CURING WHAT AILS YOU: IMPROVING HEALTH CARE DELIVERY IN BANGLADESH THROUGH NURSING POLICY

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Abstract

This study examines the situation of nurses in Bangladesh and its relation to the delivery of health care services. Nurses play a pivotal role in the health system of Bangladesh but face many problems and challenges. Nurses believe they are part of a noble profession, but the majority of Bangladeshis view it as a dirty and unworthy occupation. Through surveys and interviews in four private hospitals in and around the capital city of Dhaka this research assesses the problems that nurses feel are most pressing. Shortages in manpower, training and education problems and behaviour are identified as problems for nurses and hospitals. This study presents several policies that hospitals, government agencies and regulatory bodies could use to counter the difficulties facing nurses and the health system in Bangladesh.

Keywords: Nursing; Health Care; Hospitals; Bangladesh

Subject Terms: Bangladesh; Nursing; Health; Policy

Executive Summary

Bangladesh offers public and private health care. Common to both sectors are the nurses who act as a frontline work force in the delivery of health services. The country is plagued by severe nursing shortages and concern about the quality of health care service. Nurses in Bangladesh face unique challenges, which affect their ability to practice. Culturally, nursing is believed to be a profession left to the poorer members of society and is regarded as an unclean way of life. Poor work ethic, a lack of motivation and limited willingness for self-improvement are shown by nurses in public and private institutions. Working conditions and resources are far from equally distributed across the health system. This study examines how nurses feel about the problems they face in their day-to-day duties and lives to determine the best policies for nurses that can generate improvements in the health care system.

Nurses in four private hospitals were surveyed for their opinions, with supplemental information being provided by several key informants in the four institutions. The data collected through these surveys and interviews pointed to several problems that pose challenges to nurses and their duties. These include;

- Shortages of manpower strain the nursing staff's ability to care for patients;
- Lack of proper equipment affects the feasible level of care;
- Nurses feel they lack training for certain situations;
- Poor behaviour by nurses and poor communication between nurses and other staff and patients decrease the quality of nursing services;
- Cultural beliefs lead to negative attitudes toward nurses.

Policy Recommendations

In order to develop policy alternatives to combat these problems, nurses were also asked to identify the changes they would like to see put in place to benefit their position and increase the quality of care they provide. The solutions the nurses presented include:

- Increase levels of education and training for nurses;
- Increase the availability of hospital equipment and supplies;
- Improve staff conduct and behaviour;
- Increases in manpower are needed for better levels of service.

Taking these suggestions into consideration, this study developed four policy options with the status quo being used as benchmark comparison. Based on a comparative evaluation, a program of in-hospital continuing professional development was the leading recommendation for individual hospitals, while a national nursing awareness campaign was the leading recommendation for government. The professional development option allows hospitals to adapt the program to their own needs and provides nurses with the opportunity to continuously develop their skills and knowledge. The government supported awareness campaign serves to educate the Bangladeshi population about the necessity of nurses and the services they provide the health care system. Further consideration is given to alternate options including increases in human resource power by individual hospitals, and a government funded option that would see nursing training offered in the indigenous Bangla language.

Dedication

for grandma, lorraine and suzanne

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Lastly, I would like to thank the late Douglas Adams who wisely stated, "I always think that the chances of finding out what really is going on are so absurdly remote that the only thing to do is to say hang the sense of it and just keep yourself occupied."

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Glossary

BNC	Bangladesh Nursing Council
CPD	Continuing Professional Development
DNS	Directorate of Nursing Services
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
IUBAT	International University of Business, Agriculture and Technology
MoHFW	Ministry of Health and Family Welfare
NHP	National Health Policy
Private Hospital	Refers to any health institution not operated by the Government of Bangladesh. This includes for-profit and NGO run hospitals
Public Hospital	Refers to any health institution operated solely by the Ministry of Health and Family Welfare
Tk (Taka)	Taka, Bangladesh Currency. The exchange conversion used for this study is 1 USD = Tk 70.5 Tk 1 lakh = 100,000 Tk 1 crore = 10,000,000

1: Introduction

Socio-economic progress in many developing nations is closely tied to the development of the health care sector; healthy populations lead to healthy countries. In Bangladesh, the health sector offers its services to the population through public and private health institutions. Both act as focal points where sickness and disease are fought. On the front line stand nurses, who serve as the backbone to the health care sector. Nurses in Bangladesh face unique challenges, both professional and societal, that impact their work and how health care services are delivered to patients. A better understanding of the nursing profession in Bangladesh will allow for improvements to their position that will ultimately have beneficial impacts on the delivery of health care to the public.

My study focuses on nurses in private hospitals in and around Bangladesh's capital city of Dhaka. Nurses working in public hospitals were not used in this research for two reasons: first, gaining access to government hospitals as a foreign observer proved difficult and, second, between 1999 and 2003 the use of public health care services has been declining while the use of private health care facilities has been increasing (Andaleeb, Siddiqui and Khandakar, 2007). Most existing literature on nursing in Bangladesh deals with the situation in public hospitals, with little research examining similarities or differences with private institutions. With nearly 70% of patients seeking treatment from the private sector (World Bank, 2003) and a 15% growth per annum of private health facilities in Bangladesh (Ministry of Health and Family Welfare, 2003), a closer look at how the working situation of nurses affects the delivery of health care is warranted.

Improving the delivery of health services in Bangladesh must be done through a multi-faceted approach; no single solution can be used to solve all the current problems. My goal in this research is to use data collected from nurses working in private hospitals, as well as from

managers, administrators, physicians and nursing instructors at International University of Business, Agriculture and Technology, to discover the major challenges and problems facing these nurses and develop potential policies for health institutions to implement to build stronger nursing resources. The current "quality of services [shows] little signs of improvement" (Andaleeb, Siddiqui and Khandakar, 2), and action must be taken to address this problem. I believe that the policies developed in this study will act to improve the delivery of health care services in Bangladesh.

Consideration must be given to the depth of the issue of nursing in a developing nation. Professional, socio-economic and cultural factors must all be examined. Nursing policy must take into account the fact that changes to the practice will be felt by both patients and other health care workers. Policies developed for nurses must adhere to the goal of ensuring parallel improvements for nurses and in the delivery of health care services. Ultimately, the question is what policy measures would create changes in nursing resources resulting in improved health care service delivery in Bangladesh?

1.1 Organization of the Study

This study is organized as follows. Section 2 provides background information on the Bangladeshi health sector, examines how nurses fit into the operation and delivery of health care and explores issues of structural and cultural relevance. Section 3 describes my data sources and methodology used to design, implement and collect all the requisite information. Results from my surveys and interviews are explored in section 4. Section 5 specifies and explains the criteria used to evaluate my proposed policy alternatives followed by the introduction of my policy alternatives in section 6. Section 7 provides critical assessment of each alternative. In the final section I draw conclusions from my research and suggest steps for future research and policy in the health sector.

2: Background and Literature Review

2.1 The Health System of Bangladesh

The public health sector in Bangladesh began in earnest after the country gained formal independence from Pakistan in 1971. Bangladesh had been under British rule until 1947, at which point the sub-continent was divided into the nations of India and Pakistan. After wresting independence from the Pakistani government in 1971, Bangladesh assumed full control over all national matters. The newly independent government focused on the availability of basic medical services to the entire population as its primary health care strategy. The government emphasized its primary health care strategy in 1978 with the signing of the WHO Alma-Ata Declaration (Azad and Haque, 1999). This declaration was seen as Bangladesh's commitment with the rest of the global community to provide its population, presently exceeding 150 million, with a floor standard of health care services.

The next major step for the health sector in Bangladesh came in 1980 as a response to a request from the World Health Organization that member countries develop national strategies for attaining Health For All (HFA) goals by 2000 (Azad and Haque, 1999). The Bangladesh government responded with an initial country paper that outlined first-run solutions to improve health status and service delivery. In 1982 the country paper was updated to identify the major areas of concern: the improvement of health status, development of health care delivery systems, improvement of quality of life, and extension of coverage and accessibility (Azad and Haque, 1999). Early successes of the updated health priorities came as implementation of a national drug policy and increase in the number of district hospitals from 14 to 59. The government has continued to stress public hospitals as the primary in-patient treatment source for most Bangladeshis.

The government, private corporations, NGOs, and traditional village healers all offer health services in Bangladesh (Khan, 1984). Early problems faced in developing health care delivery were limited funding and the largely rural population. These problems were "... exacerbated by the skewed distribution of governmental expenditure. For curative services and facilities, it was heavily urban, but the population was overwhelmingly rural" (Khan, 1984, 103). Early efforts to improve the health sector in Bangladesh were difficult, but the government remained steadfast in its desire to increase levels of quality and service. The expansion of private sector and NGO-run medical centers and hospitals has somewhat eased pressures on the public sector. Increased medical services offered by non-public institutions[1] are playing a leading role in providing medical care to ambulatory patients all over the country (Azad and Haque, 1999).

Private and NGO health delivery can relieve burdens on the public health system and thereby enhance its ability to meet the country's health goals. While most publicly employed health providers are well intentioned, the public sector in Bangladesh receives harsh criticism for its failings. In 1999, just one year before the initial HFA target of 2000, Pearson (1999, 1) observed that "[l]ess than 40% of the population had access to basic health care. At the same time government services are poorly utilized." He described the overtaxed state of hospitals, the excessively high ratio of doctors to nurses, and apparent absence of strategies to address the problems (Pearson, 1999).

Publicly financed hospitals are bound by the strategies of the Ministry of Health and Family Welfare that include equitable, affordable and accessible services to all Bangladeshis (Ministry of Health and Family Welfare, 2008). Basic primary health care is a mandate of the government, and public sector hospitals are expected to meet these requirements. The success of these mandates is often obstructed by organizational problems within government and hospitals,

[1] As previously mentioned, nearly 70% of medical attention is sought from the private sector, and annual growth in private health institutions is in the range of 15%.

lack of access to facilities by rural populations and the prevalence of problematic behaviour in hospital staff including demands for *baksheesh.*[2]

Private sector hospitals provide many of the same services as the public sector, but their operating strategies can differ greatly. Private institutions operate under either for-profit or not-for-profit mandates. For-profit hospitals such as Square Hospital exist to make money for services rendered and can charge anywhere from a few hundred to one lakh Taka for procedures. Not-for-profit hospitals such as ICDDR,B are often run by NGOs and receive funding from aid agencies and international bodies. Their goal is to provide services either for free or at the lowest possible cost to the poorest Bangladeshis.

Public and private institutions provide health services in the 1,281 hospitals and 402 *upazila*[3] health complexes in the country (Bangladesh Bureau of Statistics, 2008). Current hospital resources allow for a bed to population ratio of 1:2732. Since 1998 the number of new hospitals built has increased by eight. The number of public versus private hospitals does not vary widely; the public sector is responsible for 647 and the private for 626 (Bangladesh Bureau of Statistics, 2000).

Table 2-1 offers a comparison of health statistics between Bangladesh and other South Asian countries. Compared to other South Asian countries, Bangladesh has low numbers of nurses per population, small numbers of hospitals beds available to its population and the lowest total per capita spending on health.

[2] *Baksheesh* is a bribe or money collected from others as extra compensation for due services (Andaleeb, 2000).

[3] An *upazila* is the lowest level of administrative government in Bangladesh. Similar to county lines, they are subdivisions of major districts and divisions that divide the country.

Table 2-1 Comparative Health Statistics Between South Asian Countries (2008 data)

Comparative Health Statistics Between South Asian Countries (2008 data)					
Bangladesh	India	Pakistan	Nepal	Sri Lanka	Bhutan
Total population					
155,991,000	1,151,751,000	160,943,000	27,641,000	19,207,000	649,000
Life expectancy in years (both sexes)					
63	63	63	62	73	64
Infant mortality rate per 1000 live births (both sexes)					
52	57	78	46	11	63
Total per capita expenditure on health (US$)					
13	39	16	17	60	65
Per capita government expenditure on health (US$)					
5	8	3	5	30	44
Current spending on health					
Tk5403 crore	Rs16534 crore	Rs5490 crore	Rs1209 crore	Rs399 lakh	Nu1847 crore
Hospital beds per 10,000 population					
3	-	12	2	29	16
Number of nursing and midwifery personnel					
39,471	1,372,059	70,698	11.825	33,233	730

Information in this table, with the exception of data for health spending, is available from the WHO Statistical Information System database. Information from this database shows the most up to date data available in 2008 for each country. Information on current health spending was found through the Ministry of Finance in Bangladesh, India, Pakistan, Nepal, Bhutan and the Ministry of Finance and Planning in Sri Lanka. Health spending data reflects projected health expenditure for the 2008-09 fiscal year with the exception of Bhutan which shows spending for the 2007-08 fiscal year.

2.2 Nurses in the Health System

In Bangladesh, the national nursing curriculum is the responsibility of the Bangladesh Nursing Council (BNC). Acting in conjunction with the University of Dhaka, the BNC determines what knowledge nurses need, how they should be trained, and what values nurses should uphold. The curriculum was last updated in 2006 citing concerns that the 1991 curriculum did not properly develop client- and community-oriented nurses, and that discrepancies existed between what was taught in nursing institutions and what was practiced in hospitals (Bangladesh Nursing Council, 2007).

The first step in becoming a nurse in Bangladesh is to pass Secondary School Certificate and Higher Secondary Certificate (HSC) exams with a focus on science and biology. After

passing these exams, a student can apply to any of the 51 public nursing schools or 19 private nursing institutions in the country (Khan et al., 2008). Once accepted, students must complete four years of nursing education followed by a comprehensive BNC licensing exam. Costs of education vary between institutions. Completing four years of nursing education at IUBAT comes at a cost of Tk 2.56 lakh (IUBAT, 2005). The Ministry of Education subsidizes much of the cost to individuals seeking training in the public sector. The Bangladesh College of Nursing, which is associated with the University of Dhaka, offers subsidies to students but applies much higher admission requirements. Costs to individuals seeking nurse training at private institutions bear costs privately, but they can offset these costs through scholarships or rebates based on their HSC performance. A nurse can practice legally in Bangladesh only after passing the licensing exam and registering with the BNC. Currently, the number of licensed nurses in the country is 22,803 (Khan et al., 2008).

The 2006 curriculum emphasizes professionalism and competence, adaptability, awareness of human behaviour and attempts to improve nursing quality. The BNC has also directed that the entire curriculum be taught in English, using Bangla as a supplementary language, since "no modern nursing textbooks are available in Bangla... [and] English is now the international language for professional development" (Berland, 2007, 2). Using English as the primary language of nursing instruction has proved difficult. Many students have difficulty following a course in English, and many instructors cannot understand or speak it well enough to teach proper skills and knowledge (Hadley and Roques, 2007). Regardless of the barriers English creates for some nurses, the BNC is confident that this new curriculum will improve nursing services in Bangladesh and that any

> [s]tudent who completes the Bachelor Degree Programme will be a competent professional nurse who can demonstrate the competency of using knowledge-based practice for provision of holistic, client-centered quality nursing and midwifery care to meet needs and expectations and to promote, maintain, and restore health of individuals, families, and communities in common, simple, and complex health problems/situations (Bangladesh Nursing Council, 2007, 3).

The BNC curriculum is intended to produce nurses who can practice competently. Education and training does not end with the completion of a nursing degree. The nurse's job requires practicums and refresher training at regular intervals following graduation. Pearson and Peels (2001) examined major challenges nurses face around the globe. Based on evidence from 37 countries, nurses cited the following problems: poor salary and working conditions; nursing shortages and unemployment; undue dominance of doctors; the overall structure of the health-care system, education, resources, social problems and research.

The increase in number of nurses is subject to uncertainty. Currently, an estimated 2,280 students[4] are admitted into nursing programs each year with an average annual graduation rate of 1,200 (Khan et al., 2008). The expansion of nursing demand by private sector health services may help to increase the profession's prestige and indirectly increase nursing supply. Projections for increases in numbers of nurses in both the public and private sectors over the next 20 years range from a high of 68,125, a medium estimate of 44,625 and a low of 27,600 (Khan et al., 2008).

Nurses play a pivotal role in any health care system, as intermediaries between patients and doctors. This is as true of nurses in Bangladesh as elsewhere, but there are major barriers to their effectiveness. Hadley et al. (2007) explore the stigma of being a nurse in Bangladesh and its effect on the level of care provided. Through interviews with nurses they explore aspects of the profession including social frameworks, cultural stigmas, hospital structure, and the quality of service. They conclude that the very basis for nursing, "providing care for patients is an unwelcome feature of the profession that, if possible, one should avoid" (p. 1176). Cultural reasons for this belief will be explored in part 2.3. Their study provides a basic understanding of the issue useful in my own research. Their interview results supplement my surveys and serve as a benchmark for comparison.

[4] This is the combined acceptance rate for both the public and private sectors.

In a separate study, Hadley and Roques (2007) collected further data on the actions and abilities of Bangladeshi nurses through cross-sectional observations of their activities followed by one-on-one interviews. This data allowed the authors to determine how much productive time nurses have during a shift. They find that in public hospitals a mere 5.3% of nurses' time is actually spent on direct patient care; 32.4% of time is spent on indirect care and paperwork; and upwards of 50.1% consists of unproductive time. Time spent on direct patient care involved "administering parenteral and topical medication, administering oxygen and attending to patient immediately before and after death [and installing] all intravenous infusions by order of the doctor" (Hadley and Roques, 2007, 1156). Activities during the time categorized as unproductive were identified as breaks, late arrival or early departure, change of clothes, out of the ward or sleeping, chatting with other nurses, and non-specific activities while on the ward including knitting, chatting, etc. The authors also observed that student nurses spent up to 16.7% of their time on direct patient care, were often left to change beds and expected to cover for experienced nurses who were late or being unproductive. Perhaps most shockingly

> [n]urses were not observed to provide basic hygiene care, feed patients, change wound dressings, insert or care for urinary catheters, clean up after incontinent patients, administer enemas or provide patients with advice on admission of discharge. General psychological support was not provided. However, sometimes nurses reviewed patients' conditions at the bedside at the specific request of the patients' carer or hospital support worker who approached the nurses at the nurses' bay... Nurses relied on informal patient carers to monitor the condition of the patient they were attending and report them at the nurses' bay (1156-1158).

In private and NGO-run hospitals nurses spent five times as much total time on direct patient care as nurses in public hospitals. In industrial countries, the range of nurse time spent on direct patient care ranges from 84.4 minutes per patient per day in Japan; between 118.3 and 133.7 minutes in the USA, Sweden and Spain; and up to 155.5 minutes in England and Wales (Carpenter et al., 1997). Further observations saw figures as low as 7.5% of time spent with

patients in the USA and as high as 53.2% in England and Wales.[5] The wide range was attributed to the type of ward, with the highest nursing times spent with a patient in long-stay rehabilitation wards (Carpenter et al., 1997). During the time when Bangladeshi nurses were observed being productive, many of their observed activities did not conform to their educational and training curriculum. Hadley and Roques' study provides background information on which my study can build. Their use of surveys and interviews also provided a model for my research.

Providing quality nursing services is an important goal for any nation. Uddin et al. (2006) indicate that concern over nursing quality has become much more prominent in Bangladesh in recent years. To investigate concerns about deteriorating levels of service in government hospitals, the authors attempted to determine if quality of life and job satisfaction had visible effects on the quality of service. The authors examined whether the hospital size and time of day for the nurse's work has any major impact on quality of life and job satisfaction. Three government hospitals were randomly selected for their study, with 21 nurses sampled at each. Two small hospitals were compared to one large hospital, each with morning, afternoon and night shifts. Nurses working morning shifts in the smaller hospitals demonstrated much higher quality of life and job satisfaction than those working at the larger hospital during the afternoon and night shifts. While this is not a comprehensive study of hospitals, the authors believe that upwards of 54% of nurses have low quality of life, that 92% of nurses have high job satisfaction, and that smaller hospitals promote better quality of life (Uddin et al., 2006). Little explanation is given to why hospital size affects job satisfaction for nurses aside from surmising that smaller working units function more efficiently than larger ones.

[5] A possible contributing factor to the shockingly low amount of time that nurses spend with patients may stem from the ratio of nurses in Bangladesh to the total population. In 2007, Bangladesh Health Watch reported a ratio of nurses to population of 2:10,000 leaving a shortage of 280,000 nurses nationwide. In comparison the OECD found that in 2006 the ratio of nurses to population in Canada was 8.8:1,000 (OECD, 2008).

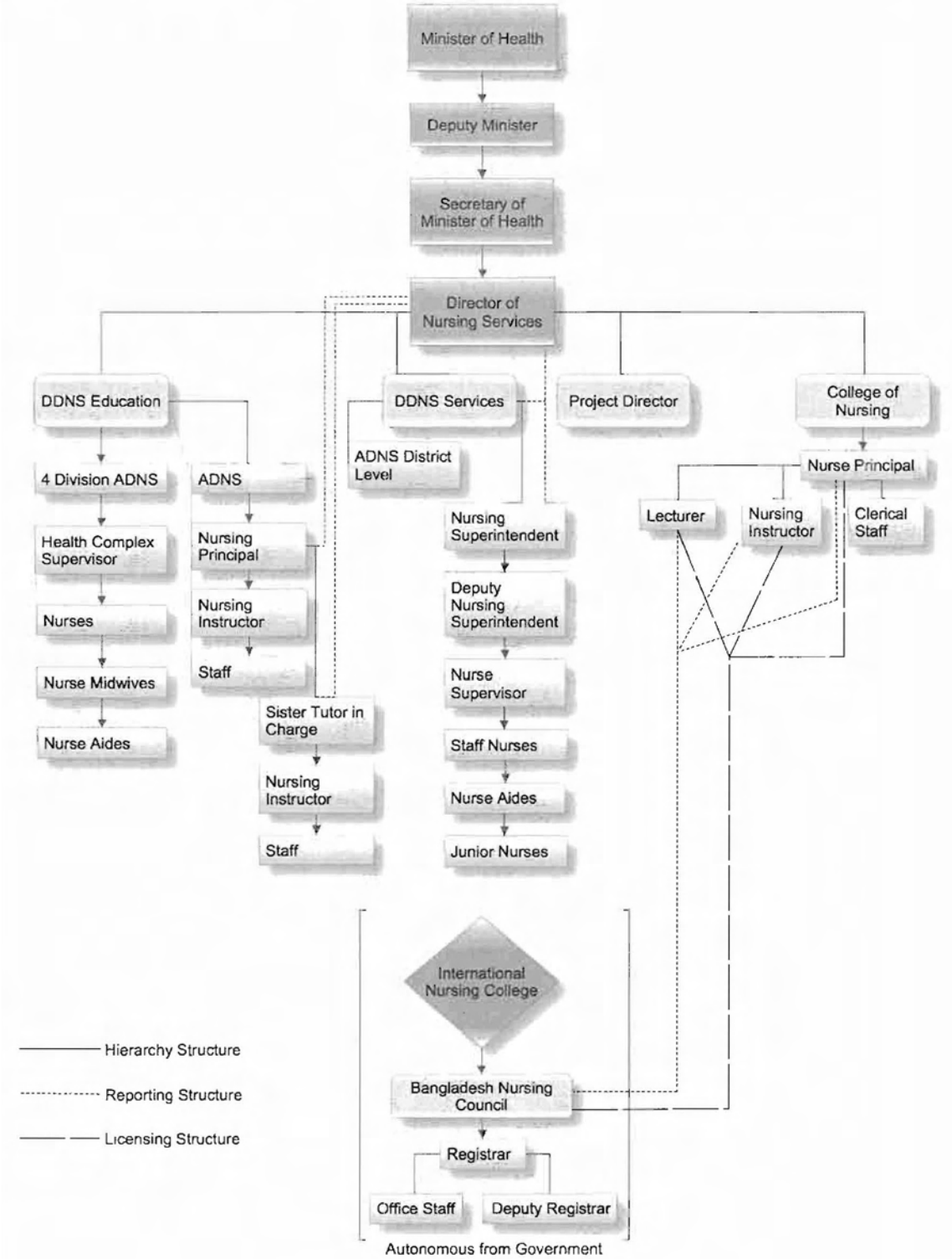
2.3 Structural and Cultural Implications

Whether a hospital in Bangladesh is financed publicly or privately, the hierarchical structure of nursing services remains constant. Figure 1[6] depicts the reporting and licensing structure of nursing in Bangladesh. This figure shows a highly centralized health care system with decisions made by high-ranking officials, leaving few opportunities for input from lower-ranked individuals.

In terms of nursing services, this "centralized decision making system in Bangladesh leaves lesser scope to the professionals and other interest groups to be dominant over [policy making]" (Osman, 2004, 60). Public and private health care providers differ little in terms of their ability to influence policy-making. Both must report to the same Ministry, and both must abide by the policies and rules set out by the Minister.

[6] This figure was developed through information available on the website of the Bangladesh Ministry of Health and Family Welfare and through consultation with a former government nurse who is now a faculty member for the College of Nursing at IUBAT.

Figure 1 *Structure of Nursing in Bangladesh*



Because of this centralization, "professionals in Bangladesh are mostly challenged by the government ... [making them] accountable to higher level government instead of local level managers" (Osman, 2004, 60). This can be seen clearly in Figure 2, where several high-level nursing positions must report directly to the Directorate of Nursing Services instead of an Assistant Deputy or Deputy Director. This structure results in miscommunication, poor allocation of resources, and a weak understanding of the needs of different population groups. These problems mean that government services reach a small portion of the population (Osman, 2004). A larger portion seeks medical services from private providers.

Socio-cultural implications must also be considered when developing health policy. Religion, community structure and patterns of family life all have profound influence over health policy (Osman, 2004). As a predominantly Muslim country, many Bangladeshis base their opinions of certain health care services on their religious beliefs. Reservations about modesty and touch, especially in the case of women, are unfamiliar to many western health practitioners. Devout Muslim women will cover their arms, legs and hair as much as possible if there is concern that a woman might be seen by men who are not from her immediate family (Lawrence and Rozmus, 2001). This Islamic *purdah* system exercises a significant influence over health policy (Osman, 2004).

Touching others is another concern. Some Muslims believe it is forbidden to touch members of the opposite sex who are not family members (Lawrence and Rozmus, 2001). This belief is so prevalent in Bangladeshi culture that "having close contact with strangers, especially those from the lower classes, [particularly in the case of Hindus, and] interacting with male patients ... is viewed as 'dirty work'" (Hadley et al., 2007, 1171). Additionally, nursing is often viewed as an undesirable profession because it requires tasks that can lower an individual's social status. Nursing duties that contribute to the negative stigma of the profession include:

> cleaning soiled beds, faeces and urine, shaving and cleaning patients and giving mouth care. Procedures viewed as dirty that required more advanced skills included catheterisations, performing stomach washouts, administering nasal suction or aspiration, cleaning drainage waste, and dressing infected or gangrenous wounds... Dirty was associated with being from a lower class rather than in an unhygienic state (Hadley et al., 2007, 1171).

Perceptions of the cost of health care and medication, and its influence on the likelihood of seeking medical attention, are too often overlooked in the cultural realm. Poorer Bangladeshis are more likely to visit a village doctor or other informal provider because they are flexible with payments (Bangladesh Health Watch, 2008). For many, visiting a hospital for treatment would be far too expensive. In addition to concerns about cost, beliefs about medication may prevent families or individuals from seeking treatment. For example,

> popular beliefs among mothers were that allopathic medicine was 'strong' and could upset the 'humeral balance' in the body of very young children. The common understanding was that young babies should not be given any kind of allopathic medicines. As homeopathic medicines were perceived as 'slow acting' and therefore safer on young bodies, mothers preferred to access homeopaths first before accessing any type of allopathic care, particularly for young infants (Bangladesh Health Watch, 2008, 17).

The cultural observations made by these authors and organizations support various analogies I encountered when speaking with nurses, managers or physicians. Many higher-ranking hospital staff and foreign experts alluded to the fact that nursing was not generally accepted as a clean or desirable profession by much of the population. They gave no specific reason as to why this was the case, but their assumptions and observations have merit based on the cultural evidence cited by Osman (2004), Lawrence and Rozmus (2001), Hadley et al. (2007) and Bangladesh Health Watch (2008).

2.4 Stakeholders in the Bangladeshi Health Care System

A health care system is necessarily comprised of a series of stakeholders, ranging from patients to government representatives and regulatory agencies. The stakeholders most involved with the health care system in Bangladesh in the context of this research are the following.

Patients. The people seeking health care services are dependent on the actions and practices of other key stakeholders. Patients are ultimately the largest group affected by policy changes undertaken by service providers and government agencies.

Nurses. These health care providers are this study's focus of attention. They are the front-line workers of health service provision and must deal with demands and expectations from both patients and their employers.

Hospital Administrators and Managers. The management of hospitals and clinics plays a large role in accepting or rejecting new policies. Administrators and managers have strong influence over the practices and expectations in their hospitals.

Government. The health system of Bangladesh is the primary responsibility of the Ministry of Health and Family Welfare, which develops national health goals and policies. Contained within the MoHFW is the Directorate of Nursing Services, the agency responsible for nursing policy and development. While policies affecting individual hospitals may not require the approval of the MoHFW or the DNS, policies that are broader in scope must recognize the government's goals and policies.

Regulatory Bodies. The Bangladesh Nursing Council is the regulatory body whose primary function is to ensure proper education, registration and licensing of practicing nurses in Bangladesh. The BNC is autonomous from the federal government and does not fall under the jurisdiction of the MoHFW. Policies dealing with education or training of nurses must be given consideration by the BNC, as would policies aimed at improving the public image and understanding of nurses. Options that could affect the accreditation of practicing nurses would also need to be examined by this agency.

3: Data & Methodology

3.1 Data Sources

3.1.1 Primary Data

The primary data for this study were collected from staff nurses, hospital managers and administrators and foreign physicians working directly in the nursing sector in Bangladesh. More focus was placed on the responses of the nurses, since previous research on this subject has placed more attention on administrative factors involved in poor service delivery. Questionnaires were delivered to staff nurses for their completion but were not given to managers, administrators or foreign physicians. Instead, these individuals were interviewed to assess their views on the status of nursing in their respective hospitals and more broadly in Bangladesh.

3.1.2 Secondary Data

Any data not collected through questionnaires or interviews was found in journals, government reports, or reports on health and nursing in Bangladesh conducted by non-governmental organizations such as the United Nations Development Program and the World Health Organization (WHO). Academic studies cited earlier have examined the development of the Bangladeshi health sector, the socioeconomic factors that have the largest influence over it and how nurses act in and are affected by the dynamics of health care provision in the country. Similarly, reports from NGOs such as the WHO's Advisory Group on Management of Nursing and Midwifery Workforce (2002) and partnerships between the WHO and the Bangladesh Ministry of Health and Family Welfare (2007) provide additional data that explain the status of the health system that is not specific to hospitals used in an academic study.

3.2 Methodology

3.2.1 Survey Instrument

My main data collection instrument consisted of a 38-item open-ended questionnaire designed to determine how nurses in private Bangladeshi hospitals feel about their position, their relationship to patients and doctors, and what challenges they face. A total of 105 questionnaires were distributed in four private hospitals of varying size in Dhaka. To limit any bias in responses, I did not personally deliver any surveys to any nurses. Once the purpose and goals of my research were explained to a manager or administrator, survey forms were given to that individual to distribute randomly to staff nurses on my behalf. Of the initial 105 surveys that were provided to the four hospitals, 67 were returned.

In order to distribute the questionnaires to the nurses, I first obtained permission from hospital managers or administrators. Through consultation with nursing instructors in the College of Nursing at International University of Agriculture Business and Technology, I formed a list of nine private hospitals in Dhaka to contact. With further help from members of the nursing faculty I also attempted to contact the administrators of public hospitals in Dhaka, including Dhaka Medical College Hospital and the National Institute of Mental Health. The administrators of the private hospitals were first sent a letter of introduction I developed which introduced the purpose and goals of my study. I then followed up on the letter with phone calls to each hospital. All told, four private hospitals agreed to participate.

Contact with public hospitals was primarily reliant on a single member of the faculty of the College of Nursing who had previously worked in government hospitals. Several attempts were made by her at my behest to try to have the administrators of the public hospitals agree to allow my survey to be distributed to their nurses. Unfortunately, requests to public institutions asking their permission to be included in my research were denied. A last attempt was made at

collecting data from the public sector by having the faculty member contact a representative of the Ministry of Health and Family Welfare, but this proved unsuccessful.

I then visited the four participating hospitals to speak with the administrators and nurse managers to further explain my intentions and to distribute the questionnaires. To limit bias in the responses from nurses by my presence, I advised administrators and nurse managers how I would like the surveys distributed and allowed them to hand them out to their staff randomly. The number of surveys left at each location varied according to the size of the hospital. The two smallest hospitals, Jahan Ara Clinic Pvt. and ICDDR,B were given 15 and 20 surveys, respectively, and the two largest, Kumudini Hospital and Square Hospital Ltd., 30 and 40, respectively. I had no desire to interrupt the daily activities of the nurses, so I allowed a period of at least four days before I returned to collect the surveys. Return rates varied from a low of 30% at Square Hospital to a high of 100% at Kumudini Hospital.

3.2.2 Key Informant Interviews

The questionnaire was not administered to hospital managers, administrators or foreign physicians working directly with nurses in the hospitals. Instead, these informants were interviewed for their opinions of the status of nurses in both individual hospitals and in Bangladesh in general. Some of these interviews were arranged ahead of time, while others were conducted with no prior planning, as the availability of informants was often unknown. The length of interviews also varied from 15 minutes to over an hour. I was able to interview four individuals in senior positions. Of the four informants, two were native Bangladeshis, one came from the United Kingdom and one from the United States. Permission was given by each to having the conversation being noted by hand instead of recorded.

3.3 Analysis

I chose to administer an open-ended questionnaire becasuse it provided as much detail as possible and its results could be analyzed both qualitatively and quantitatively. While my sample size is not representative of all nurses working in private hospitals in Bangladesh, the rich qualitative data collected compensates for the limited sample. Keeping in mind the methods from Hadley et al. (2007) and Hadley and Roques (2007), I recoded my results into these larger categories:

- Demographics
- Social Networks Awareness
- Perceived Negatives of Nursing
- Perceived Positives of Nursing
- Suggested Improvements

3.3.1 Limitations and Potential Weaknesses

The largest limitation of this study is that I was unable to collect responses from nurses working in public hospitals. The scope of my research is confined to a small sample of private hospitals. In contrast to my own work, the bulk of existing research on this topic has dealt primarily with nurses in public institutions. It would be simple to assume that any conclusions reached from my study could be applied to nurses in either public or private institutions, but given the variance in operating procedures between the two sectors, it is not possible to determine whether policies could be implemented in the same way in either sector.

A second barrier was language. Once I had designed my questionnaire, a Bangladeshi staff member of IUBAT translated it into Bangla. Even after translation, some of the nurses who participated misread a small number of the questions.

During my time in Dhaka I quickly realized that many Bangladeshis, when faced with written questions, often literally look to their friends or colleagues for answers. This behaviour is

pervasive among students and professionals. Some of the survey responses may well come from persons other than the respondents, thus possibly diminishing the survey reliability somewhat.

The largest weakness of my study revolves around the policy alternatives. I developed my alternatives based on what the nurses at the four hospitals suggested. The issue is that once my alternatives were developed, I was not able to have the same nurses review them and provide feedback. Real-world approval or rejection of my proposals would also not be decisions made by the nurses. My alternatives must be reviewed and considered by hospital administrators, managers, foreign physicians and nursing educators with whom I consulted over the course of my research. The policies I develop make use of suggestions from nurses, but having to rely on individuals in administrative or other non-nursing positions for their approval is likely to have some effect on how they are accepted. Further to this, I am unable to directly discuss my policy alternatives with the managers and administrators due to distance and my current absence from Bangladesh and must rely on electronic means or third party representatives to explain them.

4: Results

This section presents the findings from my surveys and interviews. First, I offer a brief overview of each of the four participating hospitals, followed by the qualitative and quantitative results and the information provided by key informants. An analysis of all the data collected follows the presentation of all the results.

4.1 Participating Hospitals

The four participating hospitals belong to the private sector, but not all are run on a for-profit mandate. The two hospitals that operate as for-profit institutions are Square Hospitals Ltd. and Jahan Ara Clinic. Jahan Ara, the smallest of the four participating hospitals, prides itself on enhancing entrepreneurship in the health care sector, achieving good rapport and cooperation with its customers and emphasizing high quality care (Jahan Ara Clinic Pvt., 2003). The facility is located in Dhaka's northern suburb of Uttara. In terms of ease of access, Jahan Ara provided little challenge as the top doctor also taught the nursing students at IUBAT. Informal discussions with the nurses at the hospital and nursing students at IUBAT indicated that the staff at Jahan Ara were proud of their work and would often encourage the nurses and students to build their skills under supervision of the doctors.

The second participating for-profit hospital, Square Hospital Ltd., is the most expensive private hospital in Bangladesh. With 300 beds, it serves the most affluent in Bangladeshi society and has the look and feel of a well-established hospital in North America. Square's operational strategy is to compete with hospitals in Thailand and Singapore in providing the most modern health procedures that had previously drawn the richest Bangladeshis to pursue health care outside the country. Employees come from Bangladesh, Nepal, India, Thailand and Singapore

and are expected to provide top-notch service. The vision of the hospital is to "become the location of choice for Bangladeshis and people of South and Southeast Asia for quality healthcare and an integrated centre for clinical services, medical and nursing education and research" (Square Hospitals Ltd., 2006).

The remaining two hospitals, the International Centre for Diarrhoeal Disease Research, Bangladesh and Kumudini Hospital, operate as non-profit entities. ICDDR,B, known locally as the Cholera Hospital, is 95% staffed by Bangladeshis and 5% by international experts who provide care in the areas of diarrhoeal diseases, nutrition, infectious diseases, population programs and child survival strategies (ICDDR,B, 2008). The hospital has a reputation as an international centre of excellence. Instead of charging for services, the hospital obtains funding through 55 donor countries and organizations, ranging from the Government of Bangladesh, the United Nations, foundations, universities, research institutes and other private sector organizations (ICDDR,B, 2008). Free health services are offered to poor Bangladeshis suffering from a variety of debilitating problems including dehydration, cholera and infectious disease. I faced no problems in gaining permission to conduct my survey at ICDDR,B, as this hospital's administration has strong ties with the College of Nursing at IUBAT.

The largest of the four hospitals in my research is Kumudini Hospital. Operated by the Kumudini Welfare Trust of Bengal (BD) Ltd., the hospital boasts 750 beds and is the largest privately built hospital in Bangladesh. Since its inception in 1944, the hospital's major goal has been to increase quality of life by offering free medical care (Kumudini Welfare Trust of Bengal (BD) Ltd., 2007). This changed in 1993 when the Trust implemented a Patient's Participation Program that sees patients pay for medication (but no other services). Financial support for the hospital comes from income-generating operations owned by the Trust including jute harvesting, river services, garment production, pharmaceuticals, and trading. The hospital is located in a large complex that also includes the Kumudini Women's Medical College and the Kumudini Hospital

School of Nursing. Great emphasis is placed on quality service delivery from all staff. Nurses are provided free housing and are generally recognized as among the best trained in Bangladesh.

4.2 Qualitative Results

The survey instrument used both qualitative and quantitative questions. Qualitative questions dealt mainly with the nurses' opinions about their tasks and position, and they generated a rich variety of responses. A total of 15 open-ended qualitative questions were posed through the survey and can be broken down into three categories: job descriptions, likes and dislikes, and problems and solutions.

Because these questions were qualitative, a respondent could provide more than one response. Questions having more than one response were examined, coded into their appropriate thematic elements and tallied with the results from the rest of the returned surveys. To further facilitate assessment, the responses to each qualitative question were compiled into the top five answers for each. The following tables present the top five responses for each question. Responses are ranked in descending order beginning with the most popular response. Each series of responses also indicates the number of respondents who provided each response.

Table 4-1 Job Description Responses

Question	1	2	3	4	5
Why choose nursing as a profession?	To serve, help, care for the sick (45)	To establish oneself (9)	It is a noble profession (8)	Good, secure job opportunities (7)	To serve God (3)
Further Types of Training	Infection & disease control (29)	Fistula (23)	Midwifery & delivery (22)	Immunization (16)	Technology & modernization (10)
Nurses: Duties & Responsibilities	Provide medication to patients (45)	Assess & Follow up on patient conditions (39)	Patient Intake & discharge (19)	Prepare beds (15)	Feed patients (14)
Cleaner/Ward Boys: Duties & Responsibilities	Clean the building & ward (60)	a. Clean the washrooms & bedpans b. Help the nurses (11)	a. Move trolleys & stretchers b. Clean bedding (10)	a. Transfer & move patients b. Feed patients (7)	a. Keep patients in the correct place b. Clean buckets (6)
Doctors: Duties & Responsibilities	Provide treatment to patients (56)	Assess, diagnose & follow up on patient conditions (32)	Take patient history (13)	a. Order medication b. Patient intake, discharge & transfer (9)	a. Make rounds b. Visit patients (5)
Who do the nurses report to?	Matron, Ward In-charge (21)	Managing Director (13)	a. Doctors b. Nursing Officer (9)	Nursing Director (8)	Department, Unit Head (7)

The responses to questions regarding duties and responsibilities show that, overall, nurses have a good grasp of the tasks given to different staff. There is wide agreement as to what the major responsibilities and duties are for nurses, doctors and ward boys. Some similarities exist between the jobs attributed to nurses and doctors, but as nurses act as support staff for doctors there is no reason to question the repetition of duties.

To some degree, they may be much more aware of the tasks of the cleaners and ward boys than those of the doctors. Of the 67 nurses who participated, 60 noted that cleaners and ward boys were meant to keep the hospital clean, followed by sharp decreases in the specificity of

other cleaner duties. The same pattern is not apparent when asked about doctors. Slightly fewer nurses agreed on the number one task given to doctors, and the number of duties associated with them declines more slowly. It is possible that nurses are not aware of all the responsibilities doctors have, or they have only seen them completing a few of their tasks. This would result in the wider range of responses for the duties of doctors.

As for why these individuals chose to become a nurse, significant uniformity is again reported, with more specific reasons cited much less frequently. Caring for and helping the sick is the most common response. A distant second, with nine responses, is the ability to get established in the health sector. The belief that nursing is a noble profession[7] and that is has good and secure job opportunities received nearly the same number of responses. The fewest reasons for choosing nursing as a profession were "to serve God." The fact that serving God received only three mentions is somewhat surprising considering that the majority of nurses who participated in my survey were Muslim, and in Islam caring for others is seen as service to God and fulfilling God's covenant (Rassool, 2000).

[7] The small number of responses saying nursing is a noble profession is not surprising. As indicated in Section 4.4, many nurses will agree that it is a noble profession but at the same time be embarrassed to admit to being a nurse as it is not felt to be a worthwhile profession by most of Bangladeshi society.

Table 4-2 Likes and Dislikes Responses

Question	1	2	3	4	5
Duties enjoyed most on shift	Patient care (42)	All aspects (7)	a. Assisting during rounds b. IV, blood work, catheterization c. Providing medication d. Ward management (2)	*All other responses to this question received only one mention each	
Duties enjoyed least on shift	Meeting patient visitors (7)	Sitting with, keeping patients in the ward (5)	Personal work (4)	a. Cooking b. Recreation (3)	a. Caring for patients b. Sleeping c. Checking rectal temperature d. Changing bedding (2)
What works best in working environment	Nursing care, patient recovery (38)	Good behaviour & communication with patients (15)	Good employee conduct (5)	Providing food & medication on time (3)	Providing modern and proper treatment (2)
What works least in working environment	Rude, poor behaviour with patients (18)	Not taking care of patients (15)	Not doing work properly (6)	Told to do menial or unnecessary tasks (5)	a. Poor employee conduct b. Taking rectal temperature c. Poor Communication (3)

A high number of nurses responded that patient care was their most enjoyable duty, followed by a sharp decline in citing specific duties. This could indicate that the majority of nurses feel that 'patient care' as a duty encompasses a range of responsibilities and therefore chose not to specify each one. In contrast to the large number of responses given to which duties are enjoyed the most, a relatively small number of responses was given to the question of which duties are enjoyed the least. This pattern is repeated in the series of questions asking what works best and what works least in their working environment. Initially, positive responses have a large

support base followed by a rapid drop in specificity, while at the same time the number of responses given to questions about negative aspects of their position is generally lower. This may indicate that nurses are aware of the basic benefits of their position but that they have a difficult time separating specific duties and positives from a more general understanding of their job. Additionally, the lower number of responses seen in questions regarding unfavourable aspects of their position may show a reluctance to openly admit what is causing them difficulty.

It is also apparent that what some nurses find positive in their working environment is not the same for others. Fifteen respondents indicated that good behaviour and communication with patients was a positive at work, while 18 noted that a weakness in their working environment was rude and poor behaviour to and from patients. Behaviour, communication and working properly show similar opposing viewpoints. For some nurses these issues may not be problematic, but for others they may be the basis for major problems with their position or hospital. Questions focusing on enjoyable or non-enjoyable duties do not demonstrate the same type of opposition between responses. Most respondents agreed on what constituted positive and negative duties. A possible explanation for this is that the questions about duties do not specify 'in their working environment.' When asked what works well or poorly specifically in their working environment, nurses showed diverse viewpoints. No two hospitals operate in the same way; nor do they have the same working conditions, resources and levels of staffing. These differences mean that a nurse's specific work environment will affect how she perceives these matters.

Table 4-3 Problems and Solutions Responses

Question	1	2	3	4	5
Problems faced during duties	Not having enough or the correct equipment (20)	Visitors (19)	Lack of manpower (18)	Patient complications (11)	Communication problems (5)
Biggest challenges & problems facing the hospital	Manpower shortages (34)	Equipment issues (21)	Bed, space shortages (19)	a. Visitors b. No ICU, NICU (hospital specific) (11)	Staff dissatisfaction (10)
Factors of low quality service delivery	Rude, poor behaviour (37)	Not providing proper treatment, medication on time (28)	Poor employee conduct (21)	Dishonesty (20)	Not being confidential (16)
Factors of high quality service delivery	Good communication with staff, patients (34)	Good Behaviour (25)	Honesty (24)	Proper knowledge, education and training (23)	Providing treatment and medication on time (22)
Changes that can be made to benefit nurses	Higher levels of education and training (27)	Increase supplies and equipment (15)	Improve staff conduct (11)	Improved work incentives (10)	Increase manpower (9)

The most immediate comparison that can be made in Table 4-3 is the difference in the ranking of manpower as a problem versus a solution. Inadequate manpower was identified as the biggest challenge facing hospitals; yet when considered as a solution to address the problems of service delivery, it ranks very low. Of the 67 nurses who took part in the survey, just over 50% listed inadequate manpower as a major problem while a mere 13% presented more staff as a possible beneficial change. Likewise, higher levels of education and training were identified as the primary change that could be beneficial to nurses, yet nowhere have they identified the lack of education or training as a major problem. Inadequate resources, be they human or other, are major problems identified by nurses, yet are never seen as decreasing service quality. Nurses feel that low or high quality service is influenced more by behaviour than having the proper material available to them.

Table 4-3 includes some further indications already shown in table 4-2 that issues of communication and behaviour with patients and other staff are important for nurses. In table 4-2, rude and poor behaviour took the number one spot for weaknesses in the working environment. Rude and poor behaviour once again takes the number one position in table 4-3 when identifying factors of low quality nursing service. In terms of high quality service, nurses ranked good communication first, followed by behaviour. Notable about the results for factors of high quality is that the four highest-ranked responses do not deal with the actual practice of nursing in the sense of delivery of care and treatment. The top four factors of high quality service all deal with how nurses interact with patients, how they conduct themselves and how knowledgeable they are. The fifth highest indicator of quality service deals directly with the delivery of health care.

This result sharply contrasts with the responses for factors of poor quality service. Rude and poor behaviour, interactive elements of the profession, is ranked first, followed by problems with treatment, a delivery element. The opposing viewpoints between these two questions shows that nurses place high regard on quality of service being based on good conduct and proper interaction rather than the delivery of health services, whereas poor quality is based much more on improper provision of nursing services rather than relying heavily on behavioural aspects. These differences are curious when considering that, of the top five suggestions for changes made for nurses, only one deals explicitly with behaviour and conduct.

4.3 Quantitative Results

Quantitative data collected included basic demographics and a further 23 questions meant to assess nurses' perceptions of their own job and the people they work with including other staff and patients. Table 4-4 presents demographic information for the participating nurses. Table 4-5 presents the average annual salaries at each of the four participating hospitals, table 4-6 outlines the characteristics of nurses earning over the mean income of Tk119,006, followed by Table 4-7,

which presents the results from the remaining questions on the survey not already addressed qualitatively.

Table 4-4 Demographic Data

Age			
Mean	**Median**	**Minimum**	**Maximum**
29	26	18	53
Annual Salary (Tk)			
Mean	**Median**	**Minimum**	**Maximum**
119,006	72,000	10,220	526,968
Years of Education and Training			
Mean	**Median**	**Minimum**	**Maximum**
4	4	2	15
Years of Working Experience			
Mean	**Median**	**Minimum**	**Maximum**
7	2	0.08	33

Marital Status (distribution)		
Married	**Unmarried**	**Unknown**
19	47	1

Position (distribution)							
JSN	**CN**	**SN**	**SNS**	**FN**	**WIC**	**NM**	**PPL**
2	2	7	42	2	6	4	1

JSN = Junior Staff Nurse, CN = Charge Nurse, SN = Staff Nurse, SNS = Senior Staff Nurse, FN = Fellow Nurse, WIC = Ward In-charge, NM = Nurse Manager, PPL = Professional Practice Leader

The survey instrument for this study was meant for distribution among staff nurses. As noted in section 2.2, it takes four years to complete a nursing degree. The minimum age found was 18 meaning that it is likely that the survey was distributed to some student as well as staff nurses in some hospitals. Evidence for this is also shown in the minimum number of years of education and training. The inclusion of student nurses was not my original intention, but their participation does not invalidate any conclusions. Student nurses face the same challenges and problems as licensed nurses over the course of their education.

Age, number of years of experience and marital status show some connection to the salary a nurse collects. Table 4-5 shows the average reported salaries at each of the participating hospitals[8] compared to national averages, while Table 4-6 shows the basic characteristics of nurses with an income over the mean of Tk1.19 lakh.

Table 4-5 Average Annual Salary Per Hospital

Average Annual Salary Per Hospital (Tk)					
Kumudini	**Jahan Ara**	**Square**	**ICDDR,B**	**Average of participating hospitals**	**National average[9]**
30,677	68,167	2.24 lakh	3.57 lakh	1.19 lakh	1.04 – 1.20 lakh

Table 4-6 Characteristics of Income Earners (Annual Salary)

Characteristics of Income Earners (Annual Salary)		
Characteristic	**Income below Tk119,006**	**Income above Tk119,006**
Age	Under 28	Over 28
Years of Experience	Under 5	Over 5
Marital Status	Unmarried	Married

In the sample of 67, only four nurses age under 30 are married, and as previously mentioned higher salaries are paid to nurses over 28 years old. The minimum number of years of experience reported by married nurses was one year for a single case. The next lowest number of years of experience for a married nurse was five. Only two cases of unmarried nurses had over five years of experience, including one nurse having 33 years of experience.

The huge range of salaries between hospitals is immediately evident. A ratio of 50:1 exists between the highest and lowest reported annual salaries. The most apparent explanation for the variance is each hospital's financial resources. With an annual budget of Tk 106 crore,

[8] Average salaries reflect only the amounts reported by participating nurses. These amounts would likely differ slightly if every nurse in each hospital were included.

[9] Source: Begum, 1998.

ICDDR,B can easily afford to pay its nurses much higher salaries than Square, Kumudini and Jahan Ara. In comparison, Jahan Ara has an annual budget of one crore Taka. In addition to finances, the quality and types of services expected from each institution can have an impact on salaries. For example, Square Hospital provides the most modern facilities and treatments available to paying customers in Bangladesh. Square caters to an affluent demographic and employs nurses from Bangladesh as well as surrounding countries such as India and Thailand. The importation of nurses to hospitals in Bangladesh necessitates salaries that reflect their ability to provide the highest quality of service in the most modern hospital in the country.[10] In contrast, Kumudini does not charge for services and does not receive huge foreign grants and pays the lowest salary. However, Kumudini does provide free on-site room and board to its nurses, which can be counted as part of their remuneration.

Table 4-7 Summary of Quantitative Results

Summary of Quantitative Results			
Shift Lengths (Hours)			
Mean	**Median**	**Minimum**	**Maximum**
8	8	7	10
Ratio of Patients Per Nurse			
Mean	**Median**	**Minimum**	**Maximum**
17	10	1	50
Do Nurses Receive Further Training in Their Place of Employment? (%)			
Yes		**No**	
98.5		1.5	
Do Nurses Experience Situations Where More Training is Needed? (%)			
Yes		**No**	
98.5		1.5	

[10] Data is widely available on the out-migration of Bangladeshi nurses to other South Asian and Western countries, but little to no data is available on the migration of nurses from foreign countries into Bangladesh. The only information I was able to obtain on the origins of nurses in hospitals was from informal discussions with nurses and administrators. My informant at Square Hospital noted that they employed nurses from Bangladesh, Nepal, India and Thailand, as well as nursing administrators from as far off as the United Kingdom. Similarly, at ICDDR,B and Kumudini I was told that the nursing staff was mainly comprised of native Bangladeshis but it was not uncommon to find staff from nearby South Asian countries. Only Jahan Ara had no nurses employed from another country.

Summary of Quantitative Results			
Do Nurses in Bangladesh Perform Their Duties Well? (%)			
Yes		No	
95.5		4.5	
Do Nurses Receive Awards for Good Performance? (%)			
Yes		No	
83.1		16.9	
Improve Nursing Skills or Attract Experienced Nurses? (%)			
Improve	Attract	Both	Neither
26.2	26.2	40.5	7.1
Able to Identify Hospital Administrator (%)			
Yes		No	
92.4		7.6	
Able to Identify Head Doctor (%)			
Yes		No	
95.3		4.7	
Able to Identify Head Nurse (%)			
Yes		No	
96.9		3.1	
Do Nurses Have a Good Relationship with Hospital Administration? (%)			
Yes		No	
95.3		4.7	
Do Nurses Have a Good Relationship with Doctors? (%)			
Yes		No	
97.0		3.0	
Do Nurses Have a Good Relationship with Patients? (%)			
Yes		No	
97.0		3.0	
Do Nurses and Administrators Face the Same Problems? (%)			
Yes		No	
43.8		56.2	
Do Nurses Feel They Are an Important Part of Hospital Services? (%)			
Yes		No	
100		-	
Do Nurses Feel Comfortable at Work? (%)			
Yes		No	
93.8		6.2	
Do Nurses Feel Safe at Work? (%)			
Yes		No	
95.4		4.6	
Does Their Hospital Have Difficulty Obtaining Supplies? (%)			
Yes		No	
49.2		50.8	

Summary of Quantitative Results		
Would They Rather Work in a Public or Private Institution? (%)		
Public	**Private**	**Either**
16.7	56.2	27.1

For the most part nurses have a well-developed awareness of their working environment in terms of knowing who key figures are and in maintaining working relationships. This may contribute to their sense of importance, safety and comfort in the hospital, which were all highly positive. Evidently, for questions dealing with positives and negatives of their profession, the nurses who participated have largely agreed on the positive aspects. Even though nurses feel important and safe, there are indications that they feel they have not been given as much training or knowledge as they feel necessary.

With 98.5% of participants reporting that they receive further training once they complete their education, it may initially seem that nurses would feel competent in any situation. This is not so, however, as seen by an equal 98.5% who responded saying they feel they need more training for some circumstances. The support for further training has already been seen in Table 4-3 where the highest-ranked suggested a change that could be made was to increase levels or training and education. Agreement about the need for further training as high as 98.5% is somewhat surprising considering the wide variety of development training participants reported in Table 4-1. The nature of the hospital in which the respondent works affords a possible explanation for desiring higher levels of training. Both ICDDR,B and Square boast some of the most advanced facilities in the country, providing their nurses the chance to modernize their skills and knowledge. Nurses working in either Jahan Ara Clinic or Kumudini Hospital are not afforded the same opportunities.

The lack of facilities or resources in some hospitals can partially account for the desire for more training by some nurses but not all. As previously noted, nurses from Kumudini are recognized as some of the best-trained nurses in Bangladesh even if the hospital they are trained

in is not as modern or as well funded as ICDDR,B or Square. The high 98.5% affirmative response rate indicates that hospital resources or educational training have no identifiable impact on whether nurses feel they need further training or development.

The widest range of responses was given for the question dealing with improving or attracting nursing skills. Nurses were nearly split on the questions of their facing the same problems as administrators and whether their hospital ever had difficulty securing supplies. Lastly, the question of which type of hospital they would prefer to work in received a wide range of responses. The hospital's difficulty in obtaining supplies can affect how nurses feel about working in the private sector and whether they face the same problems as administrators. Table 4.7 shows the effects of hospitals having difficulty obtaining supplies on nurses' opinions.

Table 4-8 Effects of Difficulty Obtaining Supplies on Opinions

Effects of Difficulty Obtaining Supplies on Opinions (%)		
Difficulty obtaining supplies	**Yes**	**No**
Preference to work in Public or Private sector		
Public sector	15	2
Private sector	32	23
No preference	6	22
Same problems as administrators		
Yes	33	17
No	11	39

Bangladesh imposes no federal regulations through the MoHFW or the BNC to limit the number of patients under a nurse's care.[11] In terms of the nurse-to-patient ratio, staff at Jahan Ara Clinic and Square Hospital reported the lowest numbers with a maximum ratio of 1:6. Staff at Kumudini reported ratios ranging from 1:8 to 1:40. Nurses working at ICDDR,B recorded the largest number of patients with ratios of up to 1:50. The high nurse to patient ratio that challenges

[11] In comparison, California has legislation that limits nurse-to-patient ratios. Californian nurses see a minimum of a 1:1 ratio in trauma wards, 1:2 ratio in the ICU and delivery wards, 1:4 ratio in pediatrics and the ER, and a maximum of 1:6 in a psychiatric ward (California Nurses Association, 2008).

Bangladeshi hospitals is due largely to the low nurse to population ratio. Table 4-9 compares the nursing and midwifery personnel density to population ratios of Bangladesh to other South Asian countries as well as Canada.

Table 4-9 Nursing and Midwifery Personnel Density to Population (per 10,000 population)

Nursing and Midwifery Personnel Density to Population (per 10000 population)[12]					
Bangladesh	India	Pakistan	Nepal	Sri Lanka	Canada
3	13	5	5	17	101

4.4 Key Informant Data

The negative stigma attached to nursing in Bangladeshi culture and the lack of proper training and knowledge are the most common thematic elements in the information provided by the individuals I interviewed. The four key informants insisted that progress in health care delivery requires addressing these two major themes.

My informant at Jahan Ara Clinic believes that, unless more is done by larger hospitals in Bangladesh to counter the negative stigma attached to nursing, the stigma will continue to permeate public attitudes. He made no mention of smaller hospitals making the same effort. The current stigma towards the profession means that good students avoid applying to nursing school. The students who apply are from poorer families or are those unable to gain entry into the best schools. My informant at Square Hospital also agreed that the image of nursing is a large problem. Nurses are often embarrassed to admit to their profession and introduce themselves as a doctor. Ironically, this informant admitted that when many of the nurses at Square were asked why they became a nurse, their response was that it was a noble profession. At ICDDR,B my informant agreed that the stigma attached to being a nurse in Bangladesh was problematic and signals a definite lack of talent and quality being sought out in students and new nurses.

[12] Source: World Health Organization. (2008).

Of the four informants, those at Square Hospital and Kumudini both believed that progress was being made in improving public attitudes towards nurses, albeit very slowly. Their reasons for saying this differ. Square Hospital employs nurses trained abroad and serves elite patients willing to pay high amounts for treatment and who expect a level of service quality that equals that of other large international hospitals. My informant at Kumudini thought that positive changes in nursing is more the result of the work of the WHO and other NGOs operating in the country.

The second most-discussed problem raised by all four informants was inadequate training and knowledge among nurses. There was agreement that basic nursing knowledge is sorely lacking. The Square Hospital informant felt that nurses trained in Bangladesh have much lower knowledge and training in areas such as physiology and basic anatomy. The ICDDR,B informant agreed. He believed that much of the fault lay with the government in not enforcing higher standards. Nurses are not being trained to acceptable standards and in most cases are taught by poorly skilled faculty. This results in a cyclical problem: poor education and training standards are passed on to students and future instructors, who in turn teach the next generation of nurses. At Jahan Ara my informant went further, saying that once a nurse receives her degree she recognizes that she is virtually guaranteed a job in a public hospital and feels that further training or education is not important. Nurses having this attitude generally lack motivation to pursue any further professional development. He went on to say that private hospital staff believe that if nurses become more knowledgeable, they may be drawn away to larger private or NGO hospitals or must receive higher salaries as an incentive to stay.

My informants at Jahan Ara, Square Hospital and ICDDR,B also pointed out problems with hospital administrators and the government of Bangladesh in general. It is likely that administrators, especially at private institutions, are more likely to lie if asked about any problems in their hospital. It is difficult to admit that one's own hospital is facing problems, especially if

the question comes from a foreign observer. Many administrators are likely to express willingness to see changes happen in their hospitals to improve service delivery and are welcoming to help from volunteers and foreign professionals. However, if any change to their staffing, services, or management would require more work from them, they may constrain discussion. One of my informants admitted to having been pushed out of at least two hospitals in Dhaka for this reason. At ICDDR,B my informant stated that larger hospitals in Bangladesh will systematically drive out people who try to make changes, and little concern is shown if nurses leave or are driven away.

4.5 Further Observations

A curious division exists between what the nurses reported as the biggest challenges and problems facing them in their duties and the solutions they feel would be most beneficial. The largest problems facing nurses and hospitals are a lack of manpower and proper equipment, yet the solution most often proposed is an increase in education and training levels. Thirty-four nurses stated that manpower was their hospital's biggest challenge, yet only nine felt that an increase in staff levels would bring about positive change. In contrast, an increase in education and training received three times as much support even though a lack of either was never identified as a problem, challenge or factor in low quality service. Not until the opinions of key informants are considered does a lack of training become an apparent problem, and even in this case, this concern is shown primarily from foreign staff. The best indication that nurses feel training is a problem lies in their overwhelming agreement that they face situations where further skills development would be beneficial. However, this contrasts again with their opinions on improving skills and attracting experienced nurses. Skill improvement on its own received support from just over a quarter of all participants.

A problem widely ignored in terms of suggested solutions is patient visitors. Not only were visitors ranked as the second largest problem faced during duties, they were ranked as the fourth largest challenge facing the hospital and meeting with them was recognized as the least-

liked duty nurses faced while on shift. No major solution or suggestion was provided as to how to deal with visitors, suggesting either they are simply a non-enjoyable aspect of the profession the nurses have become accustomed to, or visitors are not a very pressing problem in the nurses' eyes. It is clear that nurses feel they largely have good relationships to other staff and patients in a hospital, but they were not asked to gauge their relationship with visitors. Should any follow-up research be done, I would recommend that the relationship between nurses and visitors be analyzed to determine exactly how this affects the duties or hospital staff.

5: Evaluation Criteria

I will evaluate each of the policy alternatives using six basic criteria: cost, administrative feasibility, effectiveness, equity, administrative acceptance and acceptance by nurses. Each criterion will be measured on a scale of high (3), medium (2) or low (1) to provide a ranking of the alternatives. The higher an option ranks, the more likely it is to be effective and accepted by stakeholders. Table 5-1 presents a brief summary of the criteria and measures used.

Table 5-1 Criteria for the Assessment of Policy Alternatives

Criterion	Definition	Considerations	Measurement
Cost	What is the cost to implement and sustain the policy?	a. Hospital expenditure. b. Government expenditure.	Low Cost=3 Medium=2 High Cost =1
Administrative Feasibility	How easily can the policy be implemented in a health care institution?	Number and scale of changes needed.	High=3 Medium=2 Low=1
Effectiveness	How effective is the policy at increasing health service delivery by nurses in hospitals and clinics?	a. Short-term improvements. b. Long-term improvements.	High=3 Medium=2 Low=1
Equity	To what extent does the policy ensure equal treatment and access to nurses in different institutions?	a. Intrahospital equity. b. Interhospital equity.	High=3 Medium=2 Low=1
Administrative Acceptance	How acceptable is the policy to administrators and managers responsible for providing direction to nurses in their institution?	Changes are acceptable to administrators.	High=3 Medium=2 Low=1
Acceptance by Nurses	How acceptable is the policy to nurses who must deal directly with the impacts of its implementation?	Policy addresses concerns of nurses.	High=3 Medium=2 Low=1

5.1 Cost

The four hospitals that participated in my study are all private, yet have very different means of financing their operations. The availability of monetary resources is an essential consideration for all of them in making any policy decisions. In some cases, only hospital expenditure needs to be considered, while in the case of larger policies, government expenditure must also be considered. The exact costs of these policies are difficult to ascertain as the financial resources and budgets of each institution, from hospitals to the MoHFW, are not easily uncovered.

5.2 Administrative Feasibility

The feasibility of an alternative must be evaluated in terms of its operability and ease of implementation. The number and scale of changes needed by administrators will affect feasibility. Measurement of administrative feasibility will be drawn from evidence in the literature as well as further contact with hospital administrators and managers.

5.3 Effectiveness

Effectiveness is the ability of a policy alternative to meet the needs of the stakeholders. In this study, effectiveness measures nurses' ability to increase the level of service and care provided in private hospitals. Consideration must be given to short-term and long-term improvements. This criterion will be measured through evidence in the literature as well as the information drawn from my surveys and interviews with key informants.

5.4 Equity

Two important aspects of equity must be considered: equity within individual hospitals and equity across all hospitals. This difference is important when examining the scope of each policy alternative. An option that can be implemented in individual hospitals need not have equity

with another institution. However, there should be an attempt to enact a policy equally across those stakeholders acting directly within the given institution.

Equity across hospitals is needed for options with broader scope, such as government policies that affect every health institution falling under its jurisdiction. Options of this nature require equal treatment be given to hospitals regardless of size, financial resources or staffing levels. Measurement of equity will come from evidence in the literature, input from health professionals and data collected through my survey.

5.5 Administrative Acceptance

This criterion measures how acceptable a policy is to the administrators of a hospital, government or regulatory agency and their willingness to choose one policy over another. Different policy options have varying scope and affect different stakeholders. In some cases, a small policy may require only the acceptance from an administrator at an individual hospital, whereas a much larger one would likely require acceptance from administrators in the MoHFW and the BNC. Policies that show higher acceptance rates among individuals holding administrative positions are more likely to be given more attention and have a greater chance of being implemented. Measurement of administrative acceptance will come from evidence in the literature, information from interviews with key informants and further communication with administrators in the four participating hospitals.

5.6 Acceptance by Nurses

The ultimate goal of this research is to suggest policy alternatives that improve the quality of nursing in Bangladesh. Therefore, a key criterion is the level of acceptability among nurses. My survey of the nurses asked them directly what changes they would like to see made to better deliver health services and improve the quality of nursing in Bangladesh. To be successful, the alternatives must address nurses' perceptions of the problems and challenges they face. The

alternatives I have designed were built on the suggestions taken directly from responses to my survey. To measure how acceptable a policy is to the nurses, I will use the information collected through my questionnaire, supplemented with evidence from the literature.

6: Policy Alternatives

This section presents the policy alternatives I have formulated. Health policy deals with a wide array of stakeholders, from patients to nurses, and from hospital managers to government officials. In the context of this study the alternatives I develop aim for success through initiatives by individual hospitals and through government initiatives. I have maintained the status quo as the first option for a point of comparison for the four alternative policies: 1) a program of in-hospital continuing professional development, 2) an increase in manpower, 3) a national nursing awareness campaign and 4) providing nursing education in Bangla.

6.1 Status Quo

The proposed policy alternatives will be compared with the status quo. The status quo entails no changes to current hospital policies or operations, meaning that any challenges identified by nurses at this point would not be addressed. Improvements to health care delivery are unlikely under the status quo as it provides no motivation to either nurses or administrators to actively increase services. While some hospitals may pride themselves on providing the most modern services currently available, service levels in general are likely to remain static if no policy changes are sought.

6.2 In-Hospital Continuing Professional Development

A significant number of nurse respondents indicated that they are often asked to handle situations for which they feel inadequately trained. Likewise, a large proportion of responses indicated that levels of education, training and knowledge are currently problematic and that an increase in medical and situational knowledge among nurses would contribute to high quality

service. These nurses have already completed their nursing education, and returning to a nursing institute for further training would entail large personal costs and lost earnings. This alternative proposes a program to advance their knowledge and training in the hospital where they work.

A Continuing Professional Development program implemented by individual hospitals would allow nurses to receive further training, education and skills development while they work. This program would not require them to pay for skill upgrading and would see senior physicians, nurses and outside consultants offer direct, hands-on skills development to staff nurses. This approach is advantageous because nurses can be trained in the hospital where medical situations are not always predictable. By continuing to develop nurses in their place of employment, they will be able to exercise their knowledge immediately and not risk forgetting or losing skills that they have learned in the past. CPD sessions should be organized in small groups to minimize the loss of working staff present. Hospitals with larger nursing staff could organize larger groups if possible. These groups would rotate through the development sessions over the course of their being offered in the hospital.

Such an approach was used in Indonesian health centres where peer-to-peer immunization training resulted in a 38% improvement in awareness and delivery of DPT,[13] polio and measles vaccinations by nursing staff. The cost of the Indonesian program was as little as US $16 per individual for a three day training session (Robinson et al., 2001). In Bangladeshi currency this program cost Tk1128 per nurse over three days. For the sake of this option, a target cost of US $20 per nurse for a three-day training session with an outside consultant hired will be used. Costs are likely to decrease significantly if in-hospital peer-to-peer training is used.

The CPD program directly addresses issues in training and education identified by my informants at Square Hospital and ICDDR,B. Many nurses are not being trained to acceptable standards during their education. The CPD program would provide on-the-job professional

[13] DPT is a mixture of three vaccines, to immunize against diphtheria, pertussis and tetanus.

development to complement and improve the skills and knowledge delivered during their education. Nurses who receive further skills development are more likely to feel competent practicing their profession in a variety of situations. Higher competency will lead to improved levels of health care delivery. This alternative benefits all nurses, whether new to the workforce or veterans of 30 years. The CPD program can help eliminate cyclical patterns of improper care delivery. Since the program is meant for all hospitals, the threat of having the best nurses taken from smaller institutions is lessened. Hospitals can upgrade the skills of their nurses as needed to ensure that the delivery of health care is properly maintained or improved.

6.3 Increase Manpower

Even though a minority of participants identified an increase in manpower as a solution to the problems faced by hospitals in Bangladesh, it is the single largest problem they have identified. Currently, nurses may feel overwhelmed by their workload and patient needs. To address this hospitals in Bangladesh could seek to increase the size of their nursing force. Increasing the number of nurses in a hospital would lighten workloads, allow for more direct attention to be given to patients, and create a larger pool of knowledge and resources to draw from. This alternative can also be tailored to suit the needs of each hospital individually.

By increasing the number of nurses in hospitals, Bangladesh can slowly begin to overcome the shortage gripping the country. This option requires large up front costs to hospitals. Salaries, resource and equipment usage, and supervisory duties may all increase if more nurses are hired. These costs may cause some hospitals to be hesitant to accepting this option. However, while this option poses large upfront costs, the immediate short-term benefits are smaller nurse-to-patient ratios, a larger skill pool, and nurses being able to give more attention to smaller groups of patients. By spreading workload and decreasing patient loads, the needs of patients can be better assessed and appropriate care can be more effectively given.

6.4 National Nursing Awareness Campaign

A national nursing awareness campaign would increase the public's knowledge of nursing as a profession, what nurses do, and why they are important to the health care system. In a country where nursing is viewed as an unclean job, an awareness campaign organized and implemented by nursing organizations and the government would go a long way in showing Bangladeshis that nursing is a clean, secure and noble profession. This campaign would also serve to educate both the public and health professionals about how traditional values affect the jobs of nurses and the effectiveness of health service delivery. This campaign can be undertaken by the MoHFW under section 9.04 of the 2008 National Health Policy that aims to promote health education through the media and influence health behaviour of people (Ministry of Health and Family Welfare, 2008).

If effective, this campaign could raise the interest in members of the public in seeking nursing training. If larger numbers of people seek nursing training, this campaign will have direct effects on the current shortage of trained nurses in Bangladesh. A larger pool of individuals interested in pursuing nursing because of the information provided by this campaign would also allow training institutions to be more selective in terms of quality, ability and motivation. This would result in higher calibres of graduating nurses ready to enter the workforce. Higher quality nurses will be able to offer higher quality health care.

This campaign is meant to increase knowledge and interest in nursing as a requirement of the health sector and as an important profession. An added benefit to increased interest in the profession generated by this campaign is larger awareness in rural areas. Thirty percent of the nursing stock in the country is located in four metropolitan areas where only 14.5% of the population lives (Zurn et al., 2004). The need for nurses in rural areas far exceeds current capacity. If this campaign is able to induce more people to become nurses, a larger workforce can be used to address the needs of the ill living outside of major cities. By educating the population

about the role of nurses in the health sector, interest in the profession can be increased, enrolment in nursing programs may follow suit, and improvements to overall delivery of health care will increase due to more nurses available for work in the country.

6.5 Nursing education in Bangla

The BNC mandates that all Bangladeshi nurses be taught in English and is supported by the DNS and MoHFW. However, education in English is difficult for many Bangladeshi students, leading to poor training and understanding. As noted in Section 2.2 English is used because there are no nursing textbooks available in Bangla and English is the preferred language for professional development. These reasons largely overlook the difficulty that Bangladeshi speakers have with the language and the extent to which nurses use English in their place of employment. Bangla is still predominantly used in rural health facilities and even some of the larger urban hospitals. This option would have the MoHFW and the BNC cooperate to translate nursing textbooks into Bangla for use in training institutes. This requires no changes in the nursing curriculum and would vastly improve the understanding and communication of skills and knowledge in nursing students.

If nurses are educated in their mother tongue, they will find it simpler to understand their responsibilities, be able to communicate needs and problems to other staff more easily, and be able to provide patients with better care.[14] If training institutes were able to teach in Bangla, they could draw from a larger pool of potential candidates with appropriate prerequisites. Not every nursing school uses the same texts and materials to train their students. For the purpose of this option I will use the list of textbooks used in the College of Nursing at IUBAT to determine the basic costs needed for this alternative. It should be noted that this option was not developed through data collected in my survey and has not been rated by any nurses, administrators or nurse

[14] Haldey and Roques (2007) note that poor care is sometimes linked to poor understanding of English. They observed that patient records and reports kept in English were often copied from page to page without any understanding or re-evaluation of a patient's condition.

educators. Due to these factors, this option cannot be given as in-depth an assessment as the previous three.

7: Assessment of Policy Alternatives

This section evaluates the policy options using the established set of criteria. Each is also examined for explicit links to increases in health care delivery through increases in nursing quality. My alternatives are assessed in two veins: individual hospital initiatives[15] (the continuing professional development program and increases in manpower), and government initiatives (a national nursing awareness campaign and nursing education in Bangla). As discussed in section 3.3.1, these options, with the exception of nursing education in Bangla, have been rated by individuals whom I consulted in Dhaka including nurse managers, physicians and nursing educators. No nurses have evaluated the policy options presented.

7.1 Status Quo

Cost. The financial cost of the status quo remains low in comparison to the three alternatives. In the private sector the bulk of the cost is borne by the organization or company responsible for operating and maintaining hospital staff and facilities. Since no changes arise under this option, a hospital incurs no extra staffing, administrative or equipment costs. No extra costs to patients or salary adjustments need be considered to accommodate new staff or incorporate new hospital policies. This option is favourable to administrators and managers concerned with financial resources and operating costs and is rated as having low cost.

Administrative Feasibility. The status quo requires no changes to current practices and polices, which means that administrators need not take a new direction in their managerial style or structure and can retain familiar operating practices. No changes in staffing practices or

[15] Section 9.13 of the 2008 NHP dictates that public hospitals be granted greater administrative and financial autonomy meaning public sector hospitals are free to act on individual initiatives without interference from the MoHFW (MoHFW, 2008).

policies means that administrators do not have to re-educate staff or adopt new managerial strategies. However, any problems that currently exist for administrators would be left unaddressed, making it likely that certain problems would persist. This option is ranked as medium because it requires no immediate changes to be made but does not address current problems or challenges.

Effectiveness. The nurses who took part in my survey provided numerous suggestions for improvements to make their job more effective in terms of service delivery; none of these benefits would arise under the status quo. The problems existing in hospitals would continue unabated. Nurses would continue to work in a manner they have grown accustomed to, but no changes would be made to help ease challenges they face. This option is rated as having low effectiveness because of its inability to address current problems.

Equity. Maintaining the status quo will not address any issues of inequity both in hospitals and between institutions. The status quo sustains existing inequities and challenges, giving nurses little hope of seeing progression made in their profession. The status quo ranks low in terms of equity.

Administrative Acceptance. Given that this option requires no major effort or change by hospital administrators, they should easily accept it. No staffing changes need to be made, and no disruption arises for hospital operations. However, some administrators may not be completely satisfied with their current situation and would like to see changes that this option does not provide. This option is ranked as having medium administrative acceptance due to the fact that it requires few to no changes in the current administrative structure but may not address concerns expressed by some managers.

Acceptance by Nurses. If the status quo is maintained, none of the problems identified by nurses will be addressed. Likewise, none of the changes they have suggested to improve nursing

and health care delivery services would be given consideration. Many nurses have expressed dissatisfaction with the current state of their profession, giving this option a rank of low.

7.2 In-Hospital Continuing Professional Development

Cost. Depending on the financial resources of an individual hospital, this option may incur low or high costs. This option allows for the use of other staff currently employed in the hospital to provide more professional and skills development to nurses, or to hire outside consultants to provide the same services. Using current hospital staff would save on the costs of importing trainers or consultant professionals from other hospitals or health organizations. Hospitals would have the option to spend more and have these outside professionals visit their staff, but fees may depend on availability, number of consultants hired and the length of the development course.

The target cost for this option is US $20 per nurse for a three-day development session in the case of an outside consultant being hired. In the private sector cost would fall on individual hospitals, while in the public sector costs are likely to be subsidized by the MoHFW for any hospitals that choose to use this option. Using internal, peer-to-peer training will be less expensive. The target amount equates to Tk1410 per nurse. Using the target amount for the CPD program, the potential costs to offer development sessions to all of the nurses at each of the four hospitals for a three-day session are shown in Table 7-1.

Table 7-1 Costs for CPD program per hospital

Costs for CPD program per hospital (Tk)		
Hospital	**# of nurses**	**CPD cost**
Jahan Ara Clinic Pvt.	20	28,200
Kumudini Hospital	150	2.12 lakh
ICDDR,B	60	84,600
Square Hospital	300	4.23 lakh

Institutions where CPD program costs would be expensive may choose to rely on peer-to-peer sessions rather than hiring consultants, or offer the sessions to a limited number of nurses on staff. A possible solution to higher costs, especially for hospitals with lower financial capacity, is to develop agreements between hospitals to share talent for CPD sessions. This possibility warrants further investigation.

The development of a training regime, organizing sessions and instructors and determining how staff will be rotated to attend the training sessions without disrupting major hospital operations will cost time and money. If staff rotation through CPD sessions is having too large an impact on hospital operations it may be necessary to hire additional staff to compensate or decrease the number of nurses placed in development groups. However, the long-run benefits of this program include staff with better skill and knowledge bases, which will offset current costs of operating this program. Because of the possibility that this option may require higher costs for further professional development, it is ranked as medium.

Administrative Feasibility. This option would require a somewhat extensive effort on the part of hospital administration in finding and organizing training sessions and instructors or consultants. Hospitals having more financial resources at their disposal and greater public awareness, such as Square Hospital or ICDDR,B, would have an easier time finding and hiring consultants. Smaller hospitals, such as Jahan Ara, and those relying on charity foundations for their operating finances, such as Kumudini, would have more difficulty securing cost-effective trainers. It is possible that a first attempt at this program will be somewhat disorganized due to financial or staffing constraints, but once a successful pattern of staffing balance and training sessions is established, this option can be far more easily implemented. Due to the potential staffing issues and large initial efforts needed on the parts of managers and administrators, this option is ranked as medium.

Effectiveness. Based on the responses to questions about levels of training and education, and the identification of higher levels of skills as the primary change that could be made to increase levels of heath service delivery in Bangladesh, there is clear indication that nurses are willing to accept more professional development. This option provides nurses the chance to improve their current body of skills and continue to develop their core knowledge of their profession. Nurses who feel they would benefit from additional skill and knowledge building would likely do well under this program. Whether simply refreshing the skills they were taught during their education, or learning more modern treatments, this option offers an excellent chance to improve the delivery of health services provided by nurses. Because of the enthusiasm and interest demonstrated in this option, and its ability to directly improve health care delivery, this option is ranked high for effectiveness.

Equity. This option can be adapted to suit the needs and resources of any hospital. Every staff member in any hospital that uses this option has the chance to receive more professional development. This option ranks highly in equity because of its ability to ensure that nurses receive skill and knowledge development from other staff or consultants and is highly adaptable to situations unique to different hospitals.

Administrative Acceptance. Administrators seeking the best possible patient care will want their staff to have the best skills and knowledge. Granted, not all administrators in Bangladeshi hospitals feel that providing additional professional development to nurses is necessary, but the majority of those that I had direct dealings with felt that nurses are an integral part of hospital functions and admitted to some of their nurses not knowing as much as they should. A CPD program would allow administrators the opportunity to build a strong, knowledgeable and adaptable staff. Should this option be implemented, administrators would be able to choose what kind of development to offer their nurses, how often it would be given, and develop their own leadership skills by organizing this for their staff members. This option ranks

highly in administrative acceptance due to the fact that it can be organized to the administrator's liking and having nurses with continually upgraded training would reflect highly upon them.

Acceptance by Nurses. Of the nurses surveyed, 98.5% responded that they felt they experienced situations in which they could have benefited from more training. Over a quarter of respondents said that improving the skills and knowledge of nurses was important. Increased levels of training and knowledge were the fourth most cited factors for high quality nursing service and health delivery, and an increase in both was the most favourable change that nurses indicated could be beneficial to them and the level of health care they provide. This option directly addresses these concerns by giving nurses the chance to further develop their skills and knowledge and become better equipped to deal with any situation.

The use of outside consultants also addresses an aspect of the question of whether it is important to improve or attract skills to a hospital, with 40.5% of those surveyed indicating that both improving and attracting skills was important. Bringing in outside consultants or trainers is ostensibly attracting skilled health workers to a hospital, albeit for a short period of time. Because this option directly addresses the largest concerns and suggestions put forth by nurses who participated in this study, it is ranked highly in terms of acceptance by nurses.

7.3 Increase Manpower

Cost. This option presents the highest cost for hospitals. Reported salaries varied from 10,220Tk to 526,968Tk (Table 4-4) with an average of 119,006Tk. Any significant attempt to hire more nurses would involve very large financial costs to any institution. In the case of a hospital like Kumudini that is dependent on other market areas for finances, hiring more nurses could place a burden on the available monetary resources.

Even for a hospital with a very large operating budget, costs could become a significant constraint in terms of hiring additional nursing staff. For example, the current budget of

ICDDR,B is about US $15.5 million including about $4 million for basic operating costs and $11.5 million for specific projects (ICDDR,B, 2003). Using only the infrastructure finances, this amounts to Tk28.2 Crore. Having a total staff of 60 nurses collecting an average of Tk3.66 lakh annually, this represents an average yearly expenditure of Tk21.9 Crore on nursing salaries. Using the average reported salaries, the cost involved in hiring an additional five nurses[16] at each of the four participating hospitals are shown in Table 7-2.

Table 7-2 Cost of hiring five nurses

Cost of hiring five nurses (Tk)		
All hospitals	**National average**	**Hiring cost**
Public/Private combined	104,400 – 120,000	5.22 – 6 lakh
Participating hospitals	**Average overall salary**	**Hiring cost**
Combined	119,006	5.95 lakh
Individual hospitals	**Average hospital salary**	**Hiring cost**
Kumudini Hospital	30,677	1.53 lakh
Jahan Ara Clinic Pvt.	68,167	3.41 lakh
Square Hospital	2.24 lakh	11.2 lakh
ICDDR,B	3.57 lakh	17.8 lakh

Both Kumudini and Jahan Ara have hiring costs well below the national average and the average between participating hospitals. However, the operating budgets of these institutions is much smaller than either ICDDR,B or Square.[17] Jahan Ara may have difficulty finding room in a budget of Taka one crore to hire five nurses, while ICDDR,B, with an operating budget in excess

[16] Five nurses were chosen arbitrarily as a comparison between the four hospitals. Given the differences in hospital sizes and resources it is likely that they would not uniformly hire the same number of nurses. However, the use of five as an example is not an unreasonable as it provides basic cost comparisons for increasing nursing staff by a small number. It is unlikely that any hospital would make drastic attempts to hire large numbers of new nurses in the short-term even if the financial resources exist to do so. Hospital policy and practice may also influence the number of nurses hired. ICDDR,B has the financial resources to expand its nursing staff but rarely does so, even with the highest nurse to patient ratios observed among the participating institutions. Kumudini faces the lowest financial burden in hiring new nurses, but this is offset by the ability to provide basic needs to its staff. Given these considerations, any policy addressing the increase in nursing staff must realize that short-term increases will most likely be small, yet large enough to have a discernable impact on the hospital services.

[17] See Appendix 1

of Taka 100 crore, would have a much easier time absorbing hiring costs. Administrators will ultimately have to decide whether these costs are bearable, or whether the hospital will spend money on other resources such as equipment and medicine for use by the current staff.

Other cost considerations that fall under this option are those needed for training and recruitment of new nurses. If this option were used independently of the CPD program the cost to train nurses would fall to individuals and the 70 nursing institutions throughout the country. Individuals may face financial barriers preventing them from applying to educational institutions. Similarly, training facilities, schools and institutions may lack either the financial or human resources necessary to train larger numbers of nurses. The total number of hospitals in Bangladesh stands at 1273 (Bangladesh Bureau of Statistics, 2000), higher than the annual number of graduating nurses. If this option is widely used, demand for new nurses versus current capacity will rise sharply and strain the educational system. To relieve stress on schools to provide new nurses, hospitals could hire from surrounding countries. Hiring nurses from foreign countries would also increase the skill mix in health workers in Bangladesh. However, incentives to foreign nurses must be high enough to draw them to migrate to Bangladesh for work.

Were this option to be implemented along with the CPD program, hospitals would face increased costs to provide a larger staff with equal training opportunities. If multiple policy alternatives were used, the benefits to hiring more nurses would most likely come under criticism by administrators concerned about the high costs associated with both hiring and training new nurses. Due to its high financial burden on hospitals, this option is ranked as low.

Administrative Feasibility. Bangladesh Heath Watch (2008) reported a need for an additional 280,000 nurses to overcome the current shortage in the country. A shortage of this size represents a very difficult administrative and fiscal task; how many positions are currently open, who should fill them, when do they need to be filled? Administrators must determine if they can find space for additional nurses, ensure they are able to provide quality service and adjust

schedules and duties for the current staff to accommodate new employees. Open nursing positions in highly desirable hospitals, such as ICDDR,B and Square, are rare as those hospitals do not often expand their staffing levels and turnover is low. Administrators may be willing to hire additional staff based on the needs of their hospital, but it is unlikely that very large increases in staffing would be seen. This option rates as medium for administrative feasibility.

Effectiveness. Lack of manpower was identified as the number one challenge facing hospitals and the third largest problem faced by nurses while on duty. Nurses may feel an increase in staffing levels as being effective for improving health care delivery, but administrators and nursing educators may feel differently. More nurses would spread the workload over a larger core of staff, but questions arise as to whether excess staff may have a negative impact on the standard of care provided. A larger staff allows for the possibility of some nurses shirking their duties by reasoning that there are others present to complete their tasks. Additionally, in some cases the existing usage of nurses is ineffective, and they are not being used to their full potential. An immediate increase in nursing power might be offset by their being used inefficiently. In some cases it would be beneficial to improve the skills and knowledge of existing staff nurses rather than hiring more. This option is rated as medium for its effectiveness.

Equity. This option allows for individual hospitals to hire additional nurses based on their need and resources. Newly hired nurses would be given the same expectations as current staff and should not be looked upon as simply being relief for high workloads. There is a risk of more senior nurses and medical staff taking advantage of newly hired nurses to finish their own tasks, reasoning that more nurses means they have more people to hand their responsibilities to. Administrators must also consider whether some current staff nurses merit promotions to make way for more junior nurses. This may cause inequities if promotions are given and complaints if none are deemed needed. This option is rated as having medium equity.

Administrative Acceptance. For individual hospitals this option requires the greatest administrative responsibility and cost. Salaries must be determined, shifts and duties must be scheduled, hiring practices must be developed or refined and health care delivery quality may suffer initially as new staff members adjust to their position. As mentioned in the cost analysis of this option, administrators must determine whether the benefits of hiring nurses outweigh the costs. If this option is implemented alone, administrative acceptance is likely to be somewhat higher than if it were enacted in parallel with the CPD program. Administrators must consider the time and effort needed to find new nurses, inform them of the benefits of working in their hospital and finalize employment details. This is made more difficult when the number of graduating nurses versus the number of hospitals in the country is considered. Due to the administrative difficulties of this option, it is rated as having low administrative acceptance.

Acceptance by Nurses. Nurses are unlikely to have the same reservations about an increase in staffing as administrators. As far as they are concerned, the current lack of manpower is a large and immediate problem, which affects their ability to provide all patients with the quality of care they deserve. Any effort taken to spread their workload over a larger nursing staff would be welcomed. From the nurses' point of view, increasing their numbers would allow for more time spent with patients, lighter duties and the potential to work during preferred shifts. As previously noted, though, an increase in manpower could cause some nurses to feel that they will be able to do less work and pass off their duties to others. This option has high acceptance by nurses, as it is a direct solution to what they feel is the biggest challenge hospitals face and one of the biggest problems they face themselves while on duty.

7.4 National Nursing Awareness Campaign

Cost. This campaign would primarily be the responsibility of the MoHFW with further support coming from regulatory bodies such as the BNC and hospitals. Costs for this option will ultimately depend on the scope, size and contents of the campaign. Planning and development of

materials will have time and financial costs. Costs of information distribution will differ depending on the medium used; printed elements could cost less than televised for example. The MoHFW has already committed to increasing public health education and awareness in section 9.04 of the updated NHP and is willing to assume the costs of a nationwide campaign. The MoHFW is responsible for a budget of Tk5403 Crore in net spending on health care in the 2008-09 fiscal year. This option rates as having relatively low costs.

Administrative Feasibility. The recently updated Bangladesh National Health Policy indicates that a major goal of the MoHFW is to increase public health education through continuous promotion of health strategies in the media (Ministry of Health and Family Welfare, 2008). While the focus of the new national health policy is the promotion of better personal health care practices, it would be possible to build a nursing awareness campaign on top of the existing message framework. As the MoHFW already oversees nursing through the DNS, it would be no great challenge to include a large amount of information on nursing in continuing health education messages. The MoHFW through the DNS already interacts with the BNC for licensing and regulatory purposes, and it would also pose no huge difficulty to develop content that provides the public with as much information on nursing as possible. Since the framework for message delivery now exists, and information need only be refined and inserted into the health education and promotion section of the national health policy, this option rates as having high administrative feasibility.

Effectiveness. The effectiveness of this option depends on how much information is provided, and how widely it is assimilated by Bangladeshis. Changing cultural beliefs[18] will pose a challenge, and effectiveness will rely on how the message is absorbed by a largely Islamic population. It might be expected to see more change in better-educated than less-educated Bangladeshis. Effectiveness is challenged by an adult literacy rate of 47.5% (WHO, 2001), daily

[18] See section 2.3

newspaper readership of 6.6% (Bangladesh Bureau of Statistics, 2000), a household television ownership rate of 23% and internet use of 0.3 people per 100 population (World Bank, 2006). A large effort must be made to spread the information of this campaign through as many media as possible to ensure large saturation in the population. The campaign must be accessible to all Bangladeshis, but it must be assumed that some elements of the population will reject a challenge to widely held cultural beliefs. Due to the uncertainty about the acceptance and saturation of this campaign among all Bangladeshis, this option ranks as having medium effectiveness.

Equity. The goal of this campaign is to promote the necessities and benefits of properly trained and knowledgeable nurses. Information provided through the campaign is not focused on a sole aspect of nursing, it encompasses the entire profession and aims to educate the public about how nurses work, what their job entails, and why it is a necessary and respectable keystone in the health care sector. This option ranks highly for equity because it is targeted at the entire population and presents nurses as equals in the health care sector.

Administrative Acceptance. This option places responsibility for education in the hands of the government. The recently updated national health policy of Bangladesh explicitly states that health education and promotion through the media is a key goal for the government. While the NHP places more focus on prevention of communicable diseases, nutrition and sanitation, the inclusion of information about health practitioners should be a welcome addition to government administrators. Health education also means knowing how services are delivered and by whom. Information about health practitioners can be easily added to the education and awareness goals of the NHP, so that this option ranks high for administrative acceptance.

Acceptance by Nurses. There is not likely to be any immediate impact from this campaign. Noticeable increases in appreciation of nurses will occur after the public has had time to absorb and consider the information provided. Nurses may feel the campaign is well-intentioned, but because of its limited ability to address immediate challenges is unlikely to be

very popular initially. Nurses who participated in my research would be more appreciative of a policy having immediate and more tangible results. Even though immediate results are unlikely through this campaign, many nurses will still support its goals. If patients and the general public are more respectful of nurses, they should experience some increase in morale and personal satisfaction in their work. This option has medium acceptance by nurses due to its lack of immediate results, but long-term benefits in public education.

7.5 Nursing Education in Bangla

Cost. The largest cost for this option is having the required training materials translated into Bangla. No changes to the nursing curriculum are required, nor does it require changes to current training facilities that would incur additional costs over the translation of material. The cost of translating textbooks varies depending on the company used, the number of texts being translated and the length of the books. The College of Nursing at IUBAT uses 11 textbooks over the four-year degree program. To determine the cost of translation I contacted publishing houses and translation services. Cost of translation is based on a per-word basis and ranges from 16 to 35 cents US per word plus additional costs for formatting. Volume discounts are also available from some translation companies.

Through discussions with representatives from translation companies, I have determined that a 400-page textbook averages a total of 100,000 words.[19] Table 7-3 shows the costs of translation for books ranging from 400 to 2,000 pages at rate of 16, 20, 25 and 35 cents per word:

[19] This total is based on the assumption that a textbook has on average 250 words per page.

Table 7-3 Cost of Textbook Translation (Tk)

Cost of Textbook Translation (Tk)					
# Pages	**# Words**	**¢16/word**	**¢20/word**	**¢25/word**	**¢35/word**
400	100,000	11.3 lakh	14.1 lakh	17.6 lakh	24.7 lakh
650	162,500	18.3 lakh	22.9 lakh	28.6 lakh	40.1 lakh
900	225,000	25.4 lakh	31.7 lakh	39.7 lakh	55.5 lakh
2,000+	500,000	56.4 lakh	70.5 lakh	88.1 lakh	123 lakh

The nursing program at IUBAT uses one textbook in the range of 400 pages, four in the 650 range, four in the 900 range and two in the 2,000 range. Assuming a translation rate of ¢20 per word the total potential cost to have all of the texts used by the College of Nursing in to Bangla is Taka 373.7 crore. This does not include additional formatting, binding, licensing or shipping costs. A bound and printed translation can take from one to 24 months to be ready for shipping. Once a number of original copies have been received costs can be reduced by the use of cheaper printing and binding services in Bangladesh. Distributing the materials by either the MoHFW or the BNC will further reduce unnecessary shipping costs to individual institutions. Even with cost reductions in Bangladesh, the initial financial resources needed for translation and printing give this option a high cost rating.

Administrative Feasibility. This option relies heavily on the willingness of the BNC and MoHFW to recognize that teaching nursing in English creates large barriers for many students. Implementation of this option would require cooperation between the two agencies in deciding how many nursing textbooks are required, which institutes will be supplied and whether training institutions will teach only in Bangla, offer parallel courses in Bangla and English, or maintain a number of institutions providing nursing education only in English. The issues of cost and availability of resources in English are arguments that the BNC and MoHFW will likely raise in opposition to this option. This option only uses texts used at IUBAT. If other nursing institutions choose to use different materials the MoHFW or BNC could face other administrative hurdles in securing permission to use other texts.

Administrative opposition to this alternative may stem from being accustomed to operating the nursing education system in English, but actual difficulties facing either the MoHFW or the BNC are limited. Ordering material from translators and printers, organizing shipments and distribution, and determining which institutions will offer nursing training in Bangla are the major administrative tasks required of this option. Even with a relatively small number of administrative details, there will still be enough opposition that this option ranks as having medium administrative feasibility.

Effectiveness. This option would not result in immediate improvements in health care services provided by nurses. It will take time for students to finish their education, and longer to build a sizeable number of Bangla language trained nurses in the entire health sector. Once this is accomplished, nurses will be better suited to provide health care to the majority of Bangladeshis. With language no longer a barrier to service, improvements in communication between nurses, patients and other medical staff will increase. These improvements will lead to better understanding of patient needs and what other staff requires from nurses. This will be especially useful in hospitals where English is not widely used.

These benefits may not be reflected in institutions where foreign-sourced workers are employed. Having nurses trained in Bangla and not fluent or knowledgeable in English could cause significant communication problems between foreign doctors and nurses and native Bangladeshi health care workers. The use of Bangla for training nurses will increase learning, communication and understanding in the nursing sector; improvements that should be reflected in the level of care given. However, the use of Bangla alone will not solve persistent behaviour and motivation problems. Due to this, this option is rated as having medium effectiveness.

Equity. Nursing materials and instruction made available in Bangla could have a dramatic impact on the number of Bangladeshis applying for nursing training. Language is a difficult barrier to overcome for most people, and if the option existed for them to receive a professional

training in their native tongue, individuals would see more incentive in seeking an education.[20] Nursing students will have an easier time learning in their native tongue. Students with great potential, who would have otherwise been viewed as having poor skills and knowledge because of a poor grasp of English, will be given the chance to develop their abilities fully in a familiar language environment. This option gives more Bangladeshis the chance to learn and understand a profession that is key to the health sector and rates as having high equity.

Acceptance by Administrators. Educational administrators are likely to show resistance to this option, as they are accustomed to the current practice of instructing nursing in English. Textbooks and other instruction material are already available in English in nursing schools. Educators and employers expect their nurses to have skills in English. Offering nursing education in Bangla will potentially decrease English-speaking nurses in many hospitals and could cause communication problems in institutions where English is used by other staff. However, in facilities where Bangla is the preferred language for staff, hospital administrators would be more accepting. The difference in language preference gives this option medium acceptance by administrators.

Acceptance by Nurses. Acceptance of this policy by nurses will differ between individuals. Some may feel that learning and practicing their profession in their native tongue will be much more helpful to them. Others will question why nursing be taught in Bangla if English is the preferred language for international professional development. Hadley and Roques (2007) indicate that the suggestion to offer nursing education in Bangla to minimize learning barriers has been met with resistance by senior and junior nurses. Acceptance is likely to be lower among licensed and practicing nurses and higher among nursing students who feel it will allow them to learn the profession more easily. This option ranks as having medium acceptance by nurses.

[20] This option allows more Bangladeshi students to consider higher education that they can easily understand and learn. However, the risk in offering nursing in Bangla is a subsequent decrease in students interested in seeking a nursing degree in English, which could jeopardize attendance rates in institutions that continue to offer a nursing degree in English.

Table 7-4 summarizes the analysis of the policy options using the established set of criteria:

Table 7-4 Summary of Policy Options

Summary of Policy Options						
Option/Score	**Criteria**					
	Cost	Administrative feasibility	Effectiveness	Equity	Acceptance by administrators	Acceptance by nurses
Status quo (10)	Low Cost (3)	Medium (2)	Low (1)	Low (1)	Medium (2)	Low (1)
Hospital initiatives						
Continuing professional development (16)	Medium (2)	Medium (2)	High (3)	High (3)	High (3)	High (3)
Increase manpower (11)	High Cost (1)	Medium (2)	Medium (2)	Medium (2)	Low (1)	High (3)
Government initiatives						
National nursing awareness campaign (16)	Low Cost (3)	High (3)	Medium (2)	High (3)	High (3)	Medium (2)
Nursing education in Bangla (12)	High cost (1)	Medium (2)	Medium (2)	High (3)	Medium (2)	Medium (2)

7.6 Policy Recommendations

Given the nature of the options I have developed, an overall comparison of them would not prove as informative as comparisons between the two types. On one hand, recommendations can be made for individual hospital initiatives, and on the other, they can be made between government initiatives. The CPD program and suggested increases in manpower are options that can be implemented by individual hospitals regardless of their position in the public or private

realm. The national nursing awareness campaign and providing nursing education in Bangla are options best suited for the MoHFW and BNC to examine as public policy initiatives.

7.6.1 Recommendations to hospitals

Both the CPD and increases in manpower have the benefit of being adaptable to the needs and resources of individual hospitals, can be easily planned, and do not provoke any interference from government or regulatory agencies. Between the two options, the CPD program shows higher levels of acceptance by administrators and nurses because it directly addresses the desire for further training and skills development. Costs of this program depend greatly on whom hospitals hire to provide training. The use of peer training within individual hospitals will not incur the higher costs involved in bringing in an outside consultant. The one deficiency of this option is that hospitals with larger financial resources may be able to hire more and better consultants than more financially constrained hospitals.

My first recommendation to individual hospitals is to implement a CPD program specific to their needs and resources that will increase the skill and knowledge base of their nurses. This is a cost effective and easily organized option that any hospital can undertake without government guidance. Hospitals can plan the CPD to suit their own unique facilities and resources. Through peer-to-peer training, communication of skills and ideas between current hospital staff will increase. Hiring outside consultants, or cooperating with other hospitals to share peer-to-peer resources, will increase skills as well as bring in new ideas and techniques.

The option to increase manpower ranks second to the CPD as a hospital-level initiative. This option allows institutions to begin to overcome a shortfall of nurses but carries large costs and relatively low administrative acceptance. Like the CPD, this alternative directly addresses concerns that nurses identified through survey data. Shortages in manpower were identified as the largest challenge facing hospitals in Bangladesh, and an increase in human resources was the fifth

overall change suggested that could benefit nurses and health care delivery. This option ranks highly in acceptance by nurses, but it is too costly and does not have sufficient levels of effectiveness and equity to be considered as an immediate solution to major challenges.

My second recommendation to individual hospitals is to consider hiring additional nurses to ease workloads. The number of nurses hired will vary depending on patient load, financial resources and number of nurses available to hire. Careful consideration must be given to whether more nurses would provide an immediate benefit to hospital services. Nurses should not be hired simply because a hospital has the resources available. This option should be examined more seriously by hospitals having high nurse-to-patient ratios over those with ratios already comparable to hospitals in developed countries. This option may become easier for a larger number of hospitals depending on the use of either of the government initiatives I have developed. If a national awareness campaign and providing nursing education in Bangla are implemented, the number of new nurses available for hire could sharply increase in a short time.

Both of these options are included in the 2008 NHP developed by the MoHFW. Section 8 of the NHP lists training improvements and career development as a major goal (MoHFW, 2008). It is not, however, explicitly included as a policy practice. Increases in human resources in the health sector is listed both as a goal and a policy practice in the NHP, which stresses the importance of recruiting and training new nurses to overcome existing shortages and improve service quality. Since these options are included in the 2008 NHP, any hospital that implements one or both will be supporting the public policy goals of the Bangladeshi government .

7.6.2 Recommendations to government

A national awareness campaign woud carry no cost to hospitals, can easily be implemented and requires few administrative changes. In the short term, this option is not likely to have any major impact on nurses and the delivery of health care services, but if properly

delivered the information in the campaign should lead to long-term benefits such as increased morale among practicing nurses and increased interest in and respect for the profession by the general public. My first recommendation to government is that the MoHFW insert this option into section 9.04 of the NHP that describes Bangladesh's health education and promotion policies. Educating individuals about the necessity of strong health care workers as well as proper heath care practices will be beneficial to the long term health of Bangladeshis.

The awareness campaign can be delivered the most rapidly through media connections and dedicated goals stated by the MoHFW in the newly updated NHP. Educating the public about the necessities and responsibilities of nurses will allow Bangladeshi society to begin to realize the importance of high quality nursing and how it affects health care delivery. A successful awareness campaign could induce more Bangladeshis to choose to enter the nursing profession. This result would yield more trained nurses for health care institutions to choose from and begin to overcome the shortage of nurses currently plaguing the country. Planning for this option should be reserved until the effects of the education campaign on the public can be gauged. By waiting to implement an increase in nurses, immediate costs will not rise, and hospitals can prepare for a possible rise in the available number of nurses.

Providing nursing education in Bangla ranks second to the awareness campaign because of its high cost and uncertain acceptability by nurses and administrators. However, given the ease with which the awareness campaign can be put in place, the MoHFW and BNC have more time and resources available to seriously consider this option. This option would allow more Bangladeshis the opportunity to receive a higher education, would increase communication and understanding between health care workers, and will increase levels of service to patients. My second recommendation to government is that a small-scale trial of offering nursing training in Bangla be undertaken. A sector-wide shift to using Bangla would pose immediate administrative and learning problems, so a limited number of nursing schools should be used to gauge the effect

of using Bangla. A drawback to this small-scale trial is the high cost of translation. The costs involved in translating material for use in a trial program may cause barriers to the planning and use of this option.

If the option is deemed a success, the use of Bangla in nursing schools should be expanded. The use of English in some institutions should also be maintained for students wishing to pursue their education in a language other than Bangla. By offering training in both languages, Bangladesh will benefit by having better trained nurses in regions where English is not widely used, and still have English speaking nurses who are able to work in hospitals where it is the preferred language of operation.

My third recommendation to government simply involves further updating the NHP to better state the policy practices surrounding further training and career development, as well as language development. Currently, further training and career development is listed only as a goal but not as an official policy of the MoHFW. The government of Bangladesh should consider this as actual policy to follow rather than a desirable goal. Language development in health care workers is not included in the NHP. Regardless of whether government chooses to offer nursing training in Bangla, the difficulty posed by training in English still remains. The NHP should include reference to improvements in language training in health care workers to ensure nurses are properly trained, knowledgeable and understand everything they have been taught.

8: Conclusion

Nurses are pivotal in any health system. In a developing nation like Bangladesh, nurses are a frontline force in the delivery of health care services. Problems and challenges that impede these health professionals from performing their duties have detrimental effects on the overall quality of health services in the country. This in turn reflects poorly on hospitals, training institutions and government offices and agencies responsible for maintaining health care. The difficulties confronting Bangladeshi nurses are only compounded by the fact that, culturally, they are not seen as belonging to an important and worthwhile field. To their credit, many nurses in Bangladesh meet these challenges head-on in order to provide care to people in need.

In this study I explored ways to develop solutions to issues in nursing that could improve overall service delivery and quality. Through surveys and interviews, I determined that the status quo is unacceptable to the bulk of nursing professionals and that nurses had several ideas about how to improve their situation. Many of their suggestions would not only benefit nurses, but also lead to improvements in interaction with patients and other staff, better skills development and more efficient and effective delivery of health care.

After considering the information provided by nurses in four hospitals and several key informants, I developed four alternative policy options for health institutions in Bangladesh, two as individual hospital initiatives and two as government initiatives. Using the status quo as a base comparison, the policy alternatives are In-Hospital Continuing Professional Development, Increase Manpower, National Nursing Awareness Campaign and Nursing Education in Bangla. After analyzing the merits and effects of each option, I determined that individual hospitals implement a CPD program designed to meet their own unique needs and resources and that the government deliver a National Nursing Awareness Campaign to further educate the public about

the necessity of nurses in the health system. By offering continuing professional development, nurses in Bangladesh will see their ability to care for patients increase and as a result begin to improve the overall level of health care in the country. At the same time, a National Nursing Awareness Campaign would educate the public on why nurses are important to the health care system, and why having high quality nurses is necessary for the delivery of services of the same calibre. The other options I developed, increases in manpower and offering nursing training in Bangla, are also important policies to consider. Both are more costly and more difficult to implement than either the CPD or awareness campaign, but given enough time and resources they could significantly improve the service and care provided by nurses in Bangladesh.

I consider this study as a first step in beginning to effect changes in the nursing and health sectors in Bangladesh. Future research should examine the opinions of nurses in public hospitals as well as those working in cities other than Dhaka. Additionally, research must be done to determine how increases in power and responsibilities to agencies such as the BNC would affect current education and training strategies for nurses. Major changes in nursing will not come easily or rapidly in Bangladesh. Consistent and responsible policies must be pursued in order to maintain progress in nursing and health care in Bangladeshi society.

Appendices

Appendix 1

	ICDDR,B	Square	Kumudini	Jahan Ara
Hospital Characteristics				
Location	Mohakhali	Dhaka	Mirzapur	Uttara
Established	1978	2006	1938	1993
Budget (Tk)	106 Crore	Unknown	Unknown	1 Crore
Beds	250 – 300 with additional depending on patient load	300	750	150
Nursing Staff	60	300	150	20
Facilities/Focus	Diarrhoeal Diseases HIV/AIDS Child Health Nutrition Research Infectious Disease and Vaccine Sciences Population Sciences Poverty and Health Arsenic in Water	Critical Care Coronary Care Labour and Delivery Cardiology and Pulmonary Paediatrics and Neonatology Neurology and Neurosurgery Radiology Obstetrics and Gynaecology Oncology Pathology General Surgery	Medical Surgical Gynaecology and Obstetrics Vision Paediatrics Dentistry Maternity and Child health, Tuberculosis Diarrhoeal Diseases	Surgical Haemodialysis Pathology Diagnostic

Appendix 2

Nursing in Bangladesh – Survey Questionnaire

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Please answer in the spaces provided.

Age:

Hospital/Clinic Name:

Is your hospital Public or Private:

Your Position:

Number of Beds in Clinic/Hospital:

Number of Nurse Positions at Clinic/Hospital:

What is your yearly salary:

Years of Formal Education or Training:

Years of Working Experience:

Marital Status:

If you are not a nurse, please begin with Question 3.

1. Why did you choose nursing as your profession?

2. How much training did you go through to become a nurse?

3. Do nurses receive further training in the clinic or hospital where you work to increase their skills? If yes, what kind?

4. Do you receive rewards to increase your motivation or for good practice in your clinic or hospital? If yes, what kind?

5. Do you think in general the nurses in your clinic or hospital perform their practice well?

6. How many full time nursing positions are there in your clinic or hospital? How many part-time positions are there?

7. Does your clinic or hospital provide residence for nurses?

8. Do you feel that it is more important to improve the skills of nurses in your clinic or hospital, or to attract more experienced nurses to your clinic or hospital?

9. What are the common duties and responsibilities of the nurses in the clinic or hospital where you work?

10. How long is a full shift for the nurses in your clinic or hospital?

11. How much time during a shift do nurses use for patient care? For administrative duties?

12. How many patients are assigned to each nurse?

13. What jobs do the cleaners and ward boys have?

14. What jobs or duties do the doctors have?

15. Who do you report to directly at the hospital or clinic where you work? If it you do not report to a single person, do you report to an organization or the government?

16. Who is the head administrator of your clinic or hospital?

17. Who is the head manager of the doctors in your clinic or hospital?

18. Who is the head manager of the nurses in your clinic or hospital?

19. Do you feel that you are an important part of the services provided by the clinic or hospital?

20. What duties do you enjoy the most during your day?

21. What duties do you enjoy the least during your day?

22. Who decides what the nurse's duties will be for the day?

23. Do you ever experience situations where you feel you need more training to do the job well?

24. What problems do you face during your duties?

25. Do you think nurses and administrators face the same types of problems? Why or why not?

26. Do the nurses in your clinic or hospital have a good relationship with the patients? Why or why not?

27. Do the nurses in your clinic or hospital have a good relationship with the doctors? Why or why not?

28. Do the nurses in your clinic or hospital have a good relationship with the managers or administrators? Why or why not?

29. Would you rather work in a private hospital or a public hospital? Why?

30. What do you feel works best in your working environment?

31. What do you feel works the least well in your working environment?

32. Do you feel safe at work in your clinic/hospital? Why or why not?

33. Do you feel comfortable in your working environment? Why or why not?

34. Does your clinic or hospital ever have difficulty obtaining supplies?

35. What do you are the biggest challenges or problems facing your clinic/hospital right now?

36. What changes, if any, do you think could be made to benefit your position?

37. What are the five main factors that you think identify high quality nursing service.

38. What are the five main factors that you think identify low quality nursing service.

Thank you for your participation.

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Institution	Date
Jahan Ara Clinic (Pvt.) Ltd.	May 17, 2008
Kumudini Hospital	July 28, 2008
Square Hospital	August 3, 2008
ICDDR,B	August 13, 2008

The names and positions of informants are being withheld in order to protect their identities and positions from any complaint or consequence that may result from this study.

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