or private institutions or professionals can help make the reporting system effective. *Public and private health sectors' HRHI system should be integrated with the central HMIS to provide one stop information service. The existing double standard of HRH between the public and private sectors should be minimized.*

HR information should be scrutinized and verified before compiling by the policy level staff. Under the supervision of local health administrators of the government like UH&FPO, Civil surgeon, the provided information can be scrutinized, if the qualified staff with specific job responsibility are in position. *Central database with its extended web link can help to scrutinize the information immediately.*

Bangladesh Medical & Dental Council (BMDC) is the apex state regulatory body for health workforce like the doctors and dentists. Their primary responsibility is to maintain information regarding the number and status of the registered medical and dental practitioners and relevant specialists. In addition to that, they deal with matters arising from legal aspect of the practitioners. Health planners can access such information as they need. Such information

management is still not digitalized. That is why information access to users is sometimes difficult. System should be digitalized to bring all the stakeholders under a single HRH umbrella.

Bangladesh Nursing Council is responsible to maintain information regarding registered nurses both Diploma and Graduate nurses and nurse specialists. The nurses renew their registration every 5 years. State Medical Faculty of Bangladesh (SME) is entitled to maintain information manually regarding all categories of Auxiliary Health Staff and Health Technologists. Their Management Information System (MIS) is not digitalized. The digitalized system and its successful maintenance could help to bring success in health sector.

PDS is a form of self reporting and there is no mechanism within DGHS and DGFP to verify and scrutinize the information submitted and also no indication of penalty for providing false and misleading information. This PDS reporting is not existent in the private health sector. They provide HR information once with their application to set up a health facility and once during their yearly renewal. Also the private medical colleges and other health institutions like MATS should be included under the common HRH policy. At present system, it seems that there is a scope of information fraudulence in the self reporting system if a continuous surveillance system is not in place.

Authorized delegates and proper logistical support at different levels of administration like CS, UH&FPO can verify HRH related information in private sector. Frequency of visit from specific regulatory body may be reviewed by the HR Planners. Regular updating of the format of information collection can also be suggested. Personnel with information science background at each health service division will be able to handle such issues efficiently. Developing proper evidence based monitoring tool is also suggested for both private / public health sector.

A short and midterm strategic plan should be developed to ensure properly trained manpower and logistic support within the MoH&FW for a coordinated system for HRHI reporting. The plan should avoid all sorts and all levels of parallel HRHI reporting. Improved resource allocation should ensure proper information management system in BMDC, BNC, SMF, DNC etc.

There is a need to develop an e-monitoring system for scrutinizing the self-reporting formats to ensure that the provided information is true. Employees' right to access the database information system must be ensured to bring transparency, trust and confidence. MoH&FW as a central government body in health sector can take the leadership to manage this e-monitoring on HRHI for both public and private sector. The e-monitoring system will be an open and quick system for both public and private health sectors which will include all HRH information ranging from the top to bottom level of the health sectors. The relevant institutions and individuals would have the scope to get access into the system as and when necessary to monitor their performance and get feedbacks from the central regulatory team. The central control of the e-monitoring system will be on a highly qualified and equipped team under MoH&FW to provide all technical assistance.

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Annex A: Findings of the Consultation Workshop

(Unedited, as it was presented in the TCW workshop)

Present HRH information sources:

GoB-

- a. MIS for DGHS and DGFP
- b. State Medical faculty
- c. DNS
- d. BMDC

Private-

Nil

Difficulties of getting information

- a. Lack of accountability and system
- b. Lack of regulatory control
- c. PDS must be filed in
- d. Frequency of visit must be ensured
- e. Assign person for visit of logistics
- f. Professional control mechanism of services
- g. Providers should be ensured

Present Information Flow

- a. Manual system should be computerized
- b. Specific person should be appointed to monitor HRH system frequently
- c. Regular modification of information form
- d. Mechanism for private sector

Monitoring consistency and reliability

- Qualified personnel at CS office
- Monitoring format can be introduced

Major gaps and weaknesses

- a. Avoid to provide information
- b. Wrong and biased information
- c. Validity and reliability (poor)
- d. Manual information system

Strengthening MIS capacity building system

- a. PDS should be imposed in private sector
- b. Frequent monitoring by BMDC or other regulatory body
- c. Linkage between private, NGO and GOB MIS system

Annex B: List of Key Informants interviewed

1. Dr. A. K. F. Mozibur Rahman
Director, Hospital and Clinics, Line Director, I.H.S.M, DGHS, Mohakhali, Dhaka
2. Prof. Dr. Abul Kalam Azad, Director, MIS, DGHS, Mohakhali, Dhaka
3. Mr. Abdul Kaium, Deputy Secretary, HRDU, MoH&FW, Bangladesh Secretariat, Dhaka
4. Dr. Khaled Shamsul Islam, Senior Assistant Chief, HRDU, MoH&FW, Bangladesh Secretariat, Dhaka
5. Mr. Mahfuzur Rahman, HRDU, MoH&FW, Bangladesh Secretariat, Dhaka
6. A. K. M. Nurun Nabi, Professor & PD, Dept. of Population Sciences, Dhaka University
7. Prof. Dr. Syed Modasser Ali, Advisor to the Honorable PM, People's Republic of Bangladesh
8. Dr. Md. Khairul Islam, Country Representative, WaterAid Bangladesh, Dhaka
9. Dr. A.J. Faisel, Country Representative , EngenderHealth, Bangladesh
10. Office of Prof. Shah Monir Hossain, DG, DGHS, Mohakhali, Dhaka
11. Dr. A. K. M. Jafar Ullah, DPM, Arsenic program, DGHS, Mohakhali, Dhaka
12. Md. Mahbub Hossain, Deputy Secretary, GNSP unit, MoH&FW
13. Prof. Dr. Md. Ismail Khan, Vice-Principal, DMC, Dhaka
14. Dr. Faruk Ahmed Khan, DPM, HRM, DGHS, Mohakhali, Dhaka
15. Mrs. Makhduma Nargis, PD, CC, DGHS, Mohakhali, Dhaka
16. Dr. Borendronath, ex. PD, CC, DGHS, Mohakhali, Dhaka
17. Dr. Bishnupada Dhar, PM, DGFP, Dhaka
18. Dr. Syedur Rahman, Assistant Director, Hospital Management, DGHS, Mohakhali, Dhaka
19. Dr. Mizanur Rahman Arif, DPM, Hospital Management, DGHS, Mohakhali, Dhaka
20. Dr. Alim, MO, Reproductive Health, DGHS, Mohakhali, Dhaka

Annex C: Background Characteristics of Key Informants

Age of the Respondents

Table C 1: Age of the respondents

	Frequency	Percent
<=40	15	33.3
41-50	12	26.7
51+	18	40.0
Total	45	100.0

The information was collected from the experienced personnel working in health sector because the finding shows that most of the hospital/clinic managers and government officials among the respondents were more than 50 years old.

Education of the Respondents

Table C 2: Education of the respondents

	Frequency	Percent
MBBS	20	44.4
BA/ BCom/ BSc	11	24.4
MA/MSS	12	26.7
HSC	2	4.4
Total	45	100.0

Most of the hospital/clinic managers and government officials among the respondents were doctors which constitutes about a half of the respondents while more than a half of the respondents were not doctors. The educational qualification of the non-doctor CEOs could be a question whether they were qualified enough to run the clinic or whether they were governed by an regulation.

Official Designation of the Respondents

Table C 3: Official Designation of the respondents

	Frequency	Percent
RMO	8	17.8
MO	4	8.9
MD	1	2.2
Assistant Manager/ Manager	14	31.1
Higher division clerk	4	8.9
Chief accountant	1	2.2
Health educator	1	2.2
UFPO	3	6.7
Deputy director/ Director	7	15.6
Principal	1	2.2
Statistical officer	1	2.2
Total	45	100.0

The respondents were from different levels but their designation gave a hint that they were qualified enough to provide necessary information for the research. Because of various levels of respondents the diversity of information is expected.

Duration of Services

Table C 4: Duration of service at the existing facilities

	Frequency	Percent
< 1 year	8	17.8
1-5 Years	24	53.3
6-10 years	7	15.6
> 10 years	6	13.3
Total	45	100.0

Most of the respondents were experienced enough to respond properly to the questionnaire. Only 8 respondents had the experience of below 1 year who could be considered as weak respondents apparently.

