



**ENHANCEMENT OF EFFECTIVE DECISION MAKING BASED ON HRH
INFORMATION: BANGLADESH PERSPECTIVE**

September, 2010



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Acronyms

AHS	Allied Health Staff
BBS	Bangladesh Bureau of Statistics
BDHS	Bangladesh Demographic and Health Survey
BHW	Bangladesh Health Watch
BMA	Bangladesh Medical Association
BMDC	Bangladesh Medical and Dental Council
CCU	Coronary Care Unit
CEO	Chief Executive Officer
CME	Continuous Medical Education
CS	Civil Surgeon
CV	Curriculum Vitae
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
DNS	Directorate of Nursing Services
FPO	Family Planning Officer
GDP	Gross Domestic Product
HCP	Health Care Providers
HMIS	Health Management Information System
HR	Human Resource
HRD	Human Resource Development
HRDM	Human Resource Development and Management
HRH	Human Resource for Health
HRHI	Human Resource for Health Information
HRM	Human Resource Management
ICU	Intensive Care Unit
IHT	Institutes of Health Technology
INGO	International Non-Governmental Organization
ISO	International Organization for Standardization
JCAHO	Joint Council on Accreditation of Healthcare Organizations

JCI	Joint Commission International
KII	Key Informant Interview
LD	Line Director
MATS	Medical Assistant Training Schools
MDG	Millennium Development Goal
MIS	Management Information System
MoH&FW	Ministry of Health & Family Welfare
NGO	Non-Governmental Organization
NHP	National Health Policy
NNGO	National Non-Governmental Organization
OTD	Overseas Trained Doctors
PDS	Personal Data Sheet
RRRP	Rural and Remote Retention Policy
TCW	Technical Consultation Workshop
TOR	Terms of Reference
UH&FPO	Upazila Health & Family Planning Officer
UH&FWC	Upazila Health & Family Welfare Centre
UHC	Upazila Health Complex
UN	United Nations
WHO	World Health Organization

Executive Summary

This descriptive cross-sectional exploratory study was conducted during the period of May-July 2010 with the broad objectives to make the proposal for effective utilization of HRH information after the establishment of the HRH information system for HRH plan including HRD and HRM. It was also intended to propose ways to improve the method for the collection of HR information in private sector which is necessary for national level HRH Planning. The specific objectives of the study were to enhance effective utilization of HRH information, to review HRH development and ongoing plan by MoH&FW and other organization, to analyze the situation on the utilization of HRH information and its problems, to propose a mechanism of effective utilization of HRH information, and ways to enhance the same in decision making processes, to improve collecting HRH information in private sector for HRH planning, to review HRH information in private sector, to analyze the reason of difficulties in collecting HRH information in private sector and to propose a method of collection of HRH information in private sector and the mechanism of routine collection.

The study has included equal number of hospitals in each division both in private and public sectors. In private sector, primary data were collected from the hospital managers or owners through face-to-face interview by using structured and open-ended questionnaire. In each division, two tertiary level hospitals and four secondary level hospitals both in private and public sectors were selected by using non-probable purposive sampling method. Relevant personnel working in the DGHS, DGFP and MoH&FW were interviewed to get key information by using a pretested checklist. Besides these, some veteran public health experts working at NGO sectors were interviewed to get any other perspective about the topic. A Technical Consultation Workshop (TCW) was arranged with the participation of relevant government agencies, UN bodies, INGOs, NNGOs, HR specialists, Journalists and representatives of Civil societies to share the study design and tools prior to data collection. The study design and tools were revised by incorporating all the valued feedbacks of the participants received through the TCW. A group work was arranged after the sharing session of the TCW to get detailed information on HRH in a consultative manner. Just after the group work, the findings were shared among the large audience to collect their further feedbacks in this regard. Secondary data were collected by reviewing different literature e.g., study reports on HRH information, literature published by DGHS and MOHFW and other sources like WHO, UNICEF etc.

The respondents opined that enhancement of effective utilization of HRH information is necessary for the health sector to get up-to-date information, proper distribution of the existing human resources and to calculate the projected human resources for the continuously expanding health sector.

The study found that there is no effective HRH development plan by MoH&FW and it is not managed by any other organization like DGHS, DGFP, BMA, BMDC and DNS. The apex body of health sector that is MoH&FW has no realistic plan about the total requirement of human resource for health and how the expanding need will be managed. Even the apex body has very limited information about the existing countrywide health workforce working in private and public sector. At present, the health human resources are being developed in a rather unplanned manner; the specialized doctors, medical graduates, nurses, paramedics, technicians and other

allied health workforces are not the result of well-planned health human resources. Even when the human resources have been developed, equitable distribution is not made for their proper utilization. The total population of the country and its health human resources are found to be disproportionate e.g., doctors population ratio. Even the proportions among the health service providers are unequal e.g., doctors nurse ratio. There is no dependable plan to minimize this disproportion for the sake of the country's health system.

By analyzing the collected information, it was found that the utilization of HRH information is very poor which is creating various problems in the health sector. The piecemeal and poor database on HRH is being maintained by MoH&FW and DGFP, and an incomplete PDS system is maintained by the office of the Line Director, MIS, DGHS. However, the PDS system is open for all workforces working in the health sector of the country including both public and private sectors but very few public sector data on HRH are available over there and no data are available on private health sector. The existing HRH information record keeping system of the government has very little contribution to the public health sector for transfer, posting, promotion and any type of reward to the public health service providers. On the other hand, because of having least information with the government on HRH about private sector, no formal monitoring system is visible to assist this sector by the central policy making body. Because of absence of central database or information flow system, lack of coordination among different offices under MoH&FW is experienced.

The respondents emphasized on the need to maintain a central database on HRH with its expanded web link down to the lowest level of health service providing unit. This informative database system should be easily understandable and accessible by the human resources working in health sector and operated by a group of qualified people in the health sector. Institutional and individual responsibility and accountability should be ensured professionally to maintain and update the HRH database. Regular reporting as well as monitoring and evaluation need to be established for the sector. Different types of monitoring tools should be developed and utilized to oversee the monthly, quarterly, six monthly and yearly progresses and identify the lackings to ensure immediate support in both public and private sectors. At present, no such formal monitoring system is in place; yearly submission of some documents to the government for getting one-year renewal order of the clinic/hospital/diagnostic centre is the only system for the private sector. In addition, there is a very poor mechanism to justify that the submitted documents get renewal order, whether it is true or false. For the public sector there is no such mechanism, it completely depends on the efficiency of the CEOs of the respective institution how he would manage the staff under his/her jurisdiction.

Decision making process on HRH is going on by following an information collection and utilization system which is poor and adhoc and needs to be formalized, as opined by the respondents. The government should have a system to closely monitor the health sector including the human resource working in this sector. Upazila Health Complex could be the lowest supervising and monitoring unit for all the health infrastructures and human resource working under this UHC like UH&FWC, community clinics and private hospitals/clinics/diagnostic centers. A set of staff will be working in this office to monitor the progress by field visit and using other monitoring means. The proposed central database will continuously be updated through its extended upazila link by the team for providing up-to-date information to the district

level office and upwards through the link. This staff member will provide information by frequent field visits using all means of monitoring. This system will be working in a bilateral way; the individual institutions and individuals should have the access to the database to see their status and to get support from the government.

The respondents proposed the method of enhancement for effective utilization of HRH information in decision making processes by using the information of the proposed database where all necessary updated information will be available e.g., year and time of entry to the job of a staff, academic degrees, training achieved, detailed information about working place and nature of job performed etc. Transfer, posting, promotion and career development plan of the health service providers can be done based on the database information. This database will help to perform Clinical Audit to be launched in our country. The human resources working in the private hospitals, clinics and diagnostic centers should be under this database within the reverse accountability between the government and private sectors. The proportion of specialized doctors, medical graduates, nurses, paramedics, technicians and support staff also should be calculated and the gap would be minimized with the help of the database information. Through the reverse information web link, the implementor and top policy level manager can get access to the information. The respondents stressed on the need to ensure the professional accountable mechanism to manage the database system and recommended imposition of strict penalty due to the failure of managing the system properly. From the government part, supervision and monitoring support is difficult for the limited administrative staff at DGHS, CS office or UH&FPO office to provide.

The private health sector has very limited system of accountability. They submit a little information on HRH by filling up a prescribed format introduced by DGHS during the time of getting renewal order of the hospital/clinic/diagnostic centers. Without any established cross validation system, the private health institutions get that renewal permission to run the institutions for the next one year. The respondents suggested imposing an updated format that should have link with the HRH web link database to minimize this gap. At present, some people are responsible for the quality assurance that is in addition to their normal job responsibility. However, it is not working well because of their huge engagement with other jobs and lack of necessary support to perform their duty.

The review of HRH information in private sector found that there is no policy in position in this big sector to ensure the quality save only one government ordinance of 1982 as the basis of this control mechanism. The ordinance is not a big document and major revision is needed to make it up-to-date to meet the demand of the time, the respondents stressed. A complete policy in this place could minimize the gap and improve the situation, the respondents observed. The MoH&FW has some data, DGHS and DGFP have some data, while the divisional level health offices have some data but all are working in an incomplete and non-coordinated manner.

Because of the poor system of getting HRH related data regularly from private health sector, the formal system is struggling to provide the required support to the sector, though the public sector is also in the same position. There is no monthly, quarterly, six monthly or yearly reporting format for the private health sector to provide HRH related information to the formal health system e.g., to the UH&FPO, CS, divisional level or central level managers. Because of a

nontransparent setup for monitoring of the private health sector, the system does not work in such a way that can fulfill the minimum requirement in comparison to a standard system.

The respondents strongly felt the need to develop a complete policy for the private health sector where all types of directions will be available including the HRH information. In the policy, the regular monitoring and reporting system will be clearly mentioned with specific job description of the staff at different levels for conducting monitoring activities e.g., upazila level, district level, divisional level and national level. The frequency of visits to hospital/clinic/diagnostic centers will be mentioned in the policy. The frequency should not be more than once in a month. The minimum standard of HRH should be mentioned in the policy for the private health institution with provision for penalty for failure to maintain that standard. Different monitoring tools and formats will be suggested in the policy like monthly visiting format, quarterly, six monthly and annual visiting formats. On the other hand, reporting formats for different frequencies that will be submitted to the government by the manager/owner should be suggested. The BMDC, BMA, Nursing Council, MoH&FW, DGHS, DGFP, district hospital, upazila hospital, community clinics, UH&FWC and the private hospitals/clinics should be under a single HRH database with a separate web link for each individual sector office. The respondents cited the health policy of Malaysia as an example to be followed for Bangladesh by making necessary modifications to suit the need of our country.

Section 1: Introduction

1.1 Introduction

Development of a HRH system in the health sector is not isolated from the overall development agenda of a nation; Health and Development are inseparable. Developed nations are healthy as evidenced by their conspicuously better indicators of health. We have our current health scenario as poor as Europe had 100 years back. Therefore, prioritizing the health sector only and addressing it with resource issues will not improve the overall health status. Multi-sectoral approach and inter-sectoral collaboration to achieve a sustainable development is essential to protect and promote our national health status. Nevertheless, this is a continuous process; expecting any drastic improvement in the health sector will be an over-ambitious dream.

There are many crucial issues related to health workforce in our national health system. Two parallel systems exist for Medical and allied health educations i.e., Government and Private. Private medical colleges and health technology institutes are mushrooming in the country with inefficient basic civil infrastructure, teaching staff and other technical facilities in comparison to developed nations. Although studies are lacking in this area, the existence of imbalance in such a parallel system has been expressed in many MoH&FW reports, press and their regulatory bodies.

Continuous Medical Education (CME) is a strategy to update health professional's knowledge, skills and practice with the fast changing medical field resulting from new discoveries every day. There is a big gap in this respect between the developed and the developing nations. Once a health professional graduates from a medical school, he does not require to open the books. In western nations, health professionals need to update themselves on a continuous basis to validate their practicing license. Cross-border movement of Health Manpower must be regulated. We currently do not have the required member of health professionals to serve the country as per WHO recommendation. They recommend 1 doctor for 1400 people (1:1400).

The current HRH pattern in the private and public sector being quite different is 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 owner, absence of career planning etc. discourage efficient and skilled healthcare professionals in the private sector. This situation is the outcome of poor policy and management, supervision, and monitoring by the reasonable bodies.

Perhaps the most critical challenge faced by the health system in Bangladesh lies 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 populations. Only 5% of the health care providers are qualified modern practitioners as opposed to 43% traditional providers and other faith healers [9]. Considering the average of low-income countries, Bangladesh currently has a shortfall of over 60,000 physicians and 280,000 nursing staff. However, a more worrying phenomenon is the concentration of the HRH in urban areas, primarily in and around the capital city of Dhaka. Almost 84% of the country's trained modern health workforce are

concentrated in urban areas. While more than 65% of the country's population live in rural areas, they have only about 16% of the HRH. In contrast, 35% of the country's urban population have 84% of its physicians and more than 75% of its nurses. This tendency of centralization of HRH, together with centralized administration, has resulted in remarkably poor outcome in terms of target setting and practical output. For example in the Fourth Five Year Plan(1990-1995), the target to cover population under essential health care was 80% whereas achievement was only 45%; target to cover delivery assisted by trained persons was 50% and achievement was only 12%; antenatal care target was set at 60% while the achievement was only 35%[\[10\]](#).

Statistics show that, the doctor-population, doctor-nurse, nurse-population ratios remain far below the standard level. Nevertheless, in terms of health infrastructures and health facilities, Bangladesh is one of the resourceful countries [\[11\]](#). This indicates that the current vulnerable healthcare situation is largely due to lack of a concrete health policy and vigilant monitoring and evaluation strategy. The regulatory framework for monitoring health services delivery is notably weak. There are 45 laws related to various aspects of health like Epidemic Disease Act 1897, Prevention of Malaria Ordinance 1978, laws related to quality of food, quality of drugs etc. According to the Terms of Reference (TOR), the senior officials are given the responsibility of supervising and monitoring the health activities of their respective areas, but they seldom do this [\[12\]](#).

A large number of people are receiving health care services from the private health sector though this sector is being poorly managed due to lack of policy. The volume of human resource working in the private sector is bigger than the people working in the public sector. Frustratingly, we have less controlling mechanism to ensure proper health care through the private sector especially by providing qualified health professionals. The same scenario is also seen in the public health sectors especially when the HRH system is weak in both public and private health systems of Bangladesh.

1.2 Justification of the study

Bangladesh is one of the developing countries with scarce resources where the total population is 160 million living in approximately 57000 square miles. To achieve the Vision 2021 in healthcare sector with limited resources, we need to give strong emphasis on the quality and quantity of Health Care Providers (HCP). This can be enhanced through effective decision-making based on HRH information. In Bangladesh, HRH information is quite inadequate for a systematic HR policy, planning, strategy formulation and decision-making. The scenario is worse in non-state sectors particularly private, NGOs and non-formal healthcare providers. Least initiatives have so far been taken to explore the human resources in private healthcare sector in Bangladesh.

The Bangladesh Health Watch (BHW) study was the first of its kind that attempted to gauge the extent of the scarcity and mal-distribution of HRH in Bangladesh. However, there are a few studies in objectively identifying and analyzing the factors that contribute to this critical mal-distribution of HRH in developing countries in general and in Bangladesh in particular.

Human Resources for Health is one, albeit the most critical, of the key components of the health systems [1]. A Health Management Information System (HMIS) can be a powerful tool to make health care delivery more effective and far more efficient [2], as it is people who deliver health care services. It is investment in the world's health workers—from community workers and barefoot doctors to nurses and physicians—that made possible the science-based health revolution of the 20th century [3]. Therefore, availability of systematic HRH information will be of immense importance for 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.

1.3 Objectives

1.3.1 General Objectives

1. To make the proposal for effective utilization of HRH information after the establishment of the HRH information system for HRH plan including HRD and HRM.
2. To propose ways to improve the method for the collection of HR information in private (for and not-for profit) sector which is necessary for national level HRH Planning.

1.3.2 Specific Objectives

1. To enhance effective utilization of HRH information.
2. To review HRH development and ongoing plan by MOHFW and other organization.
3. To analyze the situation on the utilization of HRH information and its problems.
4. To propose a mechanism of effective utilization of HRH information.
5. To propose the method of enhancement for effective utilization of HRH information in decision making processes.
6. To improve collect on of HRH information in private sector for HRH planning.
7. To review HRH information in private sector (identification of available reports, sources of information and information gap).
8. To analyze the reason of difficulties for collecting HRH information in private sector.
9. To propose the method of collection of HRH information in private sector and the mechanism of routine collection.

1.4 Operational Definitions

Human Resources for Health (HRH)

Human Resources for Health (HRH) are the men and women who make health care happen. They include dentists, nurses and midwives, pharmacists, physicians and other health professionals. They also include auxiliary health care workers, community health workers, and practitioners of traditional medicine, technicians and other paraprofessional personnel. (*World Health Organization*)

Key Informants

Key informants are the people who can provide relevant information. In our study, the key informants in public sector included senior and mid-level stakeholders at national, divisional,

district and upazila level. The hospital managers or owners of selected hospitals of seven divisions of Bangladesh were the key informants for HRH in private sector.

Secondary level hospitals

Hospitals having 50 or more beds in both public and private sector are considered as the secondary level hospital in this study. However, the UHC is considered as a primary level hospital but in this research UHCs were considered as secondary level hospital including the district hospitals, because to know the HRH status, this inclusion has created no difference.

Tertiary level hospitals

Medical college hospitals, super specialized hospitals and diagnostic centers in both public and private levels were considered as the tertiary level hospital in this study.

Diagnostic centres

The big super specialized medical diagnostic centres in private sector were considered as diagnostic centre to collect information for this study.

Effective decision making

Decision that must ensure the health of the people of the country; policy to specify the process and system of taking decision on HRH in health sector like who will be responsible to take what decision and how, who will be affected by the decision, for whom the person and system are responsible and why.

1.5 Limitation of the study

1. The duration of the study was too short to get enough information through a big sample size.
2. Very few literatures and studies were found relevant to the topic.
3. The officials at different levels of Government and Non-government hospitals were found less informed to provide necessary information.
4. Respondents did not feel ease to provide information and in some cases they have refused to give information.
5. The analysis of the study has been done principally based on the qualitative information due to less and incomplete quantitative data.

1.6 Strength of the study

1. The study has considered both qualitative and quantitative data so, cross validation of information was possible to get actual information.
2. It was seen that the right personnel were selected as the key informants to get relevant information for the study.
3. The KII Guideline for collecting qualitative information and Questionnaire for collecting quantitative information, were pre-tested and revised to make it easily understandable for the data collector as well as for the respondents. So, it is expected that the collected data and information were accurate.
4. Relevant documents were collected from the respondents in favor of their statement to justify the information provided by them and cross validation.

Section 2: HRH Findings from Literature Review

Acute shortage of Allied Health Staff is a big challenge for Bangladesh. The proportion of doctors to allied health staff in our country is just the opposite to the industrialized nations. The situation can better be explained by the following figure.

Designation	Sanctioned	Available	Vacant Post
Medical Technologists			
Pharmacists	2,834	2,207	627
Medical Technologists (Lab)	1,773	1,408	365
Medical Technologists (Dental)	517	475	42
Medical Technologists (Radiography)	695	646	49
Medical Technologists (Radiotherapy)	38	30	8
Medical Technologists (Physiotherapy)	185	32	153
Total	6,042	4,798	1,244

Table 2.1: Number of sanctioned, available and vacant posts of medical technologists under DGHS (2008). Source: DGHS; Government of the People's Republic of Bangladesh

Allied health staff comprises Nurses, Physiotherapists, Radiographers, Technologists, Speech Pathologists, Audiometrists etc. Their roles are very critical in holistic treatment approach. The ultimate aim of a sound human resource development strategy is to offer comprehensive treatment and care to the public, which cannot be achieved without urgent initiative to create efficient allied health professionals. This is undoubtedly a very crucial area for human resource development strategy.

Posts	Sanctioned	Available	Vacant
Medical Assistants	5,369	3,589	1,780
Domiciliary Workers			
Health Inspectors	1,399	932	467
Assistant Health Inspectors	4,196	3,613	583
Health Assistants	20,841	14,075	6,766
Total	26,436	18,620	7,816

Table 23.2: Number of Sanctioned, available and vacant posts of Medical Assistants and Domiciliary workers, Source: DGHS; Government of the People's Republic of Bangladesh

Recently more and more recommendations are emerging from well-conducted epidemiological studies addressing the stress level of health professionals employed in special care facilities (ICU, CCU). Alcoholism, drug abuse and suicide rates are much higher in this category of health staff. Shift duty, continuous low working hours, performance anxiety, and high mortality rate in such facilities all contribute to the adverse health outcome faced by them. These problems affect the concerned professional's family as well cause a psychosocial massacre. HRH planning experts need to consider these factors during the time of developing effective policy. Regular psychosocial evaluation, special wage incentive, paid leave, and slicing long working hours can help to break through such barriers.

The sharp contrast in communication skills of health professionals in the developed and the developing nations is another index agenda for HRH planners. Effective communication is central to any sort of treatment outcome. Linguistic and cultural differences can act as barriers to effective communication with poor treatment outcome. Effective communication strategy and consulting skills are core elements of training for health professionals in the Western set up. Health professionals enriched with effective rapport building techniques (mirror image, vocal pacing techniques etc.) communicate better with their patients. However, our doctors and allied health staff have less idea about these communication/consulting skills, as reported. Poor communication creates a bad impression on the patients causing poor compliance with the recommended treatment. The most unkindly social comment about our doctors and nurses is that they do not know how to talk and communicate with the patients. Yet patients are helpless; there is inefficient law to protect clients' right in Bangladesh. This scenario is totally reverse in the Western countries. The patients have the right to sue the healthcare providers for poor communication or bad consulting manners. Several studies clearly indicated that bad communication was responsible for more than 40% of the medical litigations in the US & Australia.

The table below shows the scenario of public and private healthcare facilities of Bangladesh.

Institution	Govt./Private	NO. of Institution	NO. of Seat
Medical college	Government	17	2394
	Armed Force Medical College	1	100
	Private	41	3070
	Total	59	5549
Dental college	Government	3	215
	Private	11	700
	Total	14	915
Health Technology (Diploma)	Government	3	1010
	Private	48	5946
	Total	50	6956
Health Technology (BSC)	Government	3	110
	Private	13	1065
	Total	16	1175
Health Technology (MSC)	Government	-	-
	Private	2	65
	Total	2	65
Medical Assistant Training School (MATS)	Government	7	650
	Private	24	1755
	Total	31	2405

Table 2.3: Information on Health Education, Source: DGHS; Government of the People's Republic of Bangladesh

HRH information access, utilization and management in the private sector pose a multifaceted challenge for the relevant planners and policy makers. It is very difficult to change the scenario overnight, because the issues are interrelated and overlapping. If the situation is evaluated from the viewpoint of private entrepreneur, it is evident that maintaining such information is meaningless in their interest. They are reluctant to appoint the prescribed number of health

workforce to save cost. Hippocratic Oath is violated across the nation and Health Rights Commission is not yet formed. Hence, they are not concerned about the accountability. No system of service accreditation or standardization is required to run private/ Public health facilities like (ISO / JCI etc). Therefore, the Medical administration and record keeping are very much neglected in the private sector, whereas such information is vital not only for planning and incremental service development but also to feed research activities and for protecting patient's right.

It is interesting to observe that Bangladesh has had only one formally approved National Health Policy, i.e. NHP 2000, in its history of 37 years. With so many changes and disruptions taking place in the health sector programmes, goals and priorities, NHP 2000 was no longer considered as an appropriate policy document. In July 2003, under the initiative of the MoH&FW, a 58-member core committee headed by the Health Minister was formed with the purpose of updating the NHP. In August 2006, three years after the revision process started, the draft policy was forwarded by the Cabinet Division but was never finalized. Formulation of NHP 2006 was largely driven by the politicians and the medical professionals who incidentally developed good nexus by then. The influence of the bureaucrats was somewhat marginalized in the 2006 policy process while donors and the civil society also had little involvement.

Evidence confirms that effective workforce strategies enhance the performance of health systems, even under difficult circumstances. Indeed, the only route to reaching the health MDGs is through the workers; there are no short-cuts. Workers, of course, are not panaceas. Building a high performance workforce demands hard, consistent, and sustained efforts. For workers to be effective, they must have drugs and supplies. Moreover, for them to use these inputs efficiently, they must be motivated, skilled, and supported. Appropriate workforce strategies can generate enormous efficiency gains. Successful strategies must be country- based and country-led, focusing on the frontlines in communities, backed by appropriate international reinforcement.

Limited data are available on the existing HRH information through DGHS which are subject to continuous update. The data available are given below—

Post	Sanctioned	Available	Vacant
Director, Principal or equivalent	47	19	28
Deputy Director/Equivalent	79	65	14
Assistant Director/Civil Surgeon	191	141	50
DCS/UHFPO	500	469	31
Vice Principal	14	12	2
Professor	402	224	178
Associate Professor	552	215	337
Assistant Professor	745	311	434
Senior Consultant	350	225	125

Post	Sanctioned	Available	Vacant
Senior Lecturer	8	8	0
Junior Lecturer	32	24	8
Junior Consultant/Equivalent	2,153	1,367	786
Junior Consultant (Newly created)	1234	0	1234
Total:	6307	3080	3227

Table 2.4: Number of Sanctioned, existing and vacant posts (selected) under DGHS

Source: DGHS; Government of the People's Republic of Bangladesh
Personnel and staff of Alternative Medical Care working under DGHS-

Post	
Medical officers (Unani)	15
Medical officers (Ayurvedic)	15
Medical officers (Homeopathic)	15
Support staff	64
Gardeners	467
Total	576

Table 2.5: Personnel and staff of Alternative Medical Care working under DGHS

Source: Line Director, Alternative Medical Care, DGHS

Number of sanctioned, available and vacant posts of nurses under Directorate of Nursing Services

Class	Category	Sanctioned	Available	Vacant
I	Nursing	59	06	53
I	Non-nursing	1	0	1
II	Nursing	387	154	233
	Non-nursing	11	8	3
III	Nursing Supervisor	891	668	223
	Nursing	16149	13359	2790
	Non-nursing	263	215	48
IV	Non-nursing	704	635	69
Total		17574	14377	3197

Table 2.6: Number of sanctioned, available and vacant posts of nurses under Directorate of Nursing Services, Source: Line Director, Alternative Medical Care, DGHS

The data presented above show that there are a number of vacancies in the current healthcare facilities, particularly in public sector. Yet, the availability of such data helps the health policy makers prioritize health needs, and take immediate and necessary initiatives and interventions in the respective field. Here lies the ultimate importance of HRH information. However, these data are not enough and do not represent the whole health sector including both public and private.

Therefore, there is a huge gap on HRH system to be fulfilled immediately to run the sector efficiently.

Bangladesh has experienced remarkable progress in health and development in last couple of decades—the per capita income increased to almost \$690 by 2009[4], which was only around \$100 during the 1970s. There has been significant progress in the reduction of infant and child mortality, prevention and control of major communicable diseases, wide coverage of immunization etc. The average life expectancy also increased from 56 years in 1989[5] to almost 64[6]. The infant and child mortality rates have declined too [7]. However, the under-5 mortality rate varies between 43 in the highest income quintile and 86 among the lowest income quintile [8].

These discomfoting figures underscore some serious weaknesses of the health system in Bangladesh. The health system faces challenges in terms of shortage and maldistribution of staff, skill mix imbalance, a negative work environment and weak knowledge base.

Absenteeism is another great threat to our healthcare system. This is largely due to poor MIS (Management Information System) in the healthcare facilities. Study has already linked absenteeism with reduced output, and underperformance [14] of the healthcare providers. Absenteeism has reached its peak in various areas of the country. A report says that Kushtia General Hospital with 250 beds has the provision of 150 doctors, which at certain point has been attended by only 26 doctors [15]. Around 60 percent [16] of the posts for doctors remain vacant or the doctors are absent in the workplaces. Cases have been reported that the Government hospital was not attended by any of the doctors for long; the same hospital was found to be attended by only 1 nurse where 11 of them were posted[17]. This absenteeism severely limits patients' access to healthcare service and suggests corruption as well.

The situation prevails in the context because there has been little research on health workforce in Bangladesh. Despite a few recent studies in Ethiopia[18], Indonesia[19] and Nepal[20] that emphasized the role of financial compensation (salary), training opportunities and availability of social/educational opportunities as important factors influencing individuals' migration decisions, for the developing world as a whole it remains a largely unexplored research area – what makes a professional decide whether to live and work in an under-served rural area? What factor(s) prompt a qualified health care provider to migrate from under-served rural areas to large cities? What policies and programs could be put in place to retain qualified health professionals in under-served areas? It is imperative that the dynamics of in- and out-migration of key HRH from rural areas in Bangladesh are better understood so that effective policy and programmatic interventions can be developed across the nation.

Only recently, Bangladesh has managed to develop a nationwide network of health services delivering different levels of health care. A wide range government and no-government institutes have also been developed with the aim of providing need-based health workforce, capable to address the health of the people and efficient in utilizing the available resources.

As old statistics showed, the government-owned health workforce producing institutes include one medical university, five postgraduate medical institutes, thirteen medical colleges, one dental

college, one nursing college, thirty-eight nursing institutes, two Institutes for Health Technology (IHT) and eight Medical Assistant Training schools (MATS). The non-government sector runs nineteen medical colleges, six dental colleges, and three IHTs. Admission capacity and output of each category and institute varies [21].

The Service Delivery Survey and repeated Annual Performance Review of the Health and Population Sector Programme, highlighted the essential need for improving the human resource management and development functions, in order to achieve the goal of the health system in Bangladesh, of improving the health of the people and fulfilling their expectation.

Section 3: Methodology

It was a qualitative exploratory study. The period of the study was April 2010 to June 2010. The study was conducted at all the six divisions of Bangladesh.

3.1 Study population

The study was designed to interview the key personnel of the following departments with a pre-tested KII guideline and an open-ended structured questionnaire —

- Ministry of Health and Family Welfare: Line Director HRD and Joint Chief Planning
- Ministry of Health and Family Welfare: Director M & E
- Directorate General of Health Services: Line Director HRM
- Directorate General of Health Services: Line Director MIS
- Directorate General of Family Planning: Line Director HRM
- Directorate General of Family Planning: Line Director MIS
- Directorate of Nursing Services: Director HRM
- Directorate of Nursing Services: Director MIS
- Civil Surgeon (Health)/Deputy Director (Family Planning)
- Upazila Health and Family Planning Officer/ Upazila Family Planning Officer
- Private Hospitals
- NGO Hospitals and Clinic
- Bangladesh Medical Association
- Bangladesh Private Medical Practitioners Association (BPMPA)
- GTZ-MIS Unit
- State Medical
- Faculty

3.2 Sampling technique and tools for data collection

To get the perspective of the health services of the private sector, primary data were collected from hospital/clinic/diagnostic centers' managers or owners. From each division, two secondary and two tertiary level hospitals/clinics/diagnostic centers were taken from both public and private sectors. Non-probable purposive sampling technique was adopted to select the hospitals to be interviewed for collection of data by using a structured and open-ended questionnaire. The questionnaire was developed, pre-tested, reviewed and then finalized by incorporating the inputs.

A KII guideline was developed, pre-tested, reviewed and then finalized to collect qualitative data from different key interviewees.

3.3 Sample size

The sample size of the study for quantitative data was as follows—

Division	Number of hospital/clinic/diagnostic centers	Types of hospital/clinic
Dhaka	6	2 tertiary, 4 secondary
Khulna	6	2 tertiary, 4 secondary
Barisal	6	2 tertiary, 4 secondary
Chittagong	6	2 tertiary, 4 secondary
Sylhet	6	2 tertiary, 4 secondary
Rajshahi	6	2 tertiary, 4 secondary
Rangpur	6	2 tertiary, 4 secondary
Diagnostic Centre	3	Dhaka 3
Total	45	14 tertiary, 28 secondary, 3 diagnostic centres

3.4 Data collection instrument

A semi-structured questionnaire and KII guideline were used for data collection. Literature was reviewed objectively to get relevant information for the purpose of this research.

3.5 Method of data collection

Key informants working in the DGHS, DGFP, MOHFW, INGOs, NNGOs were interviewed to get appropriate qualitative and policy level information. The researchers collected the information by using the KII guideline that was pretested and reviewed before going to collect the information. Secondary information were collected from different studies and reports on HRH published by different agencies e.g., DGHS, DGFP, MoH&FW and other sources like UNICEF, WHO etc.

Quantitative data were collected through face-to-face interviews with the purposively selected public and private hospitals/clinics/diagnostic centers. The CEOs were preferred for collection of these information. The trained enumerators collected data from 45 public and private institutions under 7 divisions ranging from UHC to tertiary level specialized hospital by using a pretested and reviewed questionnaire through face-to-face interviews. The enumerators were provided training on questionnaire and were closely supervised during data collection process to minimize collection bias.

3.6 Confidentiality of Informed consent

Prior to the commencement of the interviews, the aims and objectives of the study along with its procedure, risks and benefits were explained to the respondents in easily understandable local language and then informed consent was taken from each respondents. They were assured that all information and records will be kept confidential and the procedure would be used only for research purpose and the findings would be helpful for developing policy on HRH.

3.7 Data processing and analysis

The issue being more related to policy making and planning, most of the data were collected from the central level including those from the MoH&FW, its various directorates, professional associations and organizations, and field level managers such as Civil Surgeons at the district level and UHFPO at the upazila level.

The collected quantitative data were computerized by using SPSS program, analyzed as well, and then presented as tables. Qualitative information were analyzed by developing a qualitative data analysis matrix and then presented as tables and also by description.