Chapter One: Introduction

1.1. Introduction

Health and its related issues are crucially important in the context of developing countries because these are directly connected with poverty reduction and the improvement of human capabilities. The majority of the developing countries are nowadays adopting Western medical-based approaches and measures and providing limited free healthcare services to improve the health status of their people, while a few follow both indigenous and eclectic models that make healthcare services easily available and without any cost (Berman, 1993; Bitran & Giedion, 2002; Lewis, 2007; van Ginneken, 1999). While the state traditionally has been at the forefront of healthcare in most countries of the world, in recent times non-governmental and private sectors have become prominent. With the intrusion of neo-liberalism, market forces are beginning to play a much wider role in addressing the health needs of the people.

Bangladesh, as a developing nation, has mainly adopted Western medical-oriented approaches and has been providing healthcare services free at the state level despite the prevalence of more culturally accepted indigenous modes of healthcare in society. Most of the health-related policies formulated there have been influenced by the bio-medical principle which focuses on human patho-physiology and emphasises cure over prevention. These focus on spending huge amounts of money on hospitals, clinics, ambulatory services, drugs and so on (Hahn 1983 in Baer *et al.*. 1997: 11). The main assumption of this bio-medical approach about illness is that disease is a deviation from normal physiological functioning and specific causes of this deviation can be found in the ill person's body. The same symptoms and outcome of the same disease can be found everywhere and medicine prescribed for its cure and containment is society-neutral (Lorber & Moore, 2002; 2). As most policy makers in the health sector come with a medical science background, their policies

ultimately focus on the bio-medical approach. However, realising the limitations of medical knowledge, an anthropologist once said about a female patient:

> *Over time I realised that there were two sets of long-term problems: the insidious medical complications of the course of her chronic syphilis and the life trajectory that her illness had marked and inexorably shaped. I recognised, furthermore, that my medical training systematically educated me about the former but tended to discount and in certain ways even blind me to the latter(Kleinman, 1988: XII).*

It is apparent from many instances that health services and programs are developed and established without taking into consideration the lifestyle of the target population (Marshall & McKeon, 1996: 142). For instance, targeted poor women often fail to avail themselves of healthcare services because of the mismatch of timing set by health centres and their own (Banik, 2010b). Again, it is important to take both direct and indirect causes of maternal mortality into consideration when any policy regarding maternal mortality is framed. To solve both direct and health/medically-related indirect causes of maternal mortality, it is critically important to take into account social causes, including physical, financial, and social barriers, faced by the poorer sections of the population. Thus, there is an urgent need for health policies to focus on the bio-social model—also known as 'patient-centred'--in public health (Mead & Bower, 2000)—that addresses both medical and social causes and not just the bio-medical. From the experiences of Sri Lanka and Malaysia it is clear that when a synergistic package of health and social services reaches the poor, the number of maternal deaths easily go down (Pathmanathan *et al.* 2003: 20). This study attempts to formulate a bio-social model in order to confront some of the common problems besetting maternal health.

The main objectives of this study are to find out the possible reasons that deter the prevention of high maternal mortality rate (MMR) and to make practical suggestions to narrow down the gap between rural (Shapahar) and urban (Bogra and Rajshahi cities) regions in Bangladesh. Other relevant objectives are to find out the drawbacks of health policies regarding this issue and to explore the reasons that might be responsible for the persistent gap between the poor women in

rural and urban areas in terms of accessibility to and availability of primary, particularly maternal, healthcare services.

1.2. Entry point of the thesis

The notion of 'development' has existed since the dawn of human civilisation. But its definition has changed with changes in economic, political and social circumstances. The main objectives of on-going development have been the promotion of either economic or social well-being. However, present day ideas or theories of development have not come automatically; it has a long history. The development of economic thought is considered the precursor to the current theorisation of development. Economic growth has been the main measure of development since the beginning of the 18th century and many theories centring on this have been elaborated upon (Arndt, 1981: 457; Fortman, 1990: 15).

The whole range of economic thought can be divided into four schools: classical, Keynesian, neo-liberal and welfare. Most classical political economists like Adam Smith, the pioneer of the classical school, Thomas Malthus and David Ricardo gave importance to free market, individual liberty, division and specialisation of labour towards economic prosperity. They also prescribed a minimum role for the state in the economy. For example, Smith mentioned that the state could play three important roles: to defend national sovereignty, to protect citizens' rights against violation by others and to provide public or collective goods (Munday, 1996: 15-22; Rapley, 2007: 15). As a result, development in the 19th century meant economic growth, mechanisation and industrialisation (Philip, 2008: 25; Pieterse, 2001: 6).

In contrast to the classical thought, John Maynard Keynes (1883-1946), whose body of work is known as 'Keynesian', placed much emphasis on the role of government (Munday, 1996:30; Rapley, 2007:2). Following Keynes, development theorists proposed a model in which the state was seen as

the driving force in development. This idea developed from their realisation that the state could be the only means to tackle financial volatilities that occurred due to imperfections in the market and the world economy. After the Second World War, development meant industrialisation with the objectives of raising incomes and providing the people with access to the basket of goods and services (Philip, 2008: 57-58; Rapley, 2007: 1).

During the 1970s, when the post-war boom came to an end, the shortcomings of state-led development became evident. At the same time, the developed countries faced economic recession and tried to find solutions to their economic problems. The roles of the state and other institutions, such as the unions, were criticised as they were seen as barriers to the development of a market economy. The developed countries ultimately found one way to get rid of this problem based on the principles of the newly emerged 'neo-liberal economic thought'. Friedrich von Hayek (1899-1992) was the pioneer of this thought. These principles proposed the concept of a free market in economic development and favoured reduction of state expenditures in social provisioning and the introduction of market-based strategies in solving economic problems. The neo-liberalists also claimed that the main problem in the Third World countries was the state itself and that rapid development would only come about if the state was rolled back. Following the neo-liberal principles, the First World-based donor agencies put pressure on Third World countries to make changes in their economic strategies. Less state, more market became one of the most important strategies for development. Structural adjustment policies were imposed on many these countries by the International Monetary Fund and the World Bank (Rapley, 2007: 1-3).

Economic growth-oriented theorists argued that gross national product (GNP) would be enough to measure development and that the benefits of development could automatically trickle down to households at the bottom of the economic hierarchy.

Evidence revealed that Third World countries with over five percent economic growth had gained much in other indicators of social development, such as life expectancy and adult literacy, compared

to developed countries that had sound economic growth. For instance, life expectancy and adult literacy rate rose by 16 years and 17 percent in developing countries between 1960 and 1987 respectively (UNDP, 1990: 2). However, dissatisfaction with growth-dominated definitions of development led some so-called welfare economists to reformulate development goals in which poverty, distribution and the meeting of basic needs were factored in (Kabeer, 1995: 2-3). Most notable welfare economists like Amartya Sen and Mahabubul Haq argued that many Third World countries with minimum economic prosperity did well in other human issues, such as access of the people to education and health services but only through proper distribution. They meant that good political will was one of the driving forces for this success. The experiences of Kerala (India) and Sri Lanka were used as best examples to reflect their thinking. They proposed that economic growth was not the panacea for development but one of the ways to bring about human development if development were to mean social well-being not economic benefits only. Based on their ideas, the United Nations Development Program (UNDP) conceived the human development index (HDI) and has been constantly updating it since 1990.

Haq, Sen and Nussbaum are considered the main architects of this approach. By negating the neo-liberal reforms, Haq outlines four pillars in his human development paradigm—*equity, sustainability, productivity* and *empowerment*—to guarantee human capabilities (Truong, 1997: 362-64). Sen proposes the two concepts of *capability* and *functioning* to clarify his capabilities approach. By capability, he means possible opportunities that people can avail themselves of and by functioning he means actual opportunities which people usually gain (Alexander, 2004: 453). In order to gain functioning, people need to have access to primary goods. Here primary goods mean two types of capital, that is, human capital (education and health) and social capital (kinship bondage, institutional support and social networks). He proposed the establishment of a certain set of rules and regulations that support people's access to primary goods (Troung, 1997:358-62). Furthermore, he suggests that both positive (the capacity of the people to be and to do) and negative (free from any interference) freedoms are important for ensuring human capabilities (Gasper & Staveren, 2003:

139-40). In contrast to Haq and Sen, Nussbaum considers capabilities as rights and gives considerable importance to the legalistic aspect of human, particularly female, capabilities (Nussbaum, 2000: 1&5).

The basic difference between economic growth and human development theory, however, is that both propose two different approaches to reduce the burden of diseases, particularly MMR. On the one hand, economic growth theory focuses on purchasing basic healthcare services available in the market. They argue that economic growth creates job opportunities for the people, which ultimately give people economic power to purchase any kind of care they seek. On the other hand, human developmentalists proposed that governments enrich the capabilities of the people by providing basic services, including healthcare services. As mentioned earlier, the capabilities approach focuses on women's rights and empowerment, including gender and health issues, which have been neglected for many decades in academic discourse although many international conferences and initiatives on gender and health issues were taking place in different places and times. Among them, the most important were the Human Rights Conference (Teheran, 1968), the International Conference on Population and Development (ICPD, Mexico, 1984), the Safe Motherhood Initiative (SMI) (Nairobi, 1987) and ICPD+10 (Cairo, 1994), the 4th World Conference on Women (Beijing, 1995) and Cairo+5 (Cairo, 1999). All of them dealt with population control, sexual and reproductive health and rights, women's empowerment and put pressure on the governments of the developing countries to translate and implement their agendas in their respective countries. However, progress was not up to expectations. One of the main reasons for this slow progress was the lack of set targets. For instance, as mentioned by Maine and Rosenfield (1999: 481), the absence of a clear strategic focus in the SMI is an important reason for the lack of progress in reducing MMR. Another reason, as cited by Freedman *et al.* (2003: 12), was that most of the health policies were formulated from within a demographically-driven framework focusing on reducing population growth by lowering birth rates and failed to introduce women, their health and wellbeing as independent

entities. As a result, both developed and developing countries urgently felt the need to set a particular target to be achieved by a particular time.

The UN Millennium Summit of 2000 provided an opportunity for all countries to set such targets with mutual consensus. Around 190 countries, including 145 heads of states, established eight goals with 18 particular targets and 48 indicators known as the Millennium Development Goals (MDGs) and agreed to fulfil these targets by 2015. The broad aim of the MDGs is to introduce both economic and social development within a single initiative. The goals include curbing poverty and hunger, reducing deaths, promoting education and women's empowerment, combating HIV/AIDS, ensuring environmental suitability and preventing discrimination against women. The Summit also provided shared responsibilities for both developing and developed countries, the former trying to pursue poverty reduction and good governance and the latter supporting their efforts by increasing aid, opening trade to exports from developing countries and relieving them from debt (Hayes, 2005: 1; OECD, 2009; Rigg, 2008: 30-32).

Bangladesh, a signatory at the Summit, is one of the most populous and emerging middle-income countries in the world. It has a huge population of 152.5 million and three quarters of the people live in rural areas. Agriculture is the mainstay of the economy and obviously most of its people are engaged in agricultural activities. The pattern of land distribution in the country is very much fragmented and per capita land is less than 0.17 decimal. The Bangladesh economy grew at an average of 3.1 percent per capita between 1990 and 2001. It has been estimated that around half of the population lives below the poverty line, earning 1.25 US Dollar per day (*Daily-Star*, July 17, 2012; UNDP, 2009) and a large number of these poor people live in rural areas (Begum & Salimullah, 2004: 93). Though Bangladesh has not been able to reduce income poverty as much as expected, it has made tremendous achievements in the health sector over the last few decades (Ahmed & Khan, 2011; Anderson, 2012). The population growth rate has come down from three in 1975 to 1.48 percent at present, the fertility rate has declined from 6 to 2.7, the contraceptive prevalence rate

rose to 56 from 7.7 percent in 1975, the infant mortality rate has come down to 46 from more than a 100 per 1,000. There was an increase of eight years in the life expectancy between 1990 and 2007. Of course, there are many negative statistics in the health sector. The family planning (FP) program is not expanding, rather stalling (Uddin & Rahman, 2006) and about 15,000 mothers die annually at the time of delivery (2.4 maternal deaths per thousand) and 7000 infants die every year. About 70 percent of the pregnant women suffer from anaemia, 88 percent of deliveries take place at home and 45 percent of babies are born under-weight (Nath, 2008; PDUN, 2007; UNDP, 2003; WHO *et al.*. 2012).

1.3. Research questions

As said before, Bangladesh is committed to achieving the MDG target. The 5th goal is to improve maternal health with a specific target of reducing MMR by two-thirds between 1990 and 2015. So, in 1990, the country set a target to reduce the MMR from 5.74 per 1,000 to 1.43 by 2015 and increase the proportion of births attended by the skilled birth attendants (SBAs) to 50 percent by 2010 (Akhter & Wohab, 2008: 100; USAID *et al.* 2011). But the present trend in MMR and the proportion of birth attended by the SBAs in Bangladesh was 2.40 (WHO *et al.* 2012) and 26.5 (USAID *et al.* 2011) in 2010. The average reduction of 5.5% per year in the MMR between 1990 and 2010 has been used as a tentative indicator of measuring whether or not a country is on track (WHO *et al.* 2012). Since Bangladesh has been able to reduce the MMR by 5.9% annually between 1990 and 2010, the progress of Bangladesh towards reaching the 5th MDG is ranked 'on track' (WHO *et al.* 2012; Hogan *et al.* 2010; Lozano *et al.* 2011). However, the progress of Nepal and Sri Lanka in attaining the 5th MDG is better than that of Bangladesh though these three countries (Bangladesh, Nepal and Sri Lanka) are in the same geographic and economic zone. For instance, in Nepal the present MMR is 1.70 and an annual average reduction in the MMR between 1990 and 2010 is 7.3%. Similarly, the current MMR is 0.35 in Sri Lanka though its annual average declining MMR between 1990 and 2010 is 4.3 (WHO *et al.* 2012). Moreover, class and regional inequality in the availability of and access to

primary, mainly maternal, healthcare services is acute/visible in these three countries (Anwar, 2007; Durairaj, 2007; Klement & Silverman, 2003 Namasivayam *et al.* 2012; NIPORT *et al*. 2005; NIPORT *et al*. 2009; Nguyen *et al*. 2013; Senarath *et al.* 2006; Thresia, 2013; Thresia & Mohindra, 2011a; Wagle *et al*. 2004).

All these facts (high MMR, class and region-based inequity) has stimulated me to search this issue (availability of and access to primary, mainly maternal, healthcare) in the context of Bangladesh by raising the main research question and sub-research questions in the following manner:

Main research question:

Despite claims that Bangladesh is on track in achieving the 5th goal of the MDG (improving maternal health), why is the rate of decline in maternal mortality low compared to other countries (especially, Sri Lanka and Nepal) with more or less similar problems?

Sub-research questions:

1) In what ways and to what extent will the existing healthcare system improve maternal health?

2) What is the rationale of sound maternal health management in the context of Bangladesh?

3) What types of barriers do pregnant mothers usually face during the use of maternal healthcare services?

4) Are there any differences in barriers of access to primary, mainly maternal, healthcare services across region and class?

5) To what extent do contextual (social, political, economic and organisational) factors support the introduction of skilled in place of the traditional birth attendant (TBA) system? That is, whether the bio-social approach will be more productive than the bio-medical.

6) What lessons, in formulating best practice, can Bangladesh learn from other developing countries?

Exploring the possible causes of high MMR and finding the contextually relevant ways of reducing the gap between rural and urban areas in terms of availability and accessibility to MHC services in Bangladesh are the main objectives of the study. As mentioned earlier, there are two main reasons (higher MMR and lag in realising the target of the 5th MDG compared with other South Asian countries) for selecting maternal health as a research issue. Also, there are many fragmented health policies which create tensions between policy implementers and service users. The existing healthcare delivery system appears less well functioning. Unearthing the drawbacks of health policies regarding problems of access and availability and exploring the reasons for the persistent gap between the poor women in rural and urban areas were other relevant objectives. A final aim of the study was to know the attitudes of mothers towards different specific maternal health-related interventions which can bring about positive outcomes in maternal health.

I have used both primary and secondary sources of information for realising the objectives stated above. For primary data the study used triangulation (questionnaire interviews of service recipients and providers, focus group discussion [FGD] and direct observation) with specific objectives of understanding and interpreting the problems, exploring the barriers related to using healthcare services, understanding the conditions of the poor women from their situations. I had selected one region (Rajshahi) from seven regions because of its high MMR and low proportion of births attended by the SBAs. Two urban areas and one rural area were then selected from the chosen region with an objective of exploring differences in terms of the availability and accessibility to primary, mainly maternal, healthcare services between urban and rural areas. Mothers who delivered at least one baby in the last ten years were targeted to be interviewed. The heads of the centres where most of the respondents went for maternal healthcare services were interviewed. Healthcare service users and non-users were targeted to be arranged for FGD in the three regions. Besides these, I collected

many articles, reports (published & unpublished) and books to complement and substantiate the arguments in the thesis.

The study developed two analytical frameworks. The first one discusses the medicalisation process of pregnancy and childbirth, the development of different medical interventions, such as ante-natal care (ANC), SBAs, safe and clean delivery, the effectiveness of these interventions in the reduction of high MMR and how these can bring positive outcomes in maternal health. It also highlights that all these bio-medical interventions address both medically-related direct and indirect causes of high MMR. Social factors—important for high MMR and the acceptance of these interventions—will not be addressed. Addressing social issues and developing a bio-social approach are the main targets of the study.

The second analytical framework focuses on the extent of influence of health sector reform policy—HSRP—(public private partnership [PPP], user fees imposing and waiving) in mother's health seeking behaviour. The PPP brings positive outcomes in people's access to healthcare services by rendering services efficiently. User fees provision deters people from seeking healthcare services and fee waiving system generates either inclusion or exclusion or both errors. How far all these reforms are helpful in increasing the availability and accessibility to primary, particularly maternal, healthcare services at the field level is one of the main objectives of the study.

1.4. Significance of the study

Pregnancy and childbirth in Western countries were considered as social events in which only one intervention—the presence of female midwives or relatives—was needed before the advancements of medical science and technology. Later, these two events were medicalised and many interventions, such as ANC, basic and comprehensive EmOC, and Caesarean delivery, were developed. This whole process first emerged in some developed countries, particularly in the USA and UK, and then it spread in other parts of the developed world. However, all developed countries

did not follow the same procedure. Some developed countries, such as the Scandinavian countries and the Netherlands, have been advocating low level intervention—home delivery in the presence of midwife. Some European countries were also able to cut high MMR before the development of these interventions. After experiencing negative outcomes of over-medicalisation of pregnancy and childbirth and facing various hindrances by strictly adhering to medical interventions, perhaps, the USA is now keen to reinstate the home delivery scheme (but this does not go with the global trend) and has introduced a new mode involving mothers and others with midwifery skills in childbirth or MOMS, as is popularly known in public health discourse (Anspach, 2010; Bergstrom & Goodburn, 2001; De Brouwere, 2007; De Brouwere *et al.* 1998; Johanson *et al.*. 2002; Johnson, 2009; Ledder, 2007; Loudon, 2000). These changes (from instrumental and/or institutional deliveries to home delivery with low interventions) have created mistrust and confusion about the effectiveness of these different bio-medical interventions around the world.

Interestingly, most developing countries are now adopting these interventions bypassing local contextual issues for various reasons, such as ideas and influences emanating from past and ongoing health-related conferences, donor agency pressures and the availability of external funding for particular interventions (Behague and Storeng, 2008; Kruske and Barclay, 2004; Sachs, 2005; Shiffman and del Valle, 2006; and Travis *et al.* 2004). In some cases, such interventions are readily available in the private sector and urban areas, but are costly and not always socially acceptable. These interventions have a tendency to create social inequity rather than reducing class- and region-based differentials in the availability and accessibility to medical services (Fraser, 2005; Hatt *et al.* 2007; Koblinsky *et al.* 2006; 2009; Krupp & Madhivanan, 2009; Ronsmans *et al.* 2009). Exploring how far these interventions are of importance in the Bangladesh context and the extent of poor women's access to these interventions is another aspect needs rigorous research.

Most of the research reviewed (see Appendix 1) was done by academics with medical and public health backgrounds. They certainly sorted out solutions to the problem (high MMR) through their

disciplinary lenses and suggested bio-medical measures. This study tries to analyse the problem from sociological and public health perspectives and to develop a bio-social model on the basis of which a culturally appropriate solution to the problem can be sought. From the methodological point of view, most of the studies used the same methodology but their focuses are unique (accessibility to medical intervention, either urban or rural areas). This study attempts to reveal the connection between social structure and the acceptability of different medical interventions and to explore regional differentials in the availability of and accessibility to primary, mainly maternal, healthcare services. So, it adds the sociological dimension to the availability and access issue.

Only 10 studies, I reviewed, focus on Bangladesh (see Appendix 1). However, the majority of these were conducted in one particular area (Matlab) where the International Centre for Diarrhoea Disease Research of Bangladesh (ICDDRB), a world renowned health research centre, has been engaged in providing services and doing research since the 1970s. All researchers there are very familiar with the local culture, custom and people. Most use the local people as gate keepers for entering the field and making comparison between programmed and controlled areas of research. The rest rely on the national data, which is not always fully reliable (*Daily-Star*, May 3, 2012). No solid conclusions or decisions are hard to make as these studies fail to depict the real situation in the country. There is hardly any study focusing on the northern part of the country. So this study is perhaps the first one to make an attempt to concentrate on the problems of the northern region. Findings and suggestions of this study can contribute to the improvement of maternal health in the studied areas.

I intend to focus on both rural and urban areas. In the urban areas selected, primary, mainly maternal, healthcare services have been provided by one of the collaborative projects between the government and NGOs. Only the government provided health care services are available in rural areas to be selected in this study. So the study will be able to make differentiation in terms of efficiency of operations, economy of scale and effective delivery between public and PPP healthcare

service delivery systems. In addition, suggestions can be made on which model between two could be more feasible to address the gap in terms of availability of and accessibility to medical services between rural and urban areas.

No studies analysed the effects of the lack of a coherent health policy relevant to the notion of 'availability' and 'accessibility' to primary, mainly maternal, healthcare services. This study thus attempts to analyse health-related policies in the light of the policy formulation cycle. This analysis may help investigate power and gender dynamics in Bangladesh society (the people who are involved in policy formulation and implementation) and explore whether these policies create obstacles or provide solutions to the problems of availability and access. Hopefully, this analysis would be of importance from a social policy perspective. Very few academics with sociological background from Bangladesh analyse health-related policies. Therefore, this study should add a new dimension of policy analysis in the field of Sociology.

Though the study will be premised on exploratory research, it also intends to develop a theoretical understanding based on analytical frameworks, which would synthesise new ideas from both the sociological and development studies literature. Few studies deal with the inclusion/exclusion factor in relation to the health of poverty-stricken people of Bangladesh. However, they failed to see this issue from a gender perspective. It is worthwhile to mention here that many projects run by different NGOs have been working to provide PHC services to the poor. Yet, the poverty rate has not been decreasing as desired. One of the possible reasons is that most of the projects failed to reach the targeted poor women due to inclusion error. Another reason is that the decision for poor women to go outside for receiving healthcare services from different centres usually comes from male guardians—whose traditional, patriarchal and dominant mentality does not permit their female family members to go outside for whatever purpose. Poor women are therefore more vulnerable compared to males.

As women's health issues have long been neglected in Bangladeshi culture, this study can attract the attention of the policy makers to appreciate poverty from a gender standpoint. The results could also be useful to both academics and researchers. Budding scholars may do further research on the issues this study will identify. Moreover, the data used in this study could be used by policy makers and development practitioners in other developing countries. Furthermore, the study proposes to highlight the link between health and society, one of the important issues in the social sciences. Other areas that it also wants to deeply dig into include the bio-social model of diseases, perceptions about and accessibility to the existing health systems, and the process of providing PHC services for the improvement of the living standards of the people, particularly the poor, human development index, social safety net and so on. By focusing on all aspects of development, as mentioned earlier, this study will broadly help to assess the road to achieving the 5th MDG.

1.5. Structure of the study

The thesis is divided into 11 chapters. Chapter one has given an impression of the main ideas of the thesis, objectives, research questions and so on.

Chapter two discusses the theoretical aspect of the study. It explores how medicalisation of pregnancy and childbirth took place in the western world and how far this medicalisation process has influenced different interventions for curbing high MMR in developing countries.

Chapter three discusses the barriers service users face when they want to use available services in different cultures. It also explores both direct and indirect causes of maternal mortality and how different interventions address these causes. By explaining them, an analytical framework is developed for this study.

Chapter four gives an idea of Bangladesh to outsiders. Social structural condition, particularly women's position in society, the poverty scenario, and political atmosphere, are highlighted in this chapter. In addition, the healthcare service delivery mechanism is elaborated here.

Chapter five highlights how and where this study was conducted, the types of barriers the researcher faced during the field work and socio-economic conditions of research participants.

Chapter six is an attempt to explain health-related policies in the light of the policy formulation cycle. The debate surrounding HSRP is discussed here. Another analytical framework is developed here for application in this study.

Chapter seven analyses the availability of and accessibility to primary, particularly maternal, healthcare services. Regional differentials in availability and accessibility are highlighted here. In addition, class-based accessibility to MHC services is examined.

Chapter eight classifies all barriers related with healthcare seeking behaviour into three sections: physical, social and organisational. How mothers' perceptions, beliefs and attitudes to pregnancy influence their healthcare seeking behaviour is especially highlighted here. The application of an analytical framework developed in Chapter 6 is shown here.

Chapter nine explores the effectiveness of medical interventions, such as ANC, Caesarean section, institutional delivery, and the presence of SBAs at delivery in reducing the higher risks of pregnant mothers' deaths. How developing countries, especially Bangladesh, can get rid of problems, is suggested here. The extent of application of an analytical framework constructed in Chapter 3 is explored here.

Chapter ten compares the positive experience of Nepal and Sri Lanka in reducing high MMR in the context of Bangladesh with the specific objective of replicating their positive strategies in Bangladesh.

Finally, chapter eleven synthesises the entire study. It also brings out the main findings and shows how the positive experience of two countries of the region—Nepal and Sri Lanka—can be replicated in the context of Bangladesh.

Chapter Two: Medicalisation of Pregnancy and Childbirth

2.1. Introduction

Pregnancy along with childbirth has been transformed from a social to a medical event. Patriarchal and capitalistic ideologies and the supremacy of technology over nature have made major contributions to this transformation. This has resulted in providing the domination of obstetrics, mainly males, in the whole process of childbirth (Barker, 1998; Fox & Worts, 1999; Lowis & McCaffery, 2004; Rothman, 1989). Johanson *et al.* (2002) claimed that the introduction of instruments, particularly forceps, by barber-surgeons, mainly males, for safe baby delivery in the 17th or 18th centuries laid the foundation of an obstetric era. This instrumental mastery has changed the role and status of women in society. It has made not only pregnant women passive but also female midwives subordinate by not allowing them to use these instruments because of their feeble-mindedness, constructed by the so-called patriarchal ideology (Schnorrenberg, 2004). Later, this obstetric politics has begun to show pregnancy as a pathological matter that warrants certain interventions for successfully dealing with abnormal pregnancies (Henley-Einion, 2009; Johanson *et al.* 2002). The Cartesian principle[1] of dissection of mind and body first played a vital role in the medicalisation process which was complemented by chemistry and computer programming (Rothman, 1989). Following the principle of medicalisation of pregnancy and childbirth (MoP&C) and of ascendancy of men over women in the medical industry, different interventions, such as ante-natal care (ANC), Caesarean section in place of vaginal delivery, the presence of skilled birth attendants (SBAs) at child delivery, basic and comprehensive essential obstetric care (B&CEOC), were proposed in different national and international forums, particularly the International Conference on Safe Motherhood (1987) and the UN Millennium Summit (2000), to curb high

[1]The philosophical and scientific traditions derived from the writings of the French philosopher Rene Descartes (1596–1650).

maternal mortality rate (MMR) in developing countries though these were developed in western countries. As suggested by Henley-Einion (2009: 181), the care that the doctors suggest for giving to labouring women and the interventions used to ensure normal safe delivery are based on western notions of time and scientific calculation and on economic aspects of minimising risks. Johanson *et al.* (2002) also claimed that in the 19th and 20th centuries, MoP&C started in a larger extent with the development of certain medical interventions, such as analgesia, anaesthesia and safe blood transfusion.

The main objectives of this chapter are to detail historical developments of the MoP&C and explore the effectiveness of different interventions. Accordingly, the first part discusses the historical development of the MoP&C, particularly in western countries, which is followed by the discussion of factors that influence people's decisions about seeking different interventions. Which approach between the horizontal and the vertical is appropriate to achieve health-related MDGs will be discussed in the third part, while how and why policy makers are divided among themselves in favouring any specific intervention or strategy is highlighted in the fourth part. The final part draws a summary of the discussion.

2.2. Medicalisation of childbirth: historical backdrop

MoP&C first started in the western world in the 17th century with the development of biological knowledge. Before that, pregnancy was a normal physiological development in women's life cycle as is now the case in certain parts of developing countries. Historical documents suggest that childbirth in Britain, as in other places, was considered as a social event which took place at home and in which lay midwives, friends and family members were the birth attendants till the 17th century (Anspach, 2010; Cahill, 2001; Fox & Worts, 1999; Henley-Einion, 2009; Johanson *et al.* 2002). Men handled complicated cases with lethal instruments and either baby or mother or both died before forceps

was introduced by Peter Chamberlen, a barber-surgeon, in the early 17th century (Cahill, 2001; Johanson *et al.* 2002).

The Chamberlen family kept it secret for three generations for consolidating their business interests. They only let people know that they had some preventive measures by which an impacted foetus could be extracted. Later, the barber-surgeon class was able to use it once their design was sold or became widely known. This established men's exclusive rights to forceps and excluded female midwives from using it (Rothman, 1991: 52). However, these small numbers of men-midwives who delivered live babies with the use of forceps began to challenge the traditional roles and functions of midwives. As their services were costly, labouring mothers continued to be attended by midwives. By the next century (18th), medical practitioners were able to secure their influences and statuses in society by using the power of the church and state which began to demolish the reputation of local and non-licensed medical practitioners, such as midwives.

The antagonistic philosophy of medical practitioners against abortion and church against lay women healers (treated as witches) enabled licensed practitioners with their superior knowledge and competent skills to move away from orthodoxy and asserted their intellectual and moral superiority over midwives and pregnant women. This created an environment that supported their dominant position in society, demeaned midwives' significance as they came to be deprived of organisational support and regulations for further training and development and challenged the existing gender order: women were not allowed to go outside in the cold and that offered men-midwives the opportunity to assist in deliveries. Gradually, men-midwives began occupying the dominant position in childbirth practice. All these events suggest that scientific and factual knowledge is inherently male-dominated and males who subsequently claimed primacy over female intuitiveness, empathy and caring. Since then, medicine, religion and the state with its patriarchal ideology simultaneously devalued women's roles and traits and dissuaded them from playing important roles in society (Cahill, 2001; Henley-Einion, 2009; Lowis & McCaffery, 2004; Rothman, 1991).

Scientific advancements in physiology and anatomy attracted men to the midwifery profession. By using their knowledge as physicians and skills as surgeons (the newly-developed forceps proved handy), these male-midwives changed the nature and pattern of midwifery practice. They not only introduced a new concept, that is, 'risk reduction or management'[2] in childbirth discourse by urging that their superior knowledge and scientific practice could help easily manage risky pregnancies (Henley-Einion, 2009) but also begun to be known as 'obstetricians' after around 1828 (Lowis & McCaffery, 2004; Schnorrenberg, 2004). Their overriding position became a threat for women who had previously played dominant roles in pregnancy and childbirth (Henley-Einion, 2009).

The social structure in both the UK and USA also supported the supremacy of men over women in pregnancy and childbirth. Wealthier women had begun to show their preferences for doctors to midwives as birth attendants from the 18th century and this trend became more widespread in the next century. Midwife services were popular in the countryside and among lower class and black women which indicated their income level to have been less compared to doctors who discouraged women from becoming midwives (Lowis & McCaffery, 2004: 20-24). At first, men-midwives became popular among the upper class people, particularly women, who set the standard for the rest of society. This changed women's role in childbearing from active to passive and transformed the delivery place from home to hospital in the mid of the 18th century. However, maternity hospitals were the place where (a small proportion 5-10%) poor women normally delivered until the 20th century (Professor De Brouwere, pers. comm. Feb 13, 2013). This was mainly due to class inequities.

[2] The concept of risk management was basically based on an industrial principle. By reviewing major industrial disasters, it discovered what factors had been responsible for these disasters and what should have been done instead. Within healthcare service industry, this reviewing started in western countries, particularly the USA, in response to litigation claims. This review began to discover a means by which 'adverse clinical events' were identified and how hospitals and other care providers complied with risk management was evaluated. In order to manage risks well, a standard care and guidelines, such as monitoring foetal rate, was developed.

In the late 19th and early 20th century, childbirth began to be considered as a condition that warranted some kind of supervision. The introduction of X-rays between 1900 and 1910 complemented this idea (Henley-Einion, 2009). In addition, two renowned books on prenatal care introduced the medicalisation process in the USA. One was written by Ms Wade (1913) and another by De Normandie (1935). The first book had less emphasis on medicalisation of childbirth than the other one. Seven issues in the former relate to hygienic practices and only two to medical needs, while the first four issues in the latter highlight medical needs. The roles of midwives were not covered in their publications reflecting that they voluntarily wanted to keep midwives out of the rhetoric of maternal health. The plausible explanation for not mentioning the midwives' role was the deliberate attempt to remove 'midwife' entirely from public discourse (Barker, 1998).

ANC can easily medicalise childbirth by using technologies successfully for toxaemia[3] and eclampsia[4] . This success can make a pregnant woman an object and the physician a subject. The ability of a pregnant woman to know her own body through experience and exercising self-hygienic techniques to ensure her health is replaced by her new, primary patient status which necessitates technological monitoring, abstracts her body and creates an asymmetric power relationship between the patient and doctor (Barker, 1998; Rudolfsdottir, 2000).

This practice (medicalisation) is based on a science-oriented perspective, whereby risk is defined as statistical risk, and whereby positive outcomes, finding from mortality and morbidity statistics, are the bases of solutions and improvements. A pregnant woman is declared high risk based on statistics not on her own experience (Van Teijlingen, 2005). By doing so, a powerful and strategic rhetorical attempt was taken for reconceptualising women's health needs (Barker, 1998). Midwifery practice has therefore been limited to a normal birth and continued under medical practitioner supervision (Henley-Einion, 2009).

[3] It was developed in 1843.
[4] It was coined in 1894.

The barber-surgeons of earlier times and the contemporary obstetricians have been able to make midwives subordinate by using their skills to treat abnormal pregnancy in a monopolised way. In Stacey's (1988 in Clarke, 2010: 332) words, childbirth has been moved from private domain (home) where experienced women monitor everything to public domain (hospital) where mainly men supervise everything. The midwife has therefore become dependent on back-up services of obstetricians which they can either provide or deny. This has limited the extent of patron-client relationship between midwives and physicians, particularly obstetricians, who basically create obstacles to the independent practice of the former. The latter has the authority not only to define what is normal and abnormal but also to set the quality of training and care of midwives. For instance, American physicians have not allowed midwives to use any surgical instruments except episiotomy, used for widening the birth canal (Gray, 2006; Rothman, 1991: 76). Thus, both Marxian and Weberian processes of domination in the profession can be applied here. Obstetrics is able to occupy a principal position in childbirth discourse by maintaining a dominant position in social structure (Marxian) and using occupational monopoly and enclosure (Weberian) (Sandall, 2004: 356).

Rapid advancements in obstetric medicine, reproductive technology and pharmaceuticals in the 20th century not only provided women with reproductive freedom but also made them dependent on expert knowledge. So if any pregnancy-related complexity develops, the expert opinion is warranted. This present trend provides obstetrics greater opportunity to exert their influence in pregnancy and childbirth (Henley-Einion, 2009). It is not true that all aspects of the MoP&C are negatives. Biomedicine has contributed to increasing the likelihood of survival of mothers and babies by using different means, such as foetal heart monitoring (FHM), more than others, including folk medicine. The use of antiseptic, aseptic and sulphonamides contributed or has contributed to the reduction of MMR (Henley-Einion, 2009; Johanson *et al.* 2002).

At present, normal labour means electoral monitoring of foetal heart rate, promoting epidurals and constant use of medical and surgical interventions to speed up the delivery process. It thus removes mothers from their normal surrounding and supportive agencies and warns that if they deviate from the given instructions they will face difficulties or risks. It is worth mentioning here that the obstetrics society sets the standard procedures of childbirth which ensures safe management of high risky pregnancies (Henley-Einion, 2009).

This modern engineering obstetric practice has contributed to the reconceptualisation of childbirth from a normal and attended event to an abnormal and managed risk or crisis that has put the domination of technology over nature and provided the ascendency of medicine in childbirth rhetoric (Cahill, 2001; Fisher *et al.* 2006). In Barker's (2010: 151) words, "Medicalisation is the process by which an ever-wider range of human experiences comes to be defined experienced, and treated as medical conditions." This reconceptualisation has provided a biomedical or technocratic model which replaced the natural or holistic model of childbirth (Henley-Einion, 2009). The following section discusses both models in detail.

2.2.1. Biomedical/technocratic model

Basically, this model is based on the dualism of mind and body given by the French philosopher Descartes. The main idea of the Cartesian model is that the body is a machine and how it is structured and worked is the domain of human knowledge. Later, knowledge of chemistry and computer programming has complemented this idea (Rothman, 1989). Like the mind-body dualism, it dichotomises mother and child. Mother and foetus are seen as dyadic than as an integrated relation (Rothman, 1991). Nowadays, the foetus is seen as a part of female body (Rudolfsdottir, 2000) and all birth-related technologies now monitor the development of the foetus within a female body. If this development is found to be abnormal, obstetrics declare this pregnancy atypical and repairment then becomes their main task (Rothman, 1991).

The obstetrician's concern with foetus indicates that they give more importance to the development and survival of the child vis-à-vis its mother's health. The connection between the foetus and mother's body, to some extent, is neglected (Johnson, 2009; Miller *et al.* 2003). As claimed by Rudolfsdottir (2000), the advancements in medical sciences have contributed to the development of perceptions about the foetus as an independent entity of a pregnant mother and, in some extreme cases, as a separate subject. Motherhood is thus seen as a job; the mother's work and her body are the resources from which babies are made, the final product is a baby produced by the labour of mothering and obstetricians are the forerunners or mechanics (Rothman, 1989; Rudolfsdottir, 2000).

All these ideas have contributed to seeing pregnancy as a problematic event and an isolated episode. The obstetricians' job starts when a pregnant mother first comes to the clinic for ANC and finishes after her discharge from the maternity centre. It views the female body as a complex entity which warrants medical intervention(s) to repair malfunctioning. The main function of the obstetricians is to search for and repair the fault. Women should be passive during the whole investigation and repairing process and should understand that normal birth can be possible if they have gone through the whole procedure.

2.2.2. Natural/holistic approach

Pregnancy is viewed as a personal experience and a natural biological event. It seems to have made greater impact on both the physical and mental conditions of a pregnant mother. Being pregnant is seen as biologically determined by the 'feminine' qualities of women. The true woman is one who has strong maternal instincts and whose main vocations in life should be to be a good wife and mother (Clarke, 2010). A woman being pregnant also means changes in her medical and social (job losing, huge burden on partners and others, social welfare benefits) roles and statuses (Meyers, 2001; Van Teijlingen, 2005). Mother and child here are integral parts and, as believed, the need of one part is complemented by the other. Emotional, physical, maternal and infant needs are not at

odds (Johnson, 2008; Rothman, 1991). For instance, pregnant mothers are used to sorting out their relations with their to-be babies through touch and sensation (Rudolfsdottir, 2000). The role of attendants like midwives or *dai* (traditional birth attendant [TBA]) is to teach a pregnant mother how to give birth and to take care of a newborn baby (Rothman, 1991).

2.2.3. Critics of medicalisation of childbirth

Feminist sociologists have argued that MoP&C has basically put motherhood from the social to the medical domain. For instance, Ann Oakley (in Clarke, 2010) has argued that medicine has controlled life forces of women. This model (the management of birth by medical professionals) which ultimately decreases the control of the mothers birthing children, fails to improve the physical and emotional outcome of the birth, and deprives women from enjoying and empowering capabilities. In other words, as gender experts claim, it disempowers women and is threatening to women's health and well-being (Cahill, 2001; Fisher *et al.* 2006; Fox & Worts, 1999; Rudolfsdottir, 2000). Gray (2006) has claimed that it has therefore begun to treat pregnancy as a disease state and reported that, in some cases, some forms of medical technology, such as ultrasound and induced births, were misused and overused. Furthermore, some feminists have argued that viewing pregnancy as a disease is a male perspective which claims male dominance in MoP&C (Lowis & McCaffery, 2004: 29).

Besides these, feminist bioethicists and practitioners have claimed that MoP&C makes pregnant women sources of medical investigations. Women are, in many situations, constantly under medical surveillance through three stages of pregnancy—pre, delivery and post. Medical doctors and nurses are constantly doing various tests to ensure that mothers are complying with the best medical norms and each foetus is developing well. For instance, ultrasound and FHM are undertaken in regular visits during the last trimester without the ethical ground about doing these tests all the

time. All these tests ultimately disembody and alienate mothers and make foetuses commodities (Johnson, 2008: 893-894).

2.2.4. Re-emergence of home birth with midwifery services

The criticism of bio-medical model's misuse or abuse of drugs and instruments resulting in adverse consequences on the health of mother and child has led some feminist groups in developed countries, particularly the USA, to advocate home birth with midwifery services. There are three models—home births using lay midwives, home births using nurse-midwives and delivery by nurse-midwives in freestanding birth centres—that have begun to be popular as alternative models in Western countries (Anspach, 2010: 241). The Scandinavian countries and Netherlands are advocating for low level interventions in childbirth (Johanson *et al.* 2002: 893). That means, they officially prefer home to hospital births with midwifery services. Nowadays, the World Health Organisation (WHO) and the International Confederation of Midwives (ICM) are trying to introduce a new term 'mothers and others with midwifery skills' (MOMS), replacing the SBA concept in the safe motherhood discourse (Johnson, 2009). One reason could be that international organisations are trying to roll back to midwifery services by realising the grave consequences of over-medicalisation of pregnancy and childbirth.

2.3. Different interventions

Since the early 1920s, colonial missionaries introduced training of the TBAs in the non-Western world as part of their efforts to provide healthcare and education. As the TBAs were an important part of local communities in many developing countries, the Alma Ata Conference (1978) documented some of their potentialities that could be used to provide primary healthcare services at the doorsteps of the people. Thus, WHO actively promoted the training and recognition of TBAs throughout the 1970s and 1980s and along with many international agencies like UNFPA, UNICEF, World Bank, International Planned Parenthood Federation, and Population Council, sponsored the

Safe Motherhood Conference. These funding agencies became the founding members of the Safe Motherhood Inter-Agency Group (IAG) (Kruske and Barclay 2004). All participants at the conference agreed to set a target to reduce MMR by half by the year of 2000. By 1990, member states had approved a strategy, known as the Safe Motherhood Initiative (SMI), to realise the objective set at the Nairobi conference. Some means[5] were recommended to meet the objective (Shiffman & del Valle, 2006).

By 1996 MMR was either increasing or remaining stable. World policy makers identified poor literacy and lack of scientific knowledge of the TBAs the leading causes for failing to lower the existing MMR (Kruske & Barclay, 2004). As bleeding, sepsis and obstructed labour appeared responsible for half of this two-third mortality, policy makers or health promoters thus turned their attention to the SBAs as an immediate measure to reduce this trend of maternal mortality (Maclean, 2005: 272). They thus changed the language from 'trained attendant' to 'skilled attendant' in policies addressing safe motherhood by recognising that someone receiving training is not necessarily skilled. In 1997, the IAG organised technical consultation in Sri Lanka to discuss the effectiveness of the SMI and to recognise skilled attendance at birth as the critical intervention for safe motherhood. It is worth mentioning here that many international conferences such as the ICPD+10 (1994), Beijing (1995), held before the Sri Lanka Consortium, at which skilled birth attendance was taken as a significant indicator of progression in maternal mortality reduction.

Family planning, ANC, safe and clean delivery, and essential obstetric care (EOC) have become the main pillars of the SMI (Ahmed, 2005; Johnson, 2009). It seems that MoP&C has had greater influence in formulating pillars which replaced many aspects of the social model of childbirth (normal birth at home by TBAs). Accordingly, many interventions, known as vertical, have been

[5] Increasing capacity and quality of institutional delivery care, providing birthing centres for low risk deliveries, increasing social participation and mobilising communities to identify pregnant women, establishing epidemiological surveillance of pregnant women and increasing capacity for countries to design programs and improve home delivery care through continuing education of TBAs and other personnel involved in home delivery.

proposed and taking place for addressing these pillars. Among them, the most important are ANC, training of the SBAs in place of TBAs, and B&CEOC (home or facility centre delivery, normal or Caesarean delivery). The main reasons for vertical interventions are the provision of a quick response to the problem, intense competition between subfields and easily attracting the attentions of funders and policy makers (Behague & Storeng, 2008). The following sections deal with their strengths and weaknesses and how different interventions could be implemented effectively.

2.3.1. For and against of ante-natal care program

A debate about the effectiveness of the ANC has been emerging around the world. On the one hand, no substantial evidence supports the ANC services for routine measurement of maternal height and weight, and identifying women's life threatening complications. For instance, a study in Tanzania revealed that, of the 24 percent of women who had attended antenatal clinics, 71 percent never received blood pressure check-up, 55 had no blood test, 61 had no urine test and 71 did not receive any health education (Maclean, 2005: 288-89). It has been argued that ANC visits appear to influence pregnant mothers' selection of birth place and attendance during delivery. The study also assumed that pregnant mothers with ANC prefer delivering babies with SBA assistance in facility centres. However, the data from South Asia and sub-Saharan Africa shows that pregnant women with ANC do not take the services of SBAs. The average ante-natal coverage rate in developing countries was higher and the figures for a single visit and four-time-visit were 68 and 60 percent respectively (Stanton *et al.* 2006). Rooney (1992 in Maclean, 2005) found effectiveness of the ANC: it helps prevent, detect and investigate anaemia; detects and investigates pregnancy-related hypertension; treats severe pre-eclampsia and eclampsia; and prevents primary infection and screen for infection. Many factors, such as poverty, illiteracy, culture, religious tradition and practices, and inadequate resources, were found to be making hindrances to the success of the ANC program in the reduction of high MMR in developing countries (Maclean, 2005).

2.3.2. Debate about traditional and skilled birth attendants

Women in many countries, including Bangladesh, have a general tendency to be lower-level health workers, such as nurse and midwives, due to poverty and a very few number of women are able to occupy highly trained professional and managerial positions. In Bangladesh, slightly over 20 percent of health workers are females (Zurn *et al.* 2004: 9). Most of the specialised female doctors usually prefer working in urban areas though there are no statistics on what proportion of female health workers are working at upper levels. The current data from different South Asian countries reflects the real situation in the health sector. The proportion of physicians per 1,000 people in Bangladesh, India, Nepal, Pakistan and Sri Lanka is 0.3, 0.6, 0.2, 0.8 and 0.6 respectively, while the nurse proportion in these countries is 0.3, 1.3, 0.5, 0.4 and 1.7 correspondingly (WB, 2010).

Lower status female health workers, such as trained or untrained TBAs[6], locally known as *'dai'* are therefore present during most deliveries occurred in developing countries. As mentioned earlier, safe and clean delivery is one of the pillars of SMI. However, it is assumed that TBAs are not always capable of carrying out safe delivery. In order to ensure safe and clean delivery, the presence of the SBAs[7]during delivery is given more emphasis. Accordingly, the 5th MDG sets the target of increasing the SBA rate. Nonetheless, both TBAs and SBAs have strengths and weaknesses.[8] These are discussed below.

2.3.2.1. Positive sides of the traditional birth attendants

The most important functions that TBAs usually perform are parturition, cutting the umbilical cord, properly disposing of the placenta, bathing both mother and child after delivery and cleaning the

[6] WHO defines TBA as "a person who assists the mother during childbirth and who initially acquired her skills by delivering babies herself or through apprenticeship to other TBAs.

[7] WHO also defines SBA as a health provider who has at least the minimum knowledge and skills to manage normal childbirth and provide basic (first line) emergency obstetric care (Kruske & Barclay, 2004).

[8] It is worth mentioning here that policy makers in developing countries are engaging in a debate on who should be considered as the SBAs though they all agree with the definition of the SBA given by WHO. Only physicians and midwives have been considered as SBAs in some countries, whereas physicians, midwives and semi-skilled health workers (such as community health worker) are recognized as SBAs (Fortney, 2007).

birthing place. Soothing, massaging and holding the birthing mothers for easing their labour pain are also their activities (Saravanan *et al.* 2010: 96). A substantial number of evidence shows that trained TBAs can easily identify dangerous signs of pregnancy at an early stage (Islam & Malik, 2001), reduce blood loss at delivery time by using transparent plastic measuring jugs (Walraven & Weeks, 1999), use hygienic procedures—clean hands, surface and cord—(Amin & Khan, 1989: 124), administer tetanus injections (Asghar, 1999) and Misoprostol (Bradley *et al.* 2007; Prata *et al.* 2009; Saravanan *et al.* 2010) and refer complicated cases to the facility centres at the proper time (Islam & Malik, 2001). By performing all these activities, trained TBAs can help pregnant mothers deliver their babies efficiently and prevent postpartum haemorrhage (PPH) and infection that would ultimately improve maternal health.

A study claimed that acute PPH and mean blood loss were averted by administering the Misoprostol orally by semi-skilled birth attendants in rural India (Saravanan *et al.* 2010: 111-12). Loudon (2000: 243S) and De Brouwere (2007: 555-56) found the effectiveness of trained midwives in positive outcomes of maternal health in the UK and USA respectively. MMR in Farafenni (Gambia), Faisalabad city (Pakistan) and Nigeria was reported to have been reduced when pregnant mothers began to receive assistance from trained TBAs. China, Malaysia, Sri Lanka and Thailand have been able to reduce high MMR by restarting or continuing TBAs trainings and utilising their services (Bergstrom & Goodburn, 2001).

However, pregnant women in developing countries usually prefer TBAs services. Many studies[9] suggest different reasons for such preference. Some are respecting local customs and values, holding the same belief system (childbirth is believed as a natural and God-gifted thing which does usually not require professional healthcare services) and easily expecting emotional support (food and warm water before and during childbirth) because of their being from the local community. The rest are: their services are culturally accepted, their service fees are minimal, they sometimes even

[9] Bisika, 2008; Carlough & McCall, 2005; Kruske & Barclay, 2004; Murakami *et al.* 2003; Paul & Rumsey, 2002; Ronsmans *et al.* 2009.

provide services free of costs and they encourage pregnant mothers to seek appropriate care on time and to practise hygienic procedures during and post delivery periods.

In summary, a pregnant woman usually needs someone who gives her affection, encourages her to be patient, helps her relieve anxiety and nurse the baby if she deliveries babies normally. A TBA as an experienced woman can easily accomplish all these activities. However, it should be remembered that TBA is not an efficient person to handle complicated cases. In complicated situations, the presence of specialists (midwives or obstetricians) as birth attendants and the availability of tertiary medical services are vital.

2.3.2.2. Negative sides of the traditional birth attendants

The status of TBAs varies from society to society. In some countries like Syria, Turkey, and Lebanon, the TBA practice was not legally recognised. In other countries, such as Sri Lanka, Tanzania, and Zambia, TBA activities are socially approved bereft of legal recognition. However, in Pakistan, TBA is not only recognised but also incorporated into the healthcare system as an important health care support for both children and mothers. In some societies, their position is high. Conversely, as they handle pollutants during or after delivery, they are considered of low status (Kruske & Barclay, 2004). A study shows that the '*dais*' in rural Bangladesh are rated lowly. This makes them socially vulnerable and often they do their work without being paid or are shy in demanding fees for their activities/services. Some Muslim *dais* believe, "the road to heaven is a straight way for a person who helps deliver 101 babies without taking any remuneration" (Islam, 1989 in Rozario, 1998: 161). As *dais* do not enjoy high esteem, their recommendations and opinions have no value in the society. Even if they are trained, they are ridiculed by villagers when they come with their kits to deliver babies (Rozario, 1998).

Of course, they have some limitations—being highly illiterate, are of old age, not adequately supervised or mentored, lack equipment, supplies, and logistical support, are fully dependent on unsafe traditional instruments, have no scientific knowledge and delivery skills, and are forced to use unhygienic procedures. Thus, they are unable to handle complicated cases which can put the lives of pregnant women at serious risk (Carlough & McCall, 2005; Khan & Islam, 2006; Kruske & Barclay, 2004). For instance, a Nigerian study found that some of the medications, such as animal dung, flies, scarification marks, and cow urine, which TBAs used for treating pregnant mothers, might cause infection that could ultimately force them at higher risk of deaths (Ofili & Okojie, 2005). TBAs in Malawi work in a poor environment in small dirty rooms with inadequate lighting, using poor equipment and unsterile procedures. Consequently, the quality of care they provide is poor (Bisika, 2008).

Like Western countries where traditional midwives, as argued by many western feminists, were driven out of birthing by dismissing their services as 'unprofessional and unscientific' (De Brouwere, 2007; Green, 2008), the acceptability of the TBA's services in developing countries is under threat due to misconception and propaganda made by different agencies, such as professional groups, particularly doctors with obstetric background and professional midwives, internationally known health-related think tanks, and academics (Pillsbury, 1982). As discussed earlier, the criticism of traditional midwife's or TBA's unprofessional and unscientific services has led to the dominance of the bio-medical model which gives more emphasis on the significance of medical doctor (SBA)'s services and draws attention away from the importance of public health measures that can contribute to reduce preventable MMR in a limited extent (Ledder, 2007).

2.3.2.3. Positive sides of the skilled birth attendants

As SBAs come from city areas and have better educational background in comparison to TBAs, they can easily perform more efficiently than others. For instance, maternal and child health workers

(MCHWs) with training performed better than untrained MCHWs. The educational level of the MCHWs appears to have an impact on their performance (Carlough & McCall, 2005). They work in a facility centre which has more advantages, such as an enabling condition, that help serve many people at a time with good referral system (Blum *et al.* 2006).

2.3.2.4. Negative sides of the skilled birth attendants

There is no doubt that SBAs are more competent in comparison with other allied health personnel in delivery skills. However, some problems arise when they are deployed in rural areas where the literacy rate is rather low. This restrains them from communicating with the local people. Their deployment increases program costs as they are provided with accommodations and incentives. Acceptability of their services depends on users' perceptions about their roles. Women often perceive them as rude, impersonal and arrogant as they undertake culturally sensitive practices like routine vaginal examination and lithotomic birthing position assessment. The waiting time, experience, age and gender of service providers appear to discourage women from not accessing their services. They are treated, in most of the cases, as 'outsiders' in the areas they provide services because of their urban and higher educational backgrounds (Kruske & Barclay, 2004). This attitude dissuades people from accepting their services. Rozario (1998) suggests that professionally provided services in rural Bangladesh fail to recognise the perspectives and actual situations of the villagers, including women giving births, their families and dais. Another study done at Matlab (Bangladesh) found SBAs facing organisational (lack of transportation, environment and supplies of equipment and drugs), cultural (not accepted their service patterns) and personal (insecurity on the way) difficulties carrying out deliveries at home (Blum *et al.* 2006).

2.3.3. Basic and comprehensive emergency obstetric care

Accessibility of pregnant mothers to facility centres and using Caesarean section in complicated situations for delivering babies are considered as vital indicators of measuring the availability of the

B&CEmOC. However, a debate has been growing about the selection of birthing place and mode at both theoretical and practical levels. The following section highlights this debate.

2.3.3.1. Home versus hospital/clinic delivery

Socio-economic status of pregnant women and their families, health status of pregnant women, physician's decision and cultural tradition appear to influence people's selections of birthing place. The following section discusses factors that influence people's choices of either home or facility centre.

2.3.3.1.1. Factors associated with home selection

Various studies sorted out many reasons for selecting home as a birthing place. Some are lower level of mothers' education and occupation, lower yearly income (Wagle *et al.* 2004)[10], very well-known attendants, home environment (Borghi *et al.* 2006)[11], availability of TBAs everywhere (Suwal, 2008)[12], easily made communication with TBAs, dependent on husband decision, family responsibility (Koblinsky *et al.* 2009)[13], no need to travel (Borghi *et al.* 2006) and difficult to find transportation facility (Khan & Islam, 2006)[14]. The rest are long distance to maternity hospital with facilities for Caesarean section (Koblinsky *et al.* 2009; Wagle *et al.* 2004), low cost, flexible payment systems of informal attendants (Borghi *et al.* 2006), direct and indirect costs related with facilities (Koblinsky *et al.* 2009), young age at marriage, late age at menarche, multi-parity, having no ANC (Wagle *et al.* 2004), poor quality of healthcare services in the facility centres (Khan & Islam, 2006), fear of referrals to district level facilities and previous bad experience with the existing facilities (Koblinsky *et al.* 2009).

[10] A cross sectional study was done in Nepal from June 2001 to January 2002.
[11] The study conducted eight districts in Nepal.
[12] Study base is Nepal.
[13] Study base is Bangladesh.
[14] Bangladesh is the study area.

2.3.3.1.2. Factors associated with facility selection

Physicians appear to have greater influence on deciding on the mode of delivery. More often than not, they force pregnant mothers and their relatives to opt for Caesarean section in hospitals instead of vaginal delivery at home. For example, more than a half of the middle class Brazilian women followed the Caesarean mode because it is more convenient for physicians; many of them were unwanted and most of the women were uninformed. In the UK and USA, 17 and 46.2 percent obstetricians respectively preferred Caesarean over vaginal deliveries (Grisaru & Samueloff, 2004). Borghi *et al.* (2006) reported that safety and staff experience worked as important factors leading women to seek facility-based birth care. A Ghanaian study found the majority of women preferred delivery in health facilities for various reasons, such as staff attitudes, cost of services, access and recommendations from family and friends, previous experience, administrative arrangements, general environment of the facility, availability of a known person in that facility, proximity of a facility, confidentiality and privacy (D'Ambruoso *et al.* 2005).

2.3.3.2. Caesarean versus normal delivery

There is debate on the safety of the Caesarean process. One study, for instance, found that Caesarean section is probably neither less than two nor more than four times more hazardous than the normal delivery. The rate of direct maternal deaths among women with normal delivery and without acute antenatal obstetric problem was six, while that among women with elective Caesarean was 23 (Harper *et al.* 2003). The pregnancy-related MMR seemingly found larger in Caesarean than in vaginal delivery (Alexander *et al.* 2003; Grisaru & Samueloff, 2004). However, this does not mean that vaginal delivery is always safer. Both mother (urinary and anal incontinence, pelvic floor dysfunctions) and baby (low birth weight) may face troubles for delivering baby vaginally in a repeated manner (Barbieri *et al.* 2000; Bek & Laurberg, 1992; Connection, 2006; Sakala & Corry,

2005). Needless to say that the risks of spontaneous normal delivery for mother and child are low compared to other modes of delivery.

2.4. Connection between vertical and horizontal approaches

Many donor agencies have developed an implicit assumption that the healthcare system can be strengthened by implementing specific disease-oriented intervention, known as the vertical approach. However, experience to date shows contradiction with the assumption that if healthcare systems are unable to provide adequate health workforce, supply drugs and finance and proper information systems, the disease control program ultimately makes those healthcare systems weaker. The already weak systems could be further compromised by over-concentrating resources in specific programs, leaving many other areas under-resourced. It also generates some difficulties, such as duplication, distortion, disruption, and distraction, when parallel programs run at the same time. The impact of the specific disease-oriented intervention can easily be understood. On the other hand, the basic health care systems—known as horizontal approach—can create a variety of options, address root causes and bring benefits for all. However, people need to wait for a longer period to get its benefits and its efforts are sometimes unfocused and unmanageable. Finally, the basic health care system is a complex anatomy and physiology; improving coverage and quality of care can only address one or more root causes of it (Criel *et al.* 1997; Criel *et al.* 2004; Travis *et al.* 2004). The UN Millennium Project warns that the specific disease control program should not bypass the basic health care system. If so, it will ultimately make the existing basic health care system less well functional as it uses the same management structures and creates competition among competent skilled staff. It is thus suggested that healthcare services should be delivered in a way that can strengthen stewardship, human resources and management of services which will bring good health outcomes. In other words, it is imperative to create strong basic health care systems for getting sustainable health outcomes (Sachs, 2005: 78).

A specific disease-oriented program can therefore produce better results in maternal health when they are backed by a good basic health care system. For instance, no difference in outcome was found in Congo, Malawi, Tanzania, Uganda and Zambia regardless of whether nurses, medical assistants or obstetricians attended at birth. The main reason for this failure was that attendants were not supported by an enabling condition in which functional infrastructure, effective systems of communication and transport, adequate equipment and supplies and supportive regulatory framework and policies were present though they all had training on carrying out operative obstetrics, including Caesarean section (Maclean, 2005: 290). Ronsmans and Graham (2006: 1198) proposed that the MMR in sub-Saharan Africa and South Asia would have been reduced to the expected mark if strong basic health care systems in which midwives were backed by an enabling environment had been ensured. It is a well-known fact that the SBAs or TBAs with or without training cannot be effective in lowering high MMR unless they are backed up by an enabling environment and a link between them and clients (community people) (Bisika, 2008; D'Ambruoso *et al.* 2005; Gbangbade *et al.* 2003).

2.5. Tension among policy makers

There has been a growing debate on which approach between technical and social should be adopted and how the shortage of skilled health staff should be addressed. Some argue that technical efforts are necessary, while a few suggest social interventions. Different countries adopted different ways, such as upgrading lower level health workers (LLHWs) with proper training to offset the shortage of skilled health personnel in rural and remotest areas. The following section highlights all these issues.

2.5.1. Intervention-related

Policy makers are advocating different ways to lower high MMR. However, some are in favour of more biomedical-focused technical emergency interventions that ensure not only the availability of

blood and drugs for treatment of eclampsia, haemorrhage, infection but also accessibility to basic surgery for Caesarean section. Others are trying to put more importance to effective basic health care organisation, including home or hospital delivery, alternative birth attendants and maternal waiting homes to improve referrals of complications. Very few advocate public health-oriented social interventions that encourage women to be pregnant at a late age and to use contraceptives. Policy makers fail to make consensual judgement on the effectiveness of interventions in reducing MMR. For instance, two countries with the same levels of technical inputs, such as numbers of emergency facilities, or percentage of births attended by SBAs, achieved different results in maternal health outcomes. No concrete studies have dealt with the relationship between an entire health system of any country and maternal health outcomes. It is not difficult to achieve a maternal health outcome (the reduction of maternal mortality and morbidity) if specific disease-oriented intervention with strong basic health care system back-up is implemented. Parkhurst *et al.* (2005) argue that it is easy to find out internationally known interventions for lowering mortality but much more complex to implement them within the constraints of the existing system .

Public health experts and academics are engaged in a debate on which approach between vertical and horizontal[15] is more suitable for improving primary, particularly maternal, health status. Policy experts[16] generally formulate policies by doing randomised controlled trials, which are supposed to be scientifically unnecessary but politically and professionally important. Contextual, observational epidemiology and multidisciplinary research is not scientific rather merely operational in form. Conversely, the academic community proposes policy by explaining specific problems with consideration of context and multidisciplinary approaches (Behague & Storeng, 2008). Thus, policy experts are in favour of the vertical, whereas academics support the horizontal approach.

[15] Vertical approaches are generally disease specific and promote targeted clinical interventions that provide healthcare services by specialized doctors. In contrast, horizontal approaches mainly focus on several interrelated health issues by strengthening basic health care systems and developing integrated healthcare delivery mechanisms.

[16] Professionals from United Nations agencies, international non-government organizations and developing country governmental levels are included in this category.

2.5.2. Addressing health personnel shortage

In theory, medical officers and other medical personnel can perform WHO-defined all EmOC[17] procedures like manual removal of a retained placenta, suturing of vaginal tears, vaginal delivery, and management of an incomplete or septic abortion. Only a few countries follow this practice. For instance, Congo, Mozambique and Nepal provided training to locally recruited midwives, non-doctor assistant medical officers, and nurses and midwives respectively for performing EmOC services, including Caesarean (Mavalankar & Rosenfield, 2005). Health personnel shortage at BOC[18] and EmOC service levels in developing countries could therefore be enhanced by upgrading the LLHWs with appropriate training. Egypt, Honduras, Malaysia, Sri Lanka and Thailand have done it (Rosenfield *et al.* 2007), while India introduced innovative strategies—obstetricians providing anaesthesia to fill in for trained anaesthetics or nurses (Clyburn *et al.* 2007). The initiatives in Malawi, Mozambique and Tanzania included the training of non-physicians to provide obstetric surgery and other life-saving procedures. In India, again, general practice physicians were trained for practising Caesarean section and anaesthesia in emergency obstetric situations (Rosenfield *et al.* 2006).

Some argue that upgrading LLHWs through short-term birthing-care-skill training and deploying them in remotest areas is cost-effective as their training and maintenance cost is lower compared to mid- and high-level health personnel. Recruiting, posting and retaining them in rural areas are easy as they do not have many options. Rural people easily accept them as they come from the same socio-economic background (Koblinsky *et al.* 2006: 1383). The experience from Myanmar, Pakistan and Sri Lanka shows that the cost of training one physician is equal to that of 2.5 to 3 nurses. Many studies also report that non-physician clinicians, midwives and nurses can perform the same functions—conducting safe and clean delivery—like physicians if they are trained well. It is thus not

[17] Emergency obstetric care (EmOC)
[18] Basic obstetric care (BOC)

difficult to bring all mothers under healthcare services without compromising quality care (Wirth, 2008). Following the same principle, Koblinsky *et al.* (2006: 1383) proposed that a team of one midwife and two assistant midwives working together could be more cost effective in terms of their performance in annual birth attendance. Giving training to LLHWs, such as TBAs, is sustainable as a trained attendant will train a family member who can take her position after she retires. For this reason, both policy makers and donor agencies should pay due attention to the training of TBAs (Banajeh, 2005).

Another study shows how training of TBAs by Gonoshasthaya Kendra brought positive results in attempts at reducing MMR in rural villages in Bangladesh. With more than 80 percent safe deliveries at the hands of TBAs, it is indeed possible to achieve objectives in rural areas where SBAs or doctors are unavailable and well trained low-cost TBAs can be given the task of delivering babies. The study recommended that TBAs should be integrated into the formal health care system at the union level for further improvement to MHC services (Chaudhury & Chowdhury, 2008). Sachs (2005) contends that by imparting training to traditional healers and engaging them to aid sick people in some parts of the developing countries would be one of the best possible ways for addressing the shortage of health personnel.

Sibbald *et al.* (2004 in Krupp & Madhivanan, 2009) suggested seven strategies for addressing health personnel shortage: enhancement of existing work roles; substitution of one type of worker for another; delegation of functions up or down the traditional role ladder; innovation in designing new jobs; transferring or relocation of particular roles or services from one healthcare sector to another; and liaising between specialist and health worker. Gujarat and Tamil Nadu, two provinces in India with the highest MMR and shortage of trained health personnel, used different strategies in lowering MMR. In Gujrat, the government developed a public private partnership between government and private obstetrician/gynaecologists, relocated their practices from the public to the private sector and provided service charges to providers directly through vouchers.

Tamil Nadu used a variety of strategies like enhancement of the capacity of non-specialised physicians and nurses. Doctors with MBBS degrees are trained in surgery, obstetrics, anaesthesia and radiology to cope with the shortage of specialists. Staff nurses are given first aid training for preventing PPH and practising birthing properly (Krupp & Madhivanan, 2009). Chen *et al.* (2004) argue that every country, either poor or rich, should have a national workforce plan which takes the current situation into consideration and addresses workforce needs. The main aim of the plan would be ensuring access of every family member to a motivated, skilled and supported health worker. To ascertain people's access, they recommend some strategic suggestions for all countries: developing national workforce strategic plans to strengthen national health systems; examining and increasing investments in appropriate education, deployment and retention of human resources; establishing an international mobility regime in which no migration for medical workforce is allowed; and finally, working both global health and finance policy makers together to ensure a fiscal environment that helps workforce development.

2.6. Summary

Capitalistic, patriarchal, religious and technological ideologies have made significant contributions to the establishment of domination of men-midwives over females and of the pre-eminence of technology over nature in pregnancy and childbirth which are the founding stones of MoP&C. This process produces a bio-medical model which ultimately replaces the social model of childbirth. Later, global politics has led this process to advance and moved pregnancy and childbirth from being social to being medical events.

All pregnancy and childbirth-related interventions, such as ANC, SBAs, Caesarean section, and B&CEmOC, are the results of this process, developed in industrialised countries, and donor driven though they were and still are proposed in different forums. All these have both pros and cons. No robust statistical data claims the efficacy of any one of these in preventing or reducing high MMR.

However, as found, no interventions are effective without the support of a robust basic health care system. Therefore, policy experts are in favour of vertical, while the academics favour the horizontal approach.

Currently, the dominant discourse in maternal health rhetoric is to increase the proportion of SBAs at delivery (one indicator of the 5th MDG). As many developing countries have a huge shortage of SBAs, they have taken many strategies like upgrading LLHWs with shorter training, providing medical graduates training in specialised fields, such as anaesthesia and surgery, for addressing this issue.

This chapter has contributed to providing a solid idea of how a medicalisation process of pregnancy and childbirth occurred in the developed countries. This understanding helps me to navigate to what extent a medicalisation process occurred in Bangladesh and to explore the extent to which poor women have access to these different medical interventions.

In the next chapter, I will review availability, accessibility, safe motherhood and MDGs-related literature to identify the types of barriers, people, particularly pregnant mothers, face when they want to use available healthcare services. The chapter will also explore causes of maternal mortality and search the relevance of these interventions in addressing these causes. By doing so, an analytical framework will be developed to apply in this study.

Chapter Three: Empirical Ground of the Ideas Developed

3.1. Introduction

As indicated in Chapter 1, the main focus of this study is to explore poor women's accessibility to and availability of primary, particularly maternal, healthcare services in Bangladesh where other forms of healthcare services, such as homeopathic, allopathic, folk-medicine, etc, are more readily available. For addressing the high population growth problem, the Bangladesh government formulated a population policy in 1976 and attempted to deliver family planning (FP)-related healthcare services to a greater extent than general or primary health care (PHC). The concept of PHC started receiving more attention after the 'Alma Ata Conference' [19]held in 1978 which led the Bangladesh government to plan the setting up of rural centres for providing basic healthcare services to all. Meanwhile, the International Conference on Safe Motherhood held in Nairobi in 1987 sought to create pressure on all governments for ensuring the safe delivery of newborns. As Bangladesh endorsed the 'safe motherhood initiative' (SMI), maternal health issues became important dimensions of PHC services. The government set up 'mother and child health' (MCH) centres for ensuring the safety of both mother and child. This move was later complemented by the outcome of the International Conference on Population and Development (ICPD) held in 1994 which aimed at attracting the world leaders' attention to the issue of reproductive health. These three conferences (Alma Ata, SMI and ICPD) created such an environment at both national and international levels that developing countries, including Bangladesh, were ethically obliged to shift

[19] The World Health Organisation (WHO) and United Nations International Children's Emergency Fund (UNICEF) organised this conference and all affiliated member states attended the conference. The main aim of the conference was to ensure health for all by the year 2000 and to make the essential health care services accessible and available at a cost that the country and community could afford. Five basic principles were set up: equity, participation, appropriate technology, prevention and an international approach to public health problems (Streefland & Chabot, 1990).

their focus from population control to reproductive health[20]. Women and their health thereby became critical issues in health governance. Meanwhile, the United Nations sponsored 'UN Millennium Summit' in 2000[21] that set targets for several human development indicators. Eight goals with 18 particular targets and 48 indicators were identified as critical in human development. These together came to be known as the Millennium Development Goals (MDGs) to be attained by 2015. Among eight goals, three are health-related of which one (the 5th) focuses on maternal health issues. This study is related to the 5th MDG in the context of Bangladesh. The following table shows MDG-related all goals.

Table 3.1 Millennium development goals

Goal 1: Eradicate extreme poverty and hunger
Goal 2: Achieve universal primary education
Goal 3: Promote gender equity and empower women
Goal 4: Reduce child mortality
Goal 5: Improve maternal health
Goal 6: Combat HIV/AIDS, malaria and other diseases
Goal 7: Ensure environmental sustainability
Goal 8: Develop a global partnership

The main target of the 5th goal is to improve maternal health by lowering high Maternal Mortality Rate (MMR) by two-thirds between 1990 and 2015 and increasing the proportion of Skilled Birth Attendants (SBAs). Accordingly, Bangladesh set a target to be achieved by 2015. As said in Chapter 1, it will probably take longer to achieve the target due to persistent massive inequality in emergency obstetric care (EmOC) service provision. The study is therefore an attempt to explore the factors responsible for the country's lag in achieving the 5th goal and to explain the reasons that obstruct poor women from accessing and availing themselves of safe motherhood-related PHC services.

In order to explain this, it is important to explore the empirical and conceptual literature to understand aspects of accessibility and availability, the SMI, maternal mortality and the MDGs and place them in the context of a poor developing nation. The first part discusses accessibility and

[20] Population control programs gave emphasis to child health, while reproductive health-related programs are focusing on both MCH.
[21] This Summit was participated by 190 countries with 145 heads of states/governments in attendance.

availability by highlighting barriers women face. The second part explores possible reasons for the success and failure of SMI in different countries. The third deals with both biological and social causes of maternal deaths. The fourth part discusses ways of achieving the MDGs at practical levels—locating the connection between political will and maternal health. In doing so, community-based success stories have been highlighted. An analytical framework is developed in the following part. The discussion in these sections is synthesised in the final one.

3.2. Accessibility and availability

Research findings from different studies led to suggestions for making maternal health care (MHC) services available at the doorsteps of pregnant mothers as one of the possible ways of addressing high MMR. However, evidence from different societies shows that pregnant mothers are sometimes unwilling to accept and utilise healthcare services for several reasons in spite of their availability.

3.2.1. Classification of barriers

Some of the reasons provided in different studies[22], are:

Socio-cultural: Cultural preferences, women's lack of decision making power, harmful cultural tradition and taboos, wrong or right perceptions about service personnel and quality of care, lack of knowledge about where to find out or search for proper care and treatment and when institutional care needs to be sought were some reasons. Also, in some cases, husbands' decisions against the need for healthcare for their wives and the low status of women in society were reasons.

Financial: Poverty, high cost of obstetric care and lack of medical insurance.

Physical: Long distance travel to healthcare facilities and lack of proper transportation.

[22] Borghi *et al.* 2003; D'Ambruoso *et al.* 2005; Johnson, 2009; Koblinsky *et al.* 2006; Maclean, 2005; Miller *et al.* 2003; Ogujuyigbe & Liasu, 2007; Parkhurst *et al.* 2005; Suwal, 2008.

Organisational/institutional: Poor quality of services, absence of healthcare providers from the centre, attitudinal problems of service providers, unreliability of institutional structures, frustration among healthcare personnel for lack of job satisfaction and career advancement were some reasons. Others were the deficiency of equipment, supplies, trained personnel (including nurses, anaesthetics, paramedics) and technical know-how at health facilities, inadequacy of space in hospitals, inattentive care of babies, whimsical decisions on the use of beds, fear of the intensive practice of healthcare providers (Caesarean mode of delivery), and, last but not least, poor or untimely responses from healthcare providers and facilities.

The explanation of these barriers is given as follows.

3.2.2. Explanation

Maclean (2005) shows how social structure and organisational failure work as barriers of access to MHC services. It found that poorer women with harmful cultural traditions and taboos created delays in seeking, accessing and receiving care. Even in some cases, if poor women reached facility centres at the right time, they did not receive proper treatment due to lack of equipment and supplies at facility centres and of health personnel's knowledge and skills. Sachs (2005) has claimed that less than five percent of pregnant women with complications in Sub-Saharan Africa received basic healthcare services at facility centres. One study reports how poverty creates a barrier to access. Health services designed to address the safe motherhood issue are being underutilised by some women, particularly deprived women, if they remain poor quality (Chapman, 2003). A Ghana study found various reasons that made service users dissatisfied. These reasons were high cost, poor quality of services, such as crowding babies on the same bed, inadequate number of nurses attending women in labour, no local anaesthetics, unduly waiting for weighing babies, and whimsical requests for mothers to vacate beds (D'Ambruoso *et al.* 2005). In a Nigerian study, respondents reported some barriers like long distance, lack of transportation facilities and of information on who

to approach and where to receive treatment, and the sole authority of husbands to make decisions whether available services should be used (Ogujuyigbe & Liasu, 2007). Besides these, a study (Miller *et al.* 2003) found many social factors that affected women's access to institutional healthcare services that ultimately put them at risk of deaths. These social factors included cultural and religious prohibitions on institutional care for delivery, lack of money and transportation to get trained assistance, lack of confidence in the healthcare system, fears of the intensive practice of health care providers, lack of understanding of when institutional care needs to be sought, poor or untimely response from health care providers and health care facilities and the low status of women.

3.2.3. Addressing the issues

Accessibility and availability problems can be addressed in different ways. For instance, Koblinsky *et al.* (2009) suggest that the access problem has four broad dimensions and these are 'too far', 'no one to accompany', 'do not know where to go', and 'do not know how to go', while Sachs (2005) suggests ways to overcome institutional barriers—by increasing investments in the health sector, by ensuring the supply/availability of essential drugs, clinic and laboratory facilities, competent and motivated health workers, by formulating supportive health policies, and by giving high-quality training, adequate salaries and high incentives.

3.2.3.1. A success story

After reviewing a number of studies, it has been found that one sub-Saharan African country, Mali, is able to increase mothers' accessibility to essential obstetric care (EOC) by implementing one program—addressing socio-cultural barriers—successfully. The following section depicts that success story.

Like other sub-Saharan African countries, ensuring the access to the EOC is imperative in Mali. Accordingly, Mali introduced a nationwide maternal referral system for improving the accessibility of people to the comprehensive EOC that could help reduce obstetric complication-related death rates. The system was to address three barriers.

- **Physical barrier:** Improving communication and transportation opportunities for addressing delays in EmOC service delivery. Funds from donors were used in improving community-based radio communication and ambulatory services.

- **Financial barrier:** Creating alternative funding options like community cost-sharing schemes where the local government, local health services and community health associations created funds for meeting emergency needs.

- **Organisational barrier:** Arranging training and equipment for managing obstetric emergencies in a better way.

The program set a target of providing services to two categories of women—the community health centres-referred patients and the self-referred to the district health centre[23]. This study evaluated the performance of the program and found that the percentage of institutional birthing and treatment of obstetric complications increased from 19 and 0.13 to 39.4 and 0.46 between before the program and one year after the program implementation respectively. The crude case fatality rate and the number of referred pregnant mothers with haemorrhage symptoms dropped between the said periods. Above all, the number of pregnant women at higher death risk reduced by a half. Besides these, it found many factors that create an enabling environment that helps easy implementation of the program. These factors include sustained political support at both regional and national levels, reliance on the establishment of community cost sharing schemes, creation of strong referral linkages, collaboration among various partners and taking consideration of local

[23] If patients had one or more of six medically known direct (haemorrhage, uterine rupture, pre-eclampsia/eclampsia, dystocic labour, infection and abortion) and two indirect (malaria and anaemia) maternal health hazard symptoms, they were then referred.

dynamics during the implementation period (Fournier *et al.* 2009). That means, the success of the programme relies on horizontal approach (see in Chapter 2) and good political will (see in Chapter 1).

Research has discovered regional and wealth-based inequities in relations to accessibility to primary, particularly maternal, healthcare services provided by skilled health personnel. They all propose that unless or until this problem is addressed properly, it will be difficult to achieve health-related MDGs.

3.2.3.2. Regional inequity

In South and Southeast Asia, the proportion of SBAs has not been increasing in the rural areas compared to the urban. Figures reveal that their percentage in urban areas increased from about 65 to more than 70, while that in the rural rose to around 30 from about 25 between 1992 and 2000. It is interesting to note that in rural areas where substantial numbers of people live, the coverage rate has been low, while it has been higher in urban areas with few people populating them though the rate of increase has been more or less the same in both places. All countries with no-coverage of universal healthcare services are categorised into two groups: one group, comprising countries with massive deprivation, where only the rich can have access to healthcare services and the other, including countries with marginal deprivation, all but not the poor have access to healthcare services (Koblinsky *et al.* 2006).

Midwifery services rarely developed in the remotest areas of Indonesia for the poor. Only one-third of midwives worked in rural areas 16 years after the village-based midwifery program started (Makowiecka *et al.* 2007). Two studies show inequity in India: one found that 70 percent of district hospitals in urban areas had a medically qualified anaesthetist, whereas the percentage for rural areas was 22 (Clyburn *et al.* 2007) and the other reported that less than half of births (46.6%) were attended by SBAs even though the percentage of the SBAs in rural areas was as low as 33.5 (Krupp & Madhivanan, 2009). Caesarean section utilisation rate in Bangladesh rural area increased from 1.7

to 5.4 percent between 1995-96 and 2005-07. This contrasted with the rise from 5.6 to 16.2 in the urban areas during the same time (Koblinsky *et al.* 2009).

3.2.3.3. Wealth-based inequity

Two studies each in Indonesia[24] and Bangladesh and one study each in Nepal and Yemen found wealth-based inequality in access to MHC services. Only 10.3 percent of the poorest quintile Indonesian women gave birth with assistance from a health professional and MMR was 706 per 100,000, while the figures for the highest quintile were 71.1 and 232 respectively. Also, 3.1 percent of the wealthiest quintile went for Caesarean section, whereas 0.6% of the three lowest wealth quintiles had access to that mode. Ten percent of the population studied had insurance for receiving free healthcare services and people with private or employment insurance had more access to skilled attendant birthing facilities than others (Ronsmans *et al.* 2009). Another Indonesian study found that around 90 percent of the wealthiest quintile women gave birth with a health professional at attendance, whereas only 16 percent in the poorest quintile had the same facilities. Seven percent in the wealthiest quintile had access to the Caesarean delivery in comparison to one or less for the poorest quintile (Hatt *et al.* 2007).

The Yemen study uncovered that around half of the richest quintile women had access to the skilled birth care services, while the figure for the poorest quintile was only 10 percent (Fraser, 2005). As reported by Borghi *et al.* (2006), among those who sought care at facilities in Nepal, 34 percent came from the highest wealthiest group compared to eight percent from the lowest. The Bangladesh experience is no exception in comparison with the above cases. For instance, poor and uneducated rural women are not able to access modern healthcare facilities or obtain the support of SBAs and use Caesarean, in spite of the significant increase in the rate of their usage (Koblinsky *et al.* 2009). Another study in Matlab (Bangladesh) found that midwife attendance birth percentage increased

[24] Indonesia introduced midwifery service during delivery at community level and social safety net program for the poor to have free maternity services. It also took a new health insurance scheme known as ASKESKIN for the poor in 2005.

more in the least poor bracket than in the poorest. The figures showed that the proportion of births in the former increased from 10.2 to 42.9 percent, while that in the latter rose to 15.8 from 5.4 between 1987-1989 and 1999-2001. However, the proportion of births attended by midwives at home increased from 5 in 1987 to 19.6 percent in 1992, while that in facility centres increased from 0 in 1987 to 26.8 percent in 2001 (Chowdhury *et al.* 2006). For this reason, in Bangladesh the persistent inequity in access cannot be offset by shifting care from home to facility level (Ahmed & Jakaria, 2009).

3.3. Safe motherhood initiative

As said in Chapter 2, in 1987, an international conference on the maternal health issue was held in Nairobi, Kenya. From this conference, an initiative, known as the SMI, was adopted to reduce MMR within a stipulated timeframe, particularly in developing countries. Certain countries have been able to achieve the target, while others have faltered. The reasons for this success are discussed below.

3.3.1. Factors associated with the success of reducing maternal mortality rate in developed and developing countries

Many studies[25] identified various factors which led to either reduction in the MMR or made SMI successful. These factors are:

Organisational or institutional: Availability of technical support, such as data system, professional expertise and access to technologies.

Gender-based: Changes to women's status in such cases as age of initial pregnancy, parity, pre-pregnancy weight, weight gain in pregnancy and smoking status.

[25] AbouZahr, 2003; Fraser, 2005; Grisaru & Samueloff, 2004; Shiffman & del Valle, 2006.

Group-based: Non-essentiality of reaching various ethnic groups with healthcare services or the absence of protest from different religious groups.

Politics-based: Political stability and prevalence of enabling conditions, such as awareness of the problem and commitment to act accordingly, mobilisation of health professionals and communities.

3.3.2. Explanation

Many countries (developed, transitional and developing) around the globe were able to reduce high MMR for different factors which are shown in country wise.

3.3.2.1. Developed countries

Developed countries (European and North American) have been able to reduce high MMR for various reasons. For instance, the MMR in England and Wales has been more or less zero since 1980, while it was 400 in 1880. The MMR in Sweden is almost zero, whereas it was less than 100 in 1950 (Loudon, 2000). The key factors that helped Sweden to reduce its high MMR during the 19th century were: determination to improve home delivery; the presence of a professional during delivery; transfer of medical technology from doctors to midwives, involving aseptic technique, evacuating a full bladder, third stage management, pain relief, intervention with forceps and extraction of a dead foetus; and a nation-wide health care system. There was high midwife coverage in every parish or local community, close supervisory follow up, including a reporting system from the midwife to the doctor, and the presence of a Swedish Health Commission (Maclean, 2005: 278).

Developed countries were able to bring social change along with scientific developments since the 19th century due to the advent of human rights movements and the introduction of equal rights for women in education, work, voting and political participation for reducing gender inequality. Both scientific and social changes resulted in a huge reduction in the MMR in these countries (McAlister & Baskett, 2006). Rapid reduction in high MMR in Europe and North America between 19th and 20th

century was due to dramatic improvement in maternity care, including improvements in sepsis control, the availability of blood transfusion facility, the introduction of antibiotics, access to safe Caesarean and abortion services, and access to post-abortion care where abortion was illegal (Mavalankar & Rosenfield, 2005). Of the 65 countries in Europe, 42 has less than 50 maternal deaths per 100,000 live births. In this regard, the rapid expansion of public health and an increasing allocation of the budget to development, including health sectors, have had greater contributions (Beaglehole & Bonita, 1997).

All these facts indicate that European and North American countries are able to achieve the current level of MMR for following bio-social model (emphasising on not only medical but also social interventions) and adopting the horizontal approach (see in Chapter 2).

3.3.2.2. Transitional countries

Whether it is possible to achieve the 5th MDG by the predetermined deadline has been a contentious issue. The experiences of some transitional countries[26] suggest that it may be possible. During the last three or four decades, Malaysia, Thailand and Sri Lanka were able to reduce MMR by more than a half. A combination of initiatives, such as long-term investment in midwifery training and referral hospitals, free care and a supportive system with regulation, control, and supervision of the medical and midwifery profession, and information to confirm progress, appeared to have supported this remarkable success. Egypt and Honduras were able to reduce MMR by 50 percent within seven years only by expanding the professional training network and focusing on international policy (Campbell, 2003; Danel & Rivera, 2003; Koblinsky & Campbell, 2003). That means, they follow low level medical interventions backed up by a strong basic health care system.

[26] They are basically trying to achieve MMR that developed countries already achieved. In this sense, they belong to neither the developed nor the developing country group.

3.3.2.3. Developing countries

Nepal has been able to slow down its high MMR during the last few decades due to an increased contraceptive prevalence rate, lowering the number of mothers with anaemia by supplying iron capsules at free of cost, availability of abortion facilities, cash allowance for poor mothers to give birth in the health centre and an increase in the health budget at the national level (Suwal, 2008). Substantial reduction in MMR occurred in rural Matlab (Bangladesh), which received intensive health and FP services. The MMR was 600 per 100,000 live births in 1976 but improved to 200 in 2001. This reduction rate was unexpected as most of the births took place at home without the help of the SBAs. However, increased access to surgical obstetric care, reduction in deaths resulting from abortion, lower fertility and general improvements in health were thought to be partially related to these sharp reductions in MMR (Ronsmans & Graham, 2006: 1192). Both Nepal and certain part of Bangladesh experiences suggest that developing countries should focus on bio-social approach for improving maternal health in future.

All these successful countries show us that maternal health can be improved if biological, social and organisational causes of high MMR are addressed. That means, the bio-social model, this study has proposed, is of importance for improving maternal health. All these countries also follow horizontal (basic health care system) rather than vertical (a specific disease-oriented intervention) approaches.

3.3.3. Factors Associated with failure of the safe motherhood initiative in developing countries

Numerous studies[27] locate different factors that are responsible for the failure of efforts to either improve maternal health or reduce MMR at desired levels in developing countries. Some factors are low status of women in society-reflecting early-age marriage accepted or expected, low female

[27] AbouZahr, 2003; Dogba & Fournier, 2009; Fraser, 2005; Maclean, 2005; Mavalankar & Rosenfield, 2005; Rosenfield *et al.* 2007; Shiffman & del Valle, 2006; Tita *et al.* 2007.

literacy rate, lack of administrative support or willingness, lack of international funding and a lack of concerted patronage from obstetric professionals. Other factors are the lack of sincere commitments of the political leadership, inadequate consultation with stakeholders about policy formulation and implementation, insufficient government budgetary allocation, following top-down approaches in policy making and implementation, policy bias towards FP program vis-à-vis MHC, religious intolerance towards change, difficulties in organising healthcare services in outlying areas, inaccessibility, unavailability or unacceptability of healthcare services and the severe shortage of skilled healthcare workers etc. All these factors are societal. So the expected MMR cannot be achieved without addressing social causes of maternal deaths.

3.4. Maternal mortality

Maternal mortality is defined as deaths connected with delivery complications occurring during pregnancy or within 42 days after delivery. Causes of maternal deaths have been identified and classified into two categories: direct and indirect. Indirect causes are further categorised into two: medical and social. The following sections discuss various causes of maternal mortality.

3.4.1. Direct medical causes of maternal mortality

The most important direct medical causes of maternal mortality, mentioned in many studies[28], are haemorrhage, infection, eclampsia, obstructed labour and unsafe abortion. Another important but contentious factor is illegal abortion (Okonofua, 2008). A study[29] found that haemorrhage accounted for 34.6 percent of deaths, followed by sepsis (28.3%), eclampsia (23.6%) and unsafe abortion (9.6%)

[28] Alexander *et al.* 2003; Bartlett *et al.* 2005; Chang *et al.* 2003; Clyburn *et al.* 2007; D'Ambruoso *et al.* 2005; Khan *et al.* 2006; Koblinsky *et al.* 2009; McCarhty & Maine, 1992; Mswia *et al.* 2003; Padhye & Lakhey, 2003; Panchabhai *et al.* 2009; Rosenfield *et al.* 2007; Shahraki, 2007; Taylor & Berelson, 1971.

[29] The study reviewed records of all deliveries and case files of all women who died during pregnancy and childbirth between January 1, 1985 and December 31, 2001, at the maternity unit of Jos University Teaching Hospital, Jos, Nigeria.

(Ujah *et al.* 2005). Another study[30] suggests that haemorrhage (30% in both years), hypertensive disease of pregnancy (15% in 1992-93 and 13% in 2000), and abortion (5% in 1992-93 and 3% in 2000) were the major direct causes. The leading causes for this type of death in India, the only country among others which has more than 20 percent of the global burden, are haemorrhage (29%), anaemia (19%), sepsis (16%), obstructed labour (10%), unsafe abortion (9%) and hypertensive disorders of pregnancy (8%) (Krupp & Madhivanan, 2009).

3.4.2. Indirect (medical) causes of maternal mortality

Anaemia, jaundice and hepatitis are the leading indirect medical causes of maternal deaths. For instance, one research revealed that hepatitis (18.6%), anaesthetic death (14.6%), anaemia in pregnancy (14.6%), meningitis (12.0%), HIV/AIDS (10.6%) and acute renal failure (8.0%) were the major indirect causes of maternal mortality (Ujah *et al.* 2005). Another study revealed cardiovascular disorder as the main cause followed by infectious and parasitic diseases (Campbell *et al.* 2005). Yet, another study[31] found that medically-related indirect deaths (190) were higher in comparison with direct deaths (87). Tuberculosis (26) and rheumatic heart disease (21) were the most leading indirect causes (Panchabhai *et al.* 2009).

3.4.3. Indirect (social) causes of maternal mortality

Maternal age[32], parity[33] and illiteracy[34] appear to be the leading factors that push pregnant mothers at risk during their pregnancies. For instance, among 174 reported deaths in Turkey, around half of the deaths (48.2%) occurred in the 20-29 year age group followed by the 30-39 age group (37.3%),

[30] The Ministry of Health and Population with the assistance of the Egyptian Central Agency for Public Mobilisation and Statistics conducted the study in Egypt in two phases (1st March 1992 to 28th February 1993 and 1st January 2000 to 31st December 2000) by using survey method.
[31] It counted all maternal mortalities and deliveries, occurred from January 1998 to December 2006, in the King Edward Memorial Hospital, a referral centre with 1800 bed tertiary care teaching institute, Mumbai.
[32] Alexander *et al.* 2003; Chang *et al.* 2003; Koblinsky *et al.* 2009; McCarthy & Maine 1992; Padhye & Lakhey, 2003; Shahraki, 2007; Suwal, 2008; Ujah *et al.* 2005.
[33] Chang *et al.* 2003; Koblinsky *et al.* 2009; McCarthy & Maine, 1992; Padhye & Lakhey, 2003; Suwal, 2008; Ujah *et al.* 2005
[34] Shahraki, 2007; Ujah *et al.* 2005

above 39 age group (8.0%) and less than 20 (6.3%) (Akar *et al.* 2004). A strong associational relationship between maternal mortality and marriage at early age, inducing couples to raise a family at an early age, found (Suwal, 2008). A study in Nepal found a positive relationship between the mother's age and risk of death in both early and late post-partum periods (Christian *et al.* 2008). The relationship between multi-parity and high probability to die has also been corroborated by research findings: out of 174 cases, 55 were primiparous, 89 multiparous, and 30 grandparous (more than four) (Akar *et al.* 2004).

There are other social issues that also affect MMR. Among them, healthcare system, poverty, gender, utilisation or non-utilisation of the ante natal care[35], race[36], lower fertility rate[37] inter or intra regional differences[38] are important. An assumption has been developing from the experience of developed countries that a strong public health system in which productive, competent and responsive health professionals are available, can easily avert high MMR. Strong political will works as an important force in formulating and implementing strong public health system there (Dogba & Fournier, 2009; Rosenfield *et al.* 2007; Shiffman & Okonofua, 2007).

3.5. Millennium Development Goals

The UN Millennium Summit held in 2000 set eight goals, known as MDGs, to be achieved by a specific period (2015). The following sections deal with the reasons for certain countries lagging behind in achieving the MDGs and how they can tide over their problems and realise the goals.

[35] Campbell *et al.* 2005; Chang *et al.* 2003; Ujah *et al.* 2005.
[36] Goffman *et al.* 2007.
[37] Koblinsky *et al.* 2009
[38] This difference could be happened in terms of economic progress, rural-urban continuum and so on and so forth. For instance, Rosenfield *et al.* (2007) reported that one in 16 pregnant women with complications was likely to die in Sub-Saharan Africa, while the figure for developed countries was one in 2800. Moreover, in America, Chang *et al.* (2003) revealed that black women were four times more likely to die from pregnancy complications than white women. Furthermore, Mswia *et al.* (2003) and Suwal (2008) found regional disparity in Tanzania and Nepal respectively.

3.5.1. Reasons for being off-track in MDG realisation

Sachs (2005) identifies four principal reasons which are apparently responsible for many developing countries being off track from achieving the MDGs. These are: poor governance (corruption, poor economic policy choices, and denial of human rights), poverty trap (no scope to catch the ladder of development), persistent sizeable pockets of poverty (regional disparity within countries in poverty reduction) and specific policy neglect (policy makers are unaware of the challenges one policy faces, not taking the local context into consideration, gender biases in public investment, and social and economic policies). In addition, many authors have identified various reasons for this dismal position of developing countries. These are a lack of sufficient financial support from developed countries (Clemens *et al.* 2007; Haines & Cassels, 2004) reflecting collective accountability does not work (Moss, 2010), consequently, shortage of huge investment in basic social services (Vandemoortele, 2002), lack of good governance, political will and public action (Anderson, 2010; Vandemoortele, 2002) and not following free trade principles (Ahmed & Cleeve, 2004). That means, societal factors are left to be addressed properly.

3.5.2. Improving the situation

Many researchers and academics (AbouZahr, 2003; Akar *et al.* 2004; Bartlett *et al.* 2005; Campbell *et al.* 2005; Fraser, 2005; Grisaru & Samueloff, 2004; Koblinsky *et al.* 2009; Kruske & Barclay, 2004; Mswia *et al.* 2003; Paul & Rumsey, 2002; Ronsmans *et al.* 2009; Rosenfield *et al.* 2007) have proposed various ways to improve the situation further. Their proposals can be categorised in the following manner:

Socio-cultural: Enhancing the social status of women, increasing the investment in social and economic development with great emphasis on gender equity, creating awareness about the risks of maternal infection and sepsis, empowering women and community to demand their rights to pregnancy, childbirth and newborn care.

Political: Making priorities of the cause, showing long-term commitments with substantial resources, taking bold efforts to overcome the systematic structural barriers to equity in healthcare access.

Financial: Increasing financial allocation for health sector.

Organisational or institutional: Some suggestions are making a combination of many interventions, creating a functioning healthcare system and an enabling environment for the service providers, furthering community outreach, encouraging true partnership and collaboration between the traditional birth attendants (TBAs) and SBAs, upgrading lower level health workers (LLHWs) with training for providing the basic and comprehensive EmOC, introducing team based healthcare services in facility centres and developing mechanisms to ensure accountability. Other proposals are increasing the availability of and accessibility to healthcare services and ensuring good quality of care, creating collaboration and integration among WHO, World Bank, bilateral, Countdown to 2015, civil society, and ministries of health, finance, and education and taking social, cultural and religious peculiarities of local areas into consideration when a region specific program is introduced.

Some possible ways are elaborated below.

3.5.2.1. Explanation

Sachs (2005) has suggested a comprehensive package (upgrading capacity, improving policies, supplying more money) for both developed and developing countries to continue success already been gained. He particularly mentions developing countries' lack of funds to implement the MDG project. He suggests giving not only money by the donor countries but also other forms of support like institutional reform, trade liberalisation, good policies, etc. However, if the developing countries do not have sufficient money to be invested, they cannot think of bringing changes in other sectors which are associated with MDG achievement. Above all, both developing and developed countries need to come forward with urgent action. On the one hand, developing countries should try to use

their efforts with honesty and efficiency to achieve the goals. On the other hand, the developed countries should not only be committed to their own promises, particularly financial commitment, but also be willing to share the responsibilities of developing countries as they both live on the same planet. He warned that if we fail to invest now, it will take another century (the next Millennium Summit in the year of 3000) to reach the target.

Better FP and reproductive health services, for instance, can help improve maternal health by reducing the number of high-risk pregnancies, reducing unwanted pregnancies and unsafe abortion, detecting pregnancy complications in the early stages and better managing obstetric complications. The Millennium Project has provided a lesson to us that below five mortality rate has been achieved not so much by the involvement of the health system as by implementing community-based interventions like improved water supplies and sanitation and exclusive breastfeeding for the first six months. Like the reduction of child mortality, increasing the proportion of births by skilled attendants is important in partially reducing MMR. But what is more important than increasing SBAs is to provide a functional referral and healthcare system which backs up the attendant by providing emergency obstetric and other appropriate services in the event of life-threatening complications (Hayes, 2005: 27). Furthermore, one report has reviewed evidence and concluded that multi factors help reduce MMR. These are: high level political commitments, investment in social and economic development with great emphasis on gender equity and ensuring the accessibility of the poor to basic healthcare services, strengthening health systems and investment in developing, deploying and supporting a cadre of health providers with midwifery skills. The report also gives some cues on how the program focusing on universal coverage of SBAs should be implemented. These lessons are: investments in the development of SBAs and of referral and EmOC services should not be treated as competing alternative but rather as complementary strategies; quality of training should be competent; broader human resource management systems should be improved; training for health personnel with normal delivery or obstetric care skills need to be continued; political, social and

legal actions focusing on women's human rights should be taken; and equity considerations need to be central to all policy documents (MacDonagh, 2005).

However, among all factors mentioned above, good political will seems to be more important for developing countries in devising proper strategies to achieve the health-related MDGs.

3.5.2.1.1. Connection between political will and maternal mortality reduction

If bio-medical causes of high maternal deaths and its-related interventions are well-known, what ensures that political governments would translate these commitments or interventions into action? Political scientists have termed this challenge as one of generating political priority: political leaders should ensure that they understand the magnitude of the problem and are willing to act by allocating the required financial, human and technical resources. They identified seven factors which placed increasing pressure on the Nigerian government for prioritising the cause. These are: the democratic transition itself, growing civil society attention to the cause,[39] the accumulation of evidence on the state of MMR in the country, the emergence of new leadership in the health administration[40], the pressure of the MDGs and the emergence of champions in parliament. Three persistent problems existed though the Nigerian government opened the window for meeting the 5th MDG by prioritising the issue. First, all networks related to the SMI in government and civil society are yet to come under a unified umbrella to make the political and social systems work efficiently. Secondly, the amount of money the Nigerian government has provided is minimal. Lastly,

[39]The Nigerian Women group has called for free MHC services to all women of reproductive age and the reform of existing laws on abortion.

[40] The Ministry produced a national reproductive health policy in 2001 and a national reproductive health strategic framework in which special consideration has been paid to reduction of MMR in 2002, secured a budget for reproductive health with specific funding for SM for the first time in 2004, and the Federal Ministry of Health launched a birth preparedness plan in 2005.

state and local governments pay virtually no attention to this issue, albeit with some exceptions[41]. However, maternal health advocates face many problems when they attempt to politically institutionalise safe motherhood. Among these, three are critical: transforming the existing network of safe motherhood champions into a potent political force, developing strategies on how to increase the federal budget allocation and promoting attention for the cause at both national and local levels (Shiffman & Okonofua, 2007).

Like Nigeria, Indonesia achieved incredible results in providing access to safe delivery care in a decade following the Nairobi Conference. Safe motherhood has been promoted in many phases. Policies were developed and implemented in the first phase (1988-95) and, the SMIs have been revitalised by a new force of political elites in the second (1996 onward). A series of prominent events focusing on safe motherhood took place with political entrepreneurs making substantial contributions to promote the cause, while the issue was mobilised. Indonesian bureaucrats developed feasible policy proposals for addressing the problem. These were possible due to the prevalence of a unitary authoritarian political system that successfully implemented social and health policies and attracted donor attention to health and population sector investments (Shiffman, 2003). Moreover, Egypt, Honduras, Malaysia, Sri Lanka and Thailand reduced high MMR only because they all considered maternal health on a priority basis (Rosenfield *et al.* 2007).

3.6. Positive experience of some community-based programs

Community-based programs have been introduced in many countries for lowering high MMR. For instance, the Population Council's Frontiers in Reproductive Health project in Kenya, in collaboration with United States Agency for International Development (USAID), supported a community-based training program which targeted local community women with midwifery knowledge and skills who could manage safe delivery and refer pregnant women if necessary. It was found from the interviews

[41] Free MHC service has been declared in Anambra and Kano states, while Jigawa state has sectioned budget for up gradation of obstetric care facilities in hospital.

of 15 clients that the proportion of births with the SBA increased slowly by 6.1% in all districts. The coverage rate of postnatal care in the first 48 hours after births and immunisation also increased. Two reasons for this achievement were identified: Community midwives were able to create a sound relationship with their clients and offer various service fee payment mechanisms, such as purchasing a huge volume of medicine at a time, providing services in exchange for farm produce, their labour, rent-free lands and having instalment-based payments. The scheme brought positive outcomes by increasing access to MHC services, which resulted in the reduction of MMR (Mwangi & Warren, 2008).

Another study shows positive impact of community-based public health interventions by reporting three case studies from developing countries. Vitamin A supplements in pregnancy reduced MMR by 40 percent in Nepal, the TBAs (as stated in Chapter 2, it should be remembered that they are not always competent in handling complicated cases) in Pakistan promoted good peri-natal hygiene which ultimately helped reduce high MMR and community-based treatment of maternal sepsis in Bangladesh was found to be one of the principal reasons for lowering high MMR (Costello *et al.* 2006). In addition, the MCH-FP, community-based program in Matlab, Bangladesh, was able to bring better results in increasing the SBA which ultimately saved mothers' lives. Some factors partially played vital roles in this success. These were: free healthcare service provision, availability of drugs and supplies at the point of care, community outreach through community health workers, higher salaries and regular supervision of midwives and comparatively mother-friendly and accountable services. Although it is difficult to make generalisations about Bangladesh in its entirety, the findings led researchers to argue that cultural and community barriers could be overcome if services were made geographically, financially and culturally acceptable to local women (Chowdhury *et al.* 2006).

Another study found positive impact of the community program in the MCH-FP area three years after implementation. It showed that maternal survival in rural areas of Bangladesh could be

improved if midwives, posted at village level, were given a working environment in which drug and equipment supplies for treating complicated cases and an effective chain of referral were available (Fauveau *et al.* 1991). The other pilot study did an evaluation of skills and performance of SBAs[42] of Bangladesh in 2004. It reported that 29% home deliveries, 52% ante-natal and 44% post-natal check-ups were performed by the 86 trained community-based SBAs (CSBAs). Ninety-one percent of the 288 patients interviewed mentioned that they were fully or fairly satisfied. Among a half of the respondents who wanted to have another child, 60 percent said that they would prefer to deliver their babies with assistance from the CSBAs (Ahmed & Jakaria, 2009).

3.7. Analytical framework

From the discussion on causes of inaccessibility to healthcare services and maternal mortality and, as detailed in Chapter 2, different interventions addressing these causes, it is possible to develop an analytical framework to be applied to this study. The framework is shown in the next page.

[42] The Bangladesh government maternity care policy has given emphasis on providing services by the community people. In this regard, an effort was taken to give training to community based female health workers (family welfare assistants and female health assistants) in midwifery skills and to identifying danger signs for referral in 2003. After finishing the training, the Bangladesh Nursing Council examines the trainees and certifies them as the SBAs.

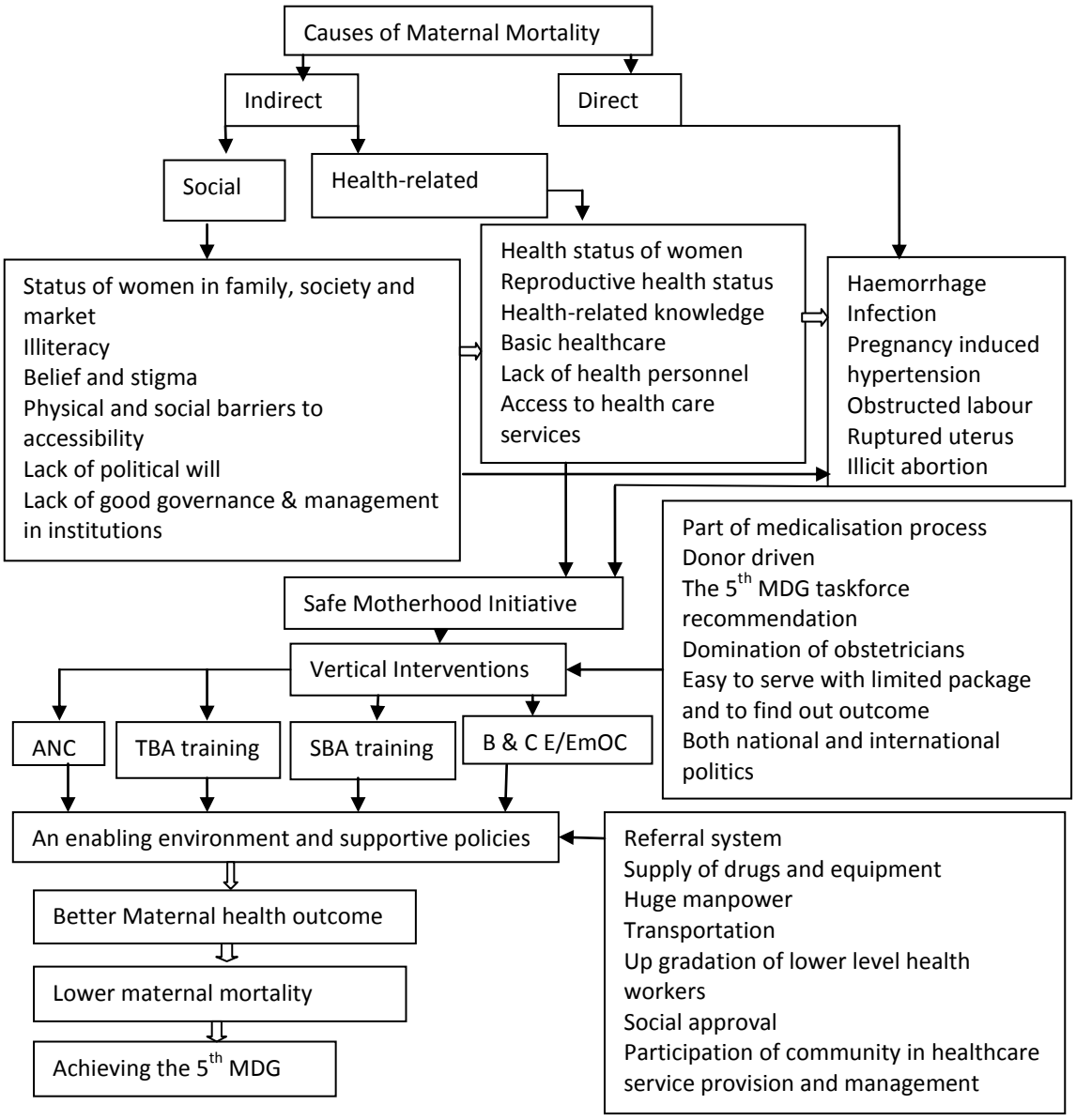

Figure 3.1 Analytical framework for maternal mortality

Figure 3.1 shows that both direct and indirect factors would be responsible for maternal mortality in all countries. It divides indirect causes into two categories, one is social and another is health-related. It further states that prevailing social structure can cause maternal mortality either directly or indirectly. Indirectly, social issues affect direct causes of maternal mortality through physiological causes. All these medical interventions basically address medically-related direct and indirect causes of maternal deaths. These interventions are the result of the MoP&C, donor driven, and national and

global politics (Behague and Storeng, 2008; Kruske and Barclay, 2004; Sachs, 2005; Shiffman and del Valle, 2006; Travis *et al.* 2004). Policy makers generally support these interventions because of their advantages of bringing about quick positive outcomes in maternal health and being implemented easily (Maclean, 2005; Behague and Storeng, 2008). However as said in Chapter 2, all these interventions have both potentials and limitations. Any single intervention can hardly bring about positive results without dependent on other interventions. The success of these interventions also depends on the back-up services (Behague and Storeng, 2008). All interventions with support from an enabling environment may generate positive results in maternal health that ultimately helps lower high MMR. This leads to the achievement of the 5th MDG target. This framework will seek to find out how far people, particularly poor women, have access to the components of whole healthcare facilities, including vertical intervention components, and what types of barriers they usually face when using these facilities.

3.8. Summary

Making healthcare services available at the doorsteps of people does not mean that service recipients easily accept them. Social, economic, physical and institutional barriers deter service users from accessing healthcare services and addressing them is not a difficult task. Many studies reported inter- and intra-regional and wealth-based inequality in healthcare service provision. Some developed, transitional and developing countries have been able to reduce high MMR by following either bio-medical or bio-social approach. However, many least developed countries still have high MMR mainly due to administrative, financial, organisational, policy-related, political and social factors. Most of the SMI-related interventions (discussed in Chapter 2) focus on the biological aspect of maternal health, partially influencing by the medicalisation process of pregnancy and childbirth though both biological and social causes of maternal deaths are equally critical. The relevance of social issues influencing decision making regarding acceptability of and accessibility to intervention-

related services is important. The study has thus taken an endeavour to reveal social causes of high MMR.

No interventions are effective without the support of a robust healthcare system. Successful countries equally emphasise biological and social issues, including the prioritisation of the issues in the political arena, taking initiatives, such as increasing female school enrolment for social development and boosting investment in the health sector. All these factors create an enabling environment for both service users and providers and encourage pregnant mothers and their families to seek healthcare services and service providers to provide services in a proper way. Many strategies, such as community-based programs, are capable of bringing about positive results in maternal health at the micro level.

Experiences of the successful countries (curbing high MMR) suggest that addressing medical causes of maternal deaths is a part of the solution to high MMR. As like as biological factors, social factors that cause high fertility and delays in making decisions about seeking healthcare services and reaching in a facility centre are also equally important for reducing high MMR. For this reason, I took an initiative to find out social factors that are partially responsible for high MMR in Bangladesh. This study can therefore be able to draw policy makers' attentions to societal reasons for high MMR.

This chapter has contributed to the development of comprehensive ideas of availability and access problems and how these problems are addressed in the successful countries.

The present condition of Bangladesh will be elaborated in the next chapter to give an idea of socio-economic conditions, particularly the position of women in society, poverty and political landscape, and how healthcare services are provided which play vital roles in people's decisions about seeking available healthcare services.

Chapter Four: General Overview of Bangladesh

4.1. Introduction

This chapter provides a general overview of Bangladesh with a view to providing impressions of the country to outsiders. The first part discusses the country's geographic location, while the second considers the prevalent social context by highlighting, in particular, the position of women in family and society, the social structure and the educational system. The third explores the economic situation with the spotlight on the economy and the state of poverty. The fourth part discusses the political condition—its colonial experience and how Bangladesh emerged as an independent nation—whereas the fifth deals with the country's administrative set up which is followed by discussion on how healthcare systems are organised and healthcare services are provided. This chapter ends by advancing some thoughts on how this overview relates to the whole study.

4.2. Geographic location

Bangladesh is located in between 20°34' and 26°38' latitude and between 88°1' and 92°41' East longitude. Geographically situated in South Asia, it is bordered by India on the western and northern sides, India and Myanmar in the East, and by the Bay of Bengal in the South. The most significant feature of the landscape is the extensive network of large and small rivers that are of primary importance in the socio-economic life of the nation. Chief among these, lying like a fan on the face of the land, are the Ganges-Padma, Brahmaputra-Jamuna and Meghna rivers (Mitra *et al.* 1997: 1). The country covers an area of 144,000 Sq kilo metres, the majority of which is plain fertile land. It also has some hilly areas on the eastern part.

4.3. Social context

Bangladesh, one of the most populous countries, has a huge population of nearly 152.5 million, of whom three quarters live in the rural areas. It has one of the highest densities of population (1015 per square kilometre) in the world (*Daily-Star*, July 17, 2012; Islam, 1978; UNDP, 2009). From a religious perspective, the majority of the people are Muslims (around 89.35%) and the rest are Hindus (9.64%), Buddhists (0.57%), and Christians (0.27%), while other minorities constitute a small portion (0.17%). Most Bangladeshis speak one language i.e., Bengali, and the woman diet consists of rice, *dal* (pulse) and fish. Most married women in the rural areas cover their bodies with S*ari*[43]*, while* unmarried girls wear *salwar kameez*[44]. *Lungi*, a kind of long skirt, and loose shirt are the main outfits that men wear. It is worth mentioning that both boys and girls in urban areas are used to being dressed in western attire. *Eidul- fitr*, *Eidul-adha*, *Durga Puza*, Buddha *Purnima*[45] and Christmas are major religious festivals which bring together people from different communities in celebration. *Pohela Baishakh*, the beginning of the Bengali calendar, is one of the most popular cultural festivals in Bangladesh. For all these reasons, Bangladesh is, by and large, a culturally homogenous society.

4.3.1. Social structure

As with the West, where societal transformation took place from feudalism[46] to capitalism[47], the same pattern was evident in Bangladesh sans the feudalism phenomenon. In its place, *prebendalisation*, the term coined by Max Weber (Gerth & Mills, 1991: 207), developed (Sen, 2004:

[43] It is a 18 feet long cloth covering the whole female body.
[44] Two parts of female dress; one for the upper portion and the other for the lower.
[45] Full moonlight night.
[46] Feudalism, based on land, reinforced by a complex legal system, and supported by the Christian Church, was the main form of social organisation in Medieval Europe in the course of Western history. It declined from the 13th century partly because of the growth of the money economy, with commerce, trade and industry, and partly because of many peasant revolts which occurred between 1350 and 1550. It ended in England in the 16th century, but lasted in France until 1789 and in the rest of Western Europe until the early 19th century. In Russia, it continued until 1861 (Elliot & Goldstein, 1993).
[47] Capitalism emerged from the early 16th century. Peasants became freed and moved to the towns to search for jobs in industries and factories. Some were turned into wage labourers and some became merchants. Lastly, the merchant class in the West became middle class through education and the establishment of municipality during the beginning of the capitalistic period (Henri, 1969).

21). This concept of *prebendalisation* included revenue collection by *zamindars, talukdars* and temporary revenue contractors as well as by *jagirdars* who were given grants for specific political-military duties. This system continued until the rise of the British rule. The permanent Settlement Act of 1793 created the opportunity for revenue collectors and others to become permanent land owners. This Act ultimately led to the development of a Hindu landlord class in Bangladesh. Meanwhile, English replaced Persian as the language and became the key to getting administrative jobs. The Hindu community accepted this change at the outset and took advantages, while Muslims took time. All these factors created a conducive environment for the upper class Hindus[48] to advance to higher positions in government that led to the development of a new urban-centred class, popularly known as '*bhadralock*—(respected person)' comprising landlords, professionals and clerks, mainly from the Hindu community (Faroqi, 2003; Riaz, 2003).

A Muslim merchant class, comprising migrated merchants from West Bengal to East Bengal (later 'East Pakistan' and now 'Bangladesh'), was developed. The University of Dhaka, set up in 1921, started playing a vital role in transforming a Muslim merchant class to a middle class. The mass exodus of Hindus, particularly from the upper class, from East Bengal to India occurred due to the partition of the Indian sub-continent based on religious principles, the India-Pakistan War of 1965 and the Liberation War of 1971 (Sen, 1985). This migration created a vacuum in important administrative and other professional areas that was later filled by the traditional Muslim wealthy class associated with agriculture (Khan, 2003) and highly educated Muslim people.

After independence, the development of the capitalistic mode of production in agriculture (i.e., Green Revolution) in rural areas appears to have had a detrimental effect on social equity. It caused differentiation and polarisation and widened the gap between two extreme classes (the poorest and

[48] Traditionally, Hindu society is highly stratified. It has been divided into two major castes vis-à-vis classes: Brahman (upper) and non-Brahman. The later caste is further divided into three hierarchical categories: superior, medium, and inferior admixture. The first category includes 20 sub-castes, including writer and warrior, while second and third has 12, including businessmen, fishermen, and nine sub-castes, including cobblers, sweepers, washermen, respectively. The last category is considered as untouchable (Khan, 2003).

the richest). Capitalist farmers can easily invest huge amounts of money and have access to the existing privileges due to political connections. In contrast, marginal peasants became poorer and were forced, in some cases, to sell their lands[49].

The dimension of class formation has recently changed. In addition to ownership of wealth, both political and bureaucratic connections and higher educational qualifications have become influential factors in class identification. The recent development of commercial non-farm agriculture, such as poultry and dairy, and the ready-made garment industry has led to the migration of a large section of the population to other regions or overseas for economic and other reasons. Bangladesh has thus been transformed from a purely agrarian to a mixed economy. To some extent, it has also been transformed into a consumer society. In rural society, class differentiation can be identified but not so in the urban areas where a middle class is visible blurring the differentiation. It is therefore easy to find out class-based differentiation in access to primary, particularly maternal, healthcare services in rural areas, while exploring it in urban areas is a difficult task.

4.3.2. Position of women in society

Bangladesh is traditionally known as a patriarchal society where men have always enjoyed certain privileges throughout their lives. They have control over household resources, while women remain fully dependent on males. Men also exercise power over women's labour, their sexuality, choice of marriage partner, their access to labour and other markets, and their income and assets. This exercise of power is socially and legally accepted in society (Hossen & Westhues, 2011: 280; Khanum, 2002:133).

Males and females within the household are treated differently. From their childhood, women know or are made to realise their inferiority to men. Girls are regarded as vulnerable, needing protection

[49] Twenty-six percent of rural people are landless and around half of them live below the poverty line (Faroqi, 2003).

from men. They are treated as liabilities as they are brought up only to be given up to others. On the contrary, boys are treated as assets as there is a possibility of their becoming future bread winners for the household. For this reason, boys get preferential treatment in almost all respects, such as food, clothing and healthcare, and in respect of opportunities like education (ADB, 2001: 4; Bhuiyan, 1981: 8; Chowdhury, F. D. 2009: 606; Islam, 1980: 8; Mannan, 2008: 46). As Kabir *et al.* (1998 in Chowdhury, F. D. 2009: 609) point out: "Daughters are considered to be 'temporary guests to the family' who will be married off when they reach the appropriate age. Even if a daughter wants to, according to social norms she is not expected to directly look after her parents or have her parents live with her." Moreover, Schuler *et al.* (1996: 1730) contend, "Discrimination against women and girls in everyday life is rationalised by the fact that they are seen as an economic burden."

In this patriarchal society, women generally hold different status at different stages of their lives; daughter, bride, mother, wife and widow. Unfortunately, they are not called by their own names; for instance, they are known as someone's daughter, wife or mother. Even their rights, respects and status are based on their relation with males. This lack of independent endowment keeps them away from participating in income generating activities and makes them dependent on others (Chowdhury, 2004: 244; Sultana & Karim, 2005). A woman is generally married before reaching 20. After marriage, her guardianship is transferred from her father to her husband who usually decides about her further education, employment, hospitalisation and movement outside the homestead (ADB, 2001: X). Once her husband passes away, her sons or other male members in the family become her guardians.

This discriminatory treatment and statuses in different stages of female lives do not support females' normal development. For instance, the decision on when and how much food is given to women usually comes from males that sometimes creates a gap between a female's demand for food and supply of it. This demand-supply gap forces women to be victims of malnutrition and this results in their becoming anaemic during pregnancy. This usually puts mothers' lives at greater risks.

Even if a mal-nutritious mother delivers a baby girl successfully, the latter is more likely to be mal-nutritious from birth and to enter another vicious cycle of mal-treatment (*Prothom-Alo*, July 16, 2012). As claimed by Rizvi and Nishat (2008: 276), these gender-based life style practices generally create obstacles to taking necessary healthcare services.

However, some indicators show that this situation, to some degree, has been changing. For instance, there has been a significant improvement in female infant mortality rate (FIMR), life expectancy, the mean age at marriage for girls, female school enrolment (FSE) over the last few decades. The FIMR has reduced from 93 in 1994 to 64 in 2004, then to 37 in 2009, female life expectancy rate increased from 65.4 years in 2003 to 68.7 in 2009, the mean marriage age for girls was 19.9 years in 1994, while it rose to 20.31 in 2008, FSE rate increased by 13.5 percent between 1991 and 2001 and female labour force participation (FLFP) increased to 6.6 in 2001 from 4.4 percent in 1991(BBS, 2010a; GED & UNDP, n.d: 4; MOHFW, 2010). Nevertheless, women perform better than men in some areas. For instance, women's life expectancy was 68.7 compared with 66.1 years for men in 2009 (BBS, 2010a). This change has been occurring for various reasons, such as the introduction of free female education up to higher secondary level, incentives given by the government to families for female education, awareness developed through many civic activities and wider engagement of females in income generating activities. For example, there are more than a thousand local and national organisations that create opportunities for over eight million poor, mostly women, through micro-credit schemes and capacity building programs (training in literacy, technical skills and understanding legal rights) which has helped women to come out of the patriarchal trap and engage in economic activities (ADB, 2001: 4; Rahman *et al.* 2003: 12).

Bangladesh has thus been able to create a better position in social indicators in comparison to other South Asian countries though it has relatively low per capita income (US$ 1241). To be precise, Bangladesh has achieved 129th position among 150 countries in the Human Development Index in 2010 (UNDP, 2010) and has been able to position herself in the middle human development country

group (UNDP, 2011). Mahmud (2008: 3-5) identifies four principal reasons for this elevation. These are: rapid and steady increase in primary school enrolment for girls since the 1980s; rapid decrease in population growth; rapid increase in FLFP; and rapid emergence of group-based micro-credit programs. He also found another two unique reasons behind this achievement and these are: adoption of low cost solutions, such as the use of locally made oral rehydration saline for diarrhoea that helps reduce infant mortality rate; and raising awareness for effective social mobilisation campaigns. Whether this recent development has had any effect in mothers' access to healthcare services will be examined in the subsequent chapters. Because the reviewed literature (Chapter 3) shows that women with better position in society have more access to healthcare services.

4.3.3. Education

The history of education in Bangladesh may be divided into four: medieval, colonial, pre-independence and post-independence. The education system in the medieval period was closely connected with religious instructions. Two major religious communities i.e., the Hindus and Muslims developed separate systems in accordance with their respective religious traditions. The educational establishments for the former were known as *pathshalas,* while *maktabs* and *madrasas* for the latter. The rulers and elite from either communities urged people to gain both religious and livelihood education. As Persian was the state language throughout the medieval period, both communities' people learnt the language to earn their livings. However, this oriental educational system faced a set back with the fall of Muslim rule in 1757 (Mohsin, 2003; Rabbi, 2008).

The British colonial rulers initially did not interfere with the existing education system for their administrative purpose. European missionaries and the East India Company established many schools and colleges between the last decades of the 19th and early 20th century (Rahman *et al.* 2010: 116). By the middle of the 19th century, the traditional education gradually lost ground and was gradually replaced by English education. Macaulay's famous 'Minute on Education' (1835)

favouring the 'Anglicists' in place of the 'Orientalists', the Freedom of Press Act (1835), replacement of Persian official language by English and Indian languages, and Harding's resolution (1844) announcing that knowledge of English would be obligatory, in some cases, and preferable for getting government jobs led to the development and expansion of English education in India during the colonial era (Chakraborty, R. 2003). All these efforts ultimately served the interests of the rich upper class as the government set up most of the educational institutions in cities, towns and commercial areas (Rabbi, 2008).

In 1947, the Indian sub-continent was divided into two parts: Pakistan (East and West) and India. The Pakistan inherited the colonial education system but following the recommendations of different education commissions the government took steps towards providing a scientific curriculum-based single stream primary and secondary education for all. The subsequent five-year plans and other development policies gave more emphasis to the need for modern scientific education though its impact was not evident before Bangladesh's independence[50]. Independent Bangladesh received a faulty education system but efforts were made to develop a modern education system suitable for contemporary Bangladesh and compatible with those of neighbouring countries (MOE, 2010; Rahman *et al.* 2010). However, the subsequent governments failed to establish a single stream education system.

Currently, the education system is heterogeneous and complex; many systems of education have been permitted to develop and exist side by side. The formal education has three main streams: Bengali-medium general education, English-medium British education and religion-based education. Bengali-medium and religion-based formal education has been divided into three tiers: primary (five years), secondary (seven years) and tertiary (four to six years). At primary level, two streams of

[50] For instance, the numbers of primary schools in East Pakistan decreased to 26,300 in 1960 from 29,633 in 1947-48, while those in West Pakistan increased from 8,413 to 18,000 between the same periods, though 56 percent of Pakistan's total population lived in the East (Rabbi, 2008; Rahman, M, et al.., 2010). The same trend was presented; the number of primary schools in East Pakistan decreased by 625, while that in West Pakistan increased by 3,387 (nearly five times) between 1948 and 1969 (Asadullah, 2010: 17).

education i.e., general and *Madrasa*, are provided. The secondary education has three streams: general, vocational/technical and *Madrasa*. The same tri-stream has been followed at tertiary level: general (pure and applied science, arts, business and social sciences), technology education (agriculture, engineering, medical, textile, leather technology and ICT) and *Modrasa* (Rahman *et al.* 2010; Shohel & Howes, 2011). Parallel to formal primary education, non-government organisations (NGOs) are developing a non-formal primary education for disadvantaged children. The main objective of this program is to prepare disadvantaged children for entry or re-entering secondary level schools. So, after completing primary education from an informal institution, they have opportunities to enter formal secondary schooling (Shohel & Howes, 2011). The whole education system is shown in the following figure.

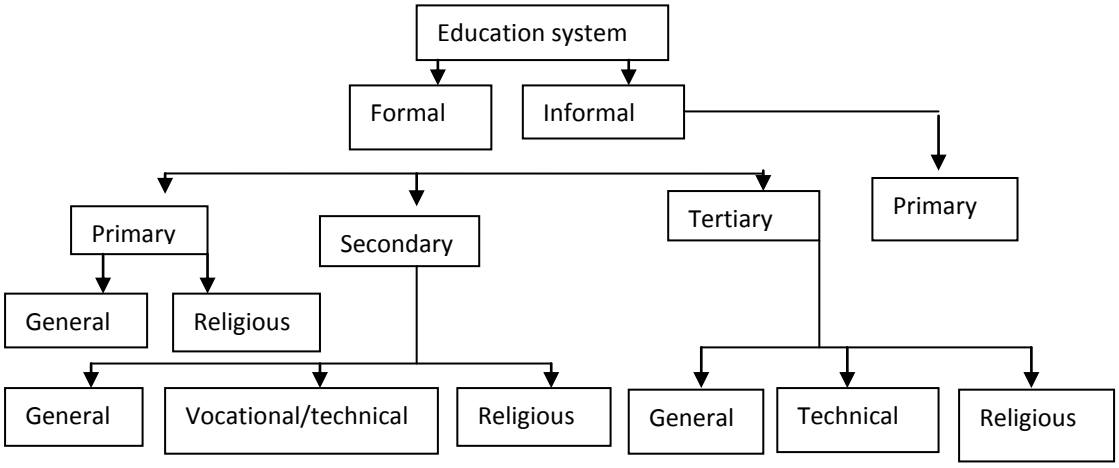

Figure 4.1 Different streams of education system in Bangladesh

4.3.3.1. Female education

Female education was not encouraged and approved until midway through the British rule. Both Hindu and Muslim communities were reluctant to educate women irrelevant to various traditional

beliefs and practices. Hindus, for instance, believed that education for females led to early widowhood. At that time, females received education informally and to a limited extent for practical purposes. Women from the higher classes had classical or vernacular education for reciting religious books and keeping family accounts. Later, Missionaries began introducing girls' formal education in Bengal. The Baptist Mission set up the first girls' school in 1819.

The promotion of 'female education' first found mention in the 'Wood's Education Dispatch' of 1854. The main aim of this promotional program was to educate females for becoming enlightened mothers. They were trained to be good mothers rather than being income generators or eligible for higher education (Rahman *et al.* 2010: 117). Two girls' schools set up by two renowned Muslim women laid the foundation for female education. One was set up in Comilla in 1873 by Nawab Faizunnessa Choudhurani and another—known as the Sakhawat Memorial Girls' School—in Kolkata in 1911 by Rokeya Sakhawat Hossain (Forbes, 2003).

After partition, the Pakistan government continued its efforts to increase female education but regional disparity in primary schooling expansion reflected that girls in East Pakistan had less access to primary schools compared to West Pakistan. Insufficient numbers of schools and the long distance to travel to the nearest one from home were the main causes that prevented parents from sending their daughters to schools.

In 1970, nearly 40 percent of girls were enrolled in primary schools, while the percentage for boys was around 75 (Hossain & Kabeer, 2004: 4094). The number of secondary girls' schools was 200 in 1947, while it rose to around 700 by 1970. In addition, more girls were reported to be attending co-educational high schools in rural areas (Khatun, 2003). As in primary schooling, the same regional disparity could be noticed here.

The first education commission, formed after independence, asserted that female education should be articulated in a way which could help women in domestic work and uphold traditional gender

roles. Accordingly, issues related to domestic help, such as child care, the nursing of the sick, promotion of health, food and nutrition, were recommended to be included in the female education curriculum. In addition, the Commission suggested the channelling of women into vocational training, such as primary school teaching, nursing and typing (Rahman *et al.* 2010).

As said earlier, still, boys are perceived to be assets and future breadwinners for taking care of their parents. This mental construction sometimes forces parents to give preference to boys' rather than to girls' education. Spending money for boys' educational purpose has been seen as an investment, while that for girls considered as making an asset for others (ADB, 2001)[51]. Poor socio-economic conditions, particularly poverty, create a barrier for poor families to sending their daughters to schools. Parents with scarce resources may trade-off between a daughter's education and other necessities, including a son's education (Hove, 2007).

The Beijing Platform for Action (1995) and Millennium Development Summit (2000) urged the achieving of universal primary education for both boys and girls and for reducing the gender gap in secondary level schooling (Mondal *et al.* 2008). Nevertheless, girls' enrolment in primary level schools has significantly increased. The gap between boys' and girls' enrolment at primary level reduced over the last two decades. For instance, the ratio of girls to boys in primary education was 0.83 in 1990/91, while it is 1.03 in 2009 (BBS, 2010b). Another report indicates that the ratio of girls to boys at primary level has crossed the gender parity since 1995 (Hoque *et al.* 2009). However, their attendance rate in rural areas is considerably lower in comparison to boys since they are kept at home to carry out household activities, including care of siblings (Ardt *et al.* 2005; Rabbi, 2008).

The same achievement is found at secondary level. In some years, the female enrolment rate outnumbered that of boys. For instance, 17 percent of students in 1970 were girls, while the figure for 2002 was 53 percent (Schurmann, A. 2009). The gender gap has been reducing, but not to the

[51] Most families with disposable income spent about 73 percent educational expenditures for sons and the rest for daughters (Akhter, 2005).

point that the previous study indicates. It shows that the ratio of girls to boys in secondary education was 0.52 in 1990/91, while it is 1.17 in 2009 (BBS, 2010b). Four policy interventions, such as the Food for Education Program, the expansion of NGO-run informal education, increasing better opportunity for women with secondary education in the formal sector, very particularly in the readymade garment work area, and the Female Secondary School Stipend Project (FSP)[52] led to this achievement. This incremental rate does not ensure that they all finish their studies. Some dropped out at some stages. Cultural taboos, such as *purdah*, cultural practices (early marriage, taking care of parents and siblings) and sexual harassment appear to have contributed to this drop–out trend (Banu, 2011; Mahmud, 2003; Mondal *et al.* 2008; Schurmann, A. 2009). Four percent of rural girls failed to continue their studies due to sexual harassment on their way to school (Schurmann, A. 2009). Two-third females, aged 20-24, were married before reaching the legal age of 18 (NIPORT *et al.* 2009). Whether this achievement affects females' access to healthcare services will be explored thereafter as the literature (Chapter 3) indicates that increasing female education leads to the improvement of women's access to healthcare services.

4.3.4. Rural-urban continuum

Bangladesh has experienced rapid urban growth last century; the percentage of urban population increased about tenfold (2.43 in 1901 and 23.01 percent in 2001). Mal-distribution of development, inadequate educational and employment opportunities in rural areas, and natural calamities, such as river erosion, cyclones, and floods, have contributed to this phenomenal growth. Conversely, increasing opportunities for higher education, employment, and income, transportation and

[52] FSP was established in 1982. The main objective of the project was to increase the enrolment rate of females in secondary schools which could ultimately delay marriage and childbearing. The operation of the project started nationally in 1994. World Bank, Asian Development Bank, the governments of Norway and Bangladesh supply the required amounts of money. The project basically provides tuition fees and a monthly stipend for rural girls up to class X. The main criteria for holding this stipend are that she should be unmarried, attend recognized institutions, maintain 75 percent of school attendance and achieve 45 percent marks in the annual examination. In 2002, nearly 2.3 million girls were reported to be enrolled under this program (Schurmann, A. 2009).

healthcare facilities appear to work as pull factors for people's movement to cities from rural areas (Hossain, 2005; Khan, 1982; Koehlmoos *et al.* 2011; Perry, 1999; Rana, 2011). Another study claimed that rural-urban migration (45%) was the leading cause of urban growth between 1981 and 1991 followed by natural population growth (35%) and reclassification of urban areas (20%) (Afsar, 1999). However, the majority of migrated people live in slum areas (Wahed *et al.* 2010).

The administrative and political system is more centralised and urban-oriented. Any policy formulated or proposed for rendering services, including healthcare, mainly focuses on how urban people, including policy makers and implementers, benefit more than their counterparts. For instance, most of the specialised hospitals dealing with complicated maternal cases are located in either big cities or district towns (Paul, 1983). Since all facilities for advancing life are available in major city areas (Afsar, 1999), qualified healthcare providers have a preference for staying and delivering services in urban areas that may have deprived rural people, particularly pregnant mothers, from receiving due treatment. Current data reflects the same tone. The life expectancy and MMR in urban areas are 68.3 years and 2.4, whereas these in rural areas are 66.2 years and 3.9 respectively (MoF&P, 2011).

4.4. The economic context

Bangladesh is gradually emerging as a middle income country. The GDP rate has been steadily rising from 3.72 between 1980/81 and 1984/85 to 3.74 (1985/86-1988/89), 4.40 (1990/91-1994/95), 5.21 (1995/96-1999/00) and 5.90 (2009) (Islam, 1978; UNDP, 2009). Per capita GDP growth rate more than doubled between 1980/81-1984/85 (1.53) and 1995/96-1999/00 (3.61) (Mahmud, 2006: 22). Although agriculture remains the mainstay of the economy with a greater part of the population being engaged in agricultural pursuits, per capita agricultural land has been decreasing. For instance, per capita arable land reduced from 0.10 hectares in 1981 to 0.06 hectares in 1996 (Nabi, 2003: 24). Nonetheless, rapid economic growth since the early 1990s brought transformation in the societal

production system with the transformation from agriculture to industry to some extent. The figures on the contribution of both agriculture and industry reflect the real transformation: agriculture and industry sectors contributed 25 percent each in GDP in the second half of the 1990s, while the industrial contribution went up 28 percent and agriculture's contribution declined to 23 percent in the 2000s (Osmani, 2010: 40-41).

4.4.1. Poverty

Many approaches to measure the incidence of poverty emerged over the last few decades. Poverty was defined by income in the 1960s, whereas relative deprivation and the basic needs approach became the gauge in the 1970s. From the 1980s, poverty began to be considered from non-monetary multi-dimensional standpoints that included dimensions of powerlessness, vulnerability, livelihoods, capabilities and mainstreaming gender. Two other criteria—'well-being' and 'voice'—were added in the 1990s. Indeed, the rights-based approach has become popular in the first decade of the new millennium (Everatt, 2005: 23). As the determinants of measuring poverty have changed over the decades, it is sometimes difficult to confirm whether poverty has been increasing or decreasing.

Different authors provided dissimilar trends (increasing or decreasing) in the incidence of poverty, the reason being the use of diverse approaches in measuring the syndrome. Some used the basic consumption unit, while others used food energy intake methods for demarcating the poverty line. Moreover, there appeared to be flaws in their methodology (Ravallion & Sen, 1996: 761-64). Various organizations have defined poverty as a relative concept. World Bank, for example, defines the poor as a group having low social interaction with other groups, while Cooperative for Assistance and Relief Everywhere equates poverty with the lack of access to conventional credit facility (Sultana, 2002: 22). Among many approaches, the most well known is the monetary approach which identifies a person as poor when his or her daily income becomes one US dollar or below.

However, no specific approach has been strictly followed in Bangladesh in measuring poverty. Direct calorie intake was used before 1988. Since then, basic needs and income approaches have been used (Ahmed, 2005; Ahmed & Chowdhury, 1999; Islam, 1996; 2003). Whatever the definition of poverty, there is also debate about the trend of poverty. Some argue that it is increasing, while others disagree. As many as 44 percent of people live under the poverty line. Among them, about 10 percent are in a state of severe deprivation (Farasuddin, 2003: 3). Around half of the population lives below the poverty line, earning 1.25 US Dollar per day (UNDP, 2009). Another study shows, in 2000, the poverty rate was 36.6 and 53 percent in urban and rural areas respectively. Thus, the poverty rate in rural areas is higher than that in the urban (Begum & Salimullah, 2004: 93). The poverty rate in rural areas dropped from 47.9 in 1995/96 to 44.9 percent in 1998/99. Rapid high production in rice in the 1990s led to improved food intake capacity of the people. As a result, the per capita calorie intake increased in both rural (from 2206 Kcal in 1995/96 to 2274.2 Kcal in 1999/2000) and urban (2220.2 Kcal in 1995/96 to 2288.3 kcal in 1999/2000) areas (GEDPC, 2001: 9). This rapid increment of food supply could be one of the reasons for a partially decreasing poverty rate in both rural and urban areas. Moreover, remittances from both domestic (especially from garments factories) and abroad and expansion of rural people's activities in non-farm activities play important roles in alleviating poverty in Bangladesh, particularly in rural areas (Osmani, 2010: 42-43).

4.4.2. Inequality

Income inequality at national level has been increasing in the last few decades. It found that household income earned by the lowest five percent households decreased from 1.03 (1991-92) to 0.77 (2005) percent, while that by the highest five percent rose to 26.93 from 18.85 percent between the same periods (Zaman, 2006). Others indicate that Gini coefficient at national level has increased from 0.432 (1995-96) to 0.467 (2005) through 0.451 (2000) (Deb *et al.* 2008). The current

data indicates a dissimilar trend and suggests that income inequality has been decreased; the Gini coefficient is 0.458 in 2010, while it was 0.467 in 2005 (Osmani & Sen, 2011: 3; UO, 2011: 14).

This income inequality has, in a parallel way, been increasing in both urban and rural areas. On the one hand, the Gini ratio for rural areas increased from 0.276 (1991/92) to 0.356 (2000) through 0.310 (1995/96). On the other hand, the ratio for urban areas rose to 0.437 (2000) from 0.327 (1991/92) through 0.389 (1995/96) (Khan, A. R. 2006: 7-12). One study claims that income inequality in rural areas rose to 0.428 in 2005 from 0.385 in 1995/96, while that in urban areas has increased from 0.444 in 1995-96 to 0.497 in 2000 and then remained the same till 2005. Income inequality in the agricultural sector has decreased, whereas it has surged in the industry and service sectors during the last decade (Deb *et al.* 2008). The current data indicates the same scenario for the rural but gives a different picture in the urban context. The figure for rural and urban areas is 0.430 and 0.452 respectively in 2010, whereas it was 0.428 (rural) and 0.497 (urban) in 2005 (UO, 2011: 14). Osmani (2010: 43-44) claims that the decade of 1991/92-2000 experienced not only growth and poverty reduction but also rising inequality. The main reasons for this increasing inequality are unequal distribution of non-farm income and income from overseas remittances. This high inequality and poverty can affect people's access to healthcare services.

4.5. Political context

In 1757, the British grabbed power in India and always appeared to serve the interests of the landlord class. As there was no partisan politics during the early period of British rule, they ruled without any intervention. Some local rebellions took place during their early regime but they were disorganised. The British government formed the Congress Party in 1885 headed by one Englishman for improving negotiations with influential local individuals and consolidating their power. All members of this party mainly came from the Hindu *Zamindar* class and they also served the interests of the government. However, the British realised that the Congress Party was becoming antithetical

to their interest and power, they supported the formation of the Muslim League for countering it. All members of the League also came from the Muslim gentry. The Hindu elite class was tipped against the Muslim aristocracy. By doing this, the British ensured its authority over the sub-continent by following the principle of 'divide and rule'. As both parties' principal interest was to gain the upper hand in society and politics for ultimate freedom from British rule, it could be assumed that they never pressurised the British government for engaging in social priorities, which made and implemented any effective social policy.

After the partition of the sub-continent in 1947, East Bengal became part of Pakistan mainly based on the criterion of religion. Pakistan had two parts—one was called East Pakistan (now Bangladesh) and the other was West Pakistan (now Pakistan). However, the West Pakistan government represented the landlord class and served their interests. East Pakistan with the larger population experienced exploitations and deprivations in every aspect. The people became vehemently opposed to any form of discrimination perpetrated upon them by the rulers based in West Pakistan. They demanded greater political and fiscal autonomy and ultimately independence, which resulted after a nine-month bloody war in 1971 (Choudhury, 1972; Islam, 1997; Kabir, 1987).

In the almost 40 years since independence, Bangladesh has experienced two stints of full or partial military rule lasting nearly 12 years. During the remaining years, the so-called democratic era, the country has been under the control of the two major parties, either the Awami League or the Bangladesh Nationalistic Party (BNP). Both have been at the helm thrice. The Awami League came into power after independence and ruled till 1975 and any form of opposition was quelled by the regime. The BNP ruled in three phases (1978-1980, 1991-1996, and 2001-2006). The Awami League returned to power in 1996 and again in 2009 for five-year terms. During their rule, no political consensus on national issues was formed. The country's political culture is such that the governing party has always been dominating and repressing the opposition. For its part, the opposition has always opposed the policies of the governing party. This has proved detrimental to creating the

conditions for designing and executing broadly agreed social policies (Ahmed, R 2009; Jahan, 2004; Pandey, 2004; Riaz, 2003).

4.6. Administrative set-up

Bangladesh has had parliamentary democracy since 1991. Constitutionally, parliament is the highest state organ as well as the sole authority to enact and amend laws. The cabinet, which includes the prime minister, ministers, state ministers, and deputy ministers, has executive power and is accountable collectively to parliament. As in other parliamentary democracies, the leader of the majority party is appointed prime minister and chief executive of the country by the president who is a ceremonial figurehead. Each ministry is normally headed by a minister or a state minister. A state minister is assisting a minister if he/she has responsibilities for more than one ministry. Each ministry consists of either one division or more. The secretary, the principal officer of one division, advises the minister on policy and administrative issues. Other functions of the secretary are to monitor the routine operations of the division, supervise its staff and organisational processes, and maintain its financial matters. An additional secretary can play the same roles in the absence of the secretary in the division. Each division is further divided into wings whose chief executives are joint secretaries, their main functions being monitoring the affairs of a wing and submitting cases to his/her superiors for decision. One wing has more than one branch, each of which is headed by the deputy secretary looking after everything under his/her supervision. There is one section in each wing at the divisional level headed by a senior/assistant secretary who makes decisions on all cases following stipulated rules and precedents (Jahan, 2006: 3-4; Zafarullah, 1998: 91; Zafarullah, 2007). The whole discussion on the organogram of the cabinet/executive structure is shown in the Appendix 2.

Administratively, the entire country is divided into five layers: *bibhagh* (division), *zila* (district), upazila (sub district), union and ward. A divisional commissioner administers and monitors all

activities of the division. Each division is sub-divided into districts supervised by the deputy commissioner. Districts are further sub-divided into *upazilas,* headed by an Upazila Nirbahi Officer (UNO). Under each *upazila,* there are several unions, each being administered by an elected council consisting of 13 members and headed by a chairman. Lastly, a union[53] is divided into nine wards (MOHFW, 2010: 2; Ruhul *et al.* 1999: 65). At present, there are seven divisions, 64 districts, 483 *upazilas*, 4,498 unions, and 40,482 wards. The administrative hierarchies can be shown as follows:

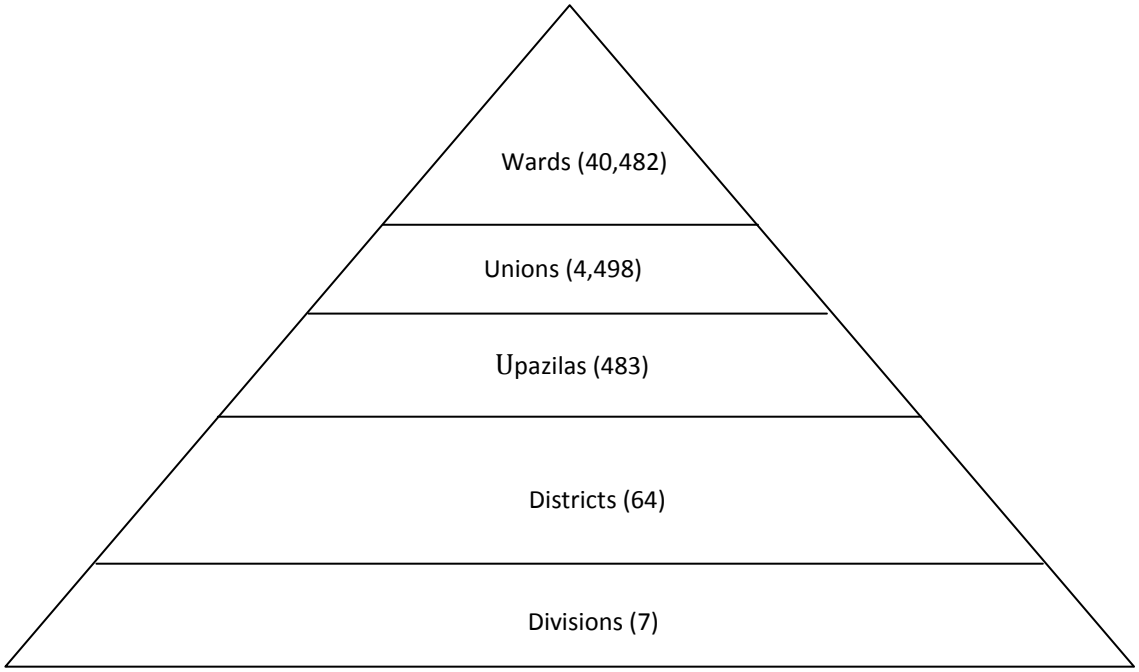

Figure 4.2 The administrative hierarchy

4.7. Healthcare service delivery system

This part is further divided into five sections. The first sub-section discusses different types of healthcare services available. The next deals with the healthcare system which prevailed prior to independence which is followed by highlighting the prevalent healthcare systems since independence. The fourth explores maternal health care (MHC) delivery system, whereas the fifth shows overall healthcare delivery systems.

[53] One chairman from the whole union, one member from each ward and one female member from three wards are locally elected for five years.

4.7.1. Different types of healthcare services

Like many Third World countries, medical pluralism or the existence of different therapeutic systems in a homogeneous socio-economic setting is an important aspect of the healthcare service delivery system (Ahmed *et al.* 2000: 362). They range from self-care to folk and western medicine. One study found that healthcare options are multiple and diverse, ranging from traditional to modern care and home remedies. Four types of healthcare options were identified in this study. These are: home remedies, traditional/indigenous healers, modern institutional care and unqualified modern practitioners (Desmet *et al.* 1999: 99-100). Another study grouped types of healthcare clients sought into five categories: self-care in which no medication is substituted for common home remedies like oral saline; traditional methods include healing by using both supernatural means and the advice of local *Kabiraj*/*Hakim*/homeopathic practitioners; para-professionals[54]; qualified allopath comprising licensed practitioners; and informal or unqualified care providers (drug peddlers, untrained pharmacists and so on) (Ahmed *et al.* 2003: 308). Exploring what types of healthcare services pregnant mothers usually seek is the main reason for mentioning different healthcare options.

4.7.2. Service delivery system before independence

The political life of Bangladesh is divided into five periods: Hindu, Muslim, British, Pakistan and Bangladesh. During the Hindu period, the most common health system was *Ayurveda*, which was fully based on the provision of adequate food and healthy surroundings. *Unani*, whose main substances were natural resources, was the most prevalent health system during the Muslim period in India (Ghani, 2003). The higher class people benefited more than other classes from both systems as they financially patronised them. The colonisers made attempts to establish a modern healthcare system by rejecting *Ayurveda* and *Unani* practices.

[54] Including *palli chikitsoks* (village practitioners who receive a year-long training in diagnosing and treating common rural ailments), medical assistants who have a three-year medical program completion certificate, and government and non-government community health workers with basic healthcare training.

Like many colonial rulers, the British (1757-1947) provided limited hospital-based curative care to their own people and local elites for consolidating their administrative and business interests in Bengal (the Eastern part of which is now Bangladesh) (Navarro, 1982: 27-28; Osman, 2004: 71-72). Bala (1991: 93) claimed that the British government introduced public health policy in India which was more of a failure than a success. This failure had been caused by a lack of broader objectives—greater emphasis on the health of the colonial army and the European population in India, and the protection of trade and commercial interests from the impact of disease and epidemics, failure to give due attention to the dominant social and religious conditions in India in order to tackle health hazards, and the government's incapacity in intervening directly in health matters as they had limited knowledge of disease causation and its prevention and cure.

The Pakistani rulers inherited the colonial healthcare delivery system and continued providing healthcare services to the urban elites for their support in smoothly ruling the country. Thus, after independence, Bangladesh got the administrative-headquarter-based and urban-centred healthcare systems from colonial and subsequent rulers. This was state-financed, hospital-based and relied on a small number of highly trained physicians (Kabeer, 1995: 189; Osman, 2004: 76).

4.7.3. Service delivery system after independence

The government has been organising its healthcare service delivery system at five levels: home and community level; union level: Union Health Sub-Centre (UHSC) /Union Health and Family Welfare Centre (UHFWC); *upazila* level: *Upazila* Health Complex (UHC); district level: District Hospital; and national level. Each district hospital serves a population of roughly 2.5 million, whereas the UHC provides services to a population of about 0.2 million (Hossain & Ross, 2006: 321). The focus of the system is to provide healthcare services in the rural countryside. In urban areas, no healthcare services are provided at home or community level. The figure (following page) shows the availability of healthcare services at different levels.

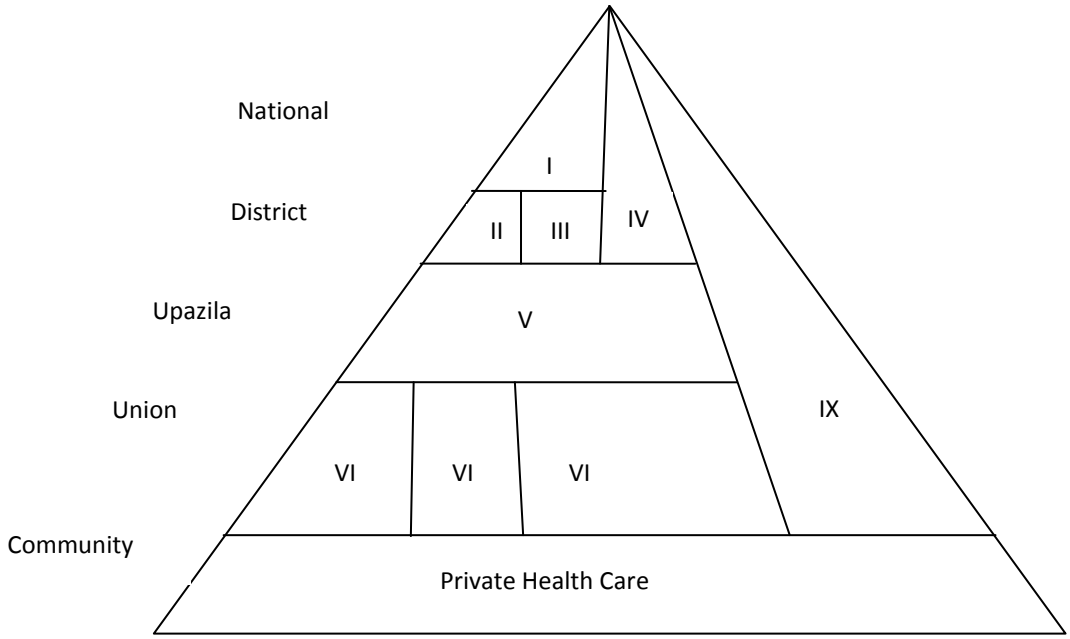

Figure 4.3 Availability of healthcare services at different levels

Notes: I-Medical College Hospitals (300-500 beds), II-District Hospitals (50-200 beds), III- Maternal and Child Welfare Centre (2-10 beds), IV- Specialised Hospitals, V- UHC (31 beds), VI-Dispensary (outpatient only), VII-UHFWC (outpatient only) VIII-Other Health Centres and IX-Other hospitals.

The figure 4.3 shows that medical college hospitals and specialised hospitals are available at the district and upper levels. There is also a district hospital which provides some comprehensive healthcare services and monitors the functioning activities of the UHC. The UHFWCs, and other health centres provide outdoor healthcare services at the union level. Private healthcare providers are available at the community level. Besides these, other hospitals are available at every level to provide healthcare services.

4.7.3.1. Structural position of health personnel

A healthcare system similar to the administrative structure has been set-up. The minister of the Ministry of Health and Family Welfare (MOHFW) is the supreme authority to implement all health policies. Under the minister, there are two directors general, each for health and family planning (FP) wings, each with a director. Healthcare services are provided under the guidance of a divisional

director and a district civil surgeon at both division and district levels respectively. The Upazila Health and Family Planning Officer (UHFPO) supervises and monitors both health and family welfare services provided at *upazila* and below levels. The following figure shows the position of health personnel at different levels.

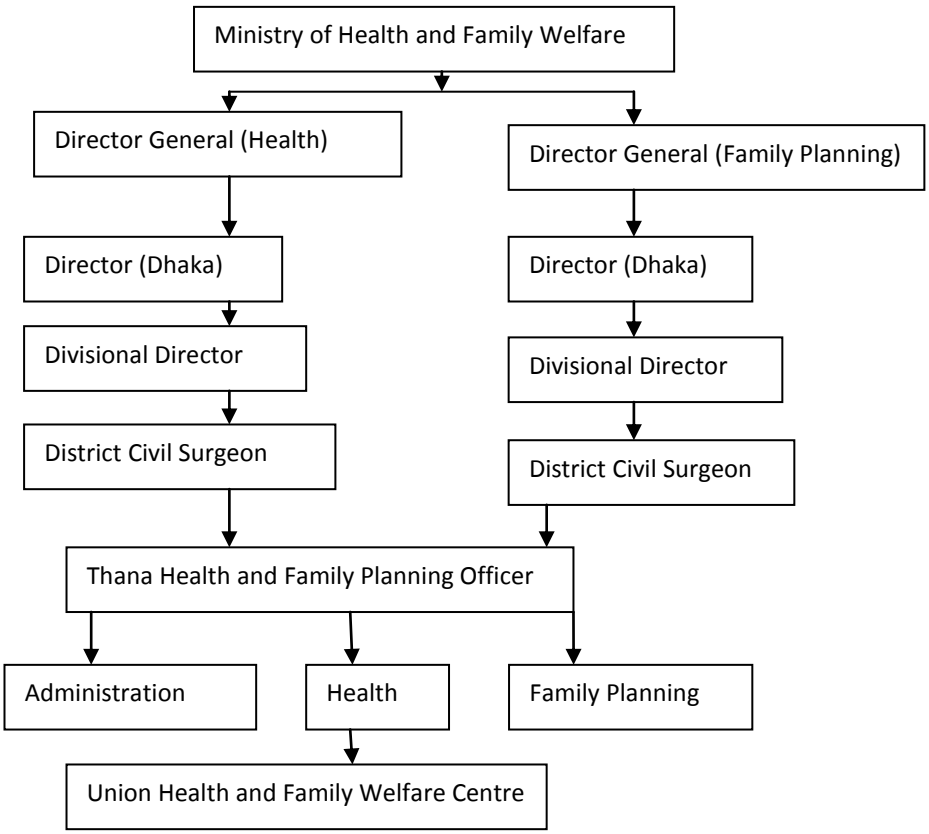

Figure 4.4 Administrative structure of health personnel in Bangladesh (Source: Khanum, 1999: 126)

4.7.3.2. Governance and organogram of healthcare system

The government, private, NGOs and traditional sectors provide healthcare services in Bangladesh. The MOHFW is primarily concerned with formulating, planning and making decisions on health policy issues at the macro level. It directly supervises the healthcare services in the public sector and indirectly monitors services provided by others. It has two wings i.e., health and FP. The Health wing provides and administers preventive and curative healthcare services. It also controls drug administration and monitors development of the nursing profession. At the lowest level, there is one

UHSC comprising a medical officer, a medical assistant and a pharmacist. In the middle, there is a UHC with 31 beds in which nine medical officers, two pharmacists, two medical assistants, and five nurses are expected to provide healthcare services to both out-and in-patients. One district hospital, headed by the civil surgeon who runs both fixed-site and out-reach healthcare services in the district, is available at the upper level. The FP wing monitors population control and research, and provides maternal and child health (MCH) care services. Besides all these centres at different levels, the FP wing sets up some maternal and child welfare centres (MCWCs) for providing MHC services at district and *upazila* levels (Ara, 2008: 5-6; Rahman *et al.* 2003: 12). The figure (in Appendix 3) portrays the organogram of healthcare service delivery systems.

4.7.4. Maternal healthcare service delivery system

The scope of the PHC has been expanding in the last few decades. For instance, until the 1950s, the main focus of the PHC services was to extend basic medical curative services and providing treatment to sick people in the most remote and underprivileged areas. However, the PHC scope widened after the 1960s and included both preventive and promotional measures. Safe drinking water, sanitation, provision of essential drugs, MHC, etc. became the main PHC services. As discussed in Chapter 3, different conferences, such as the Alma Ata in 1978, the Safe Motherhood in 1987, and the International Conference on Population and Development in 1994, gave more emphasis to maternal health. For instance, the Safe Motherhood Conference gave emphasis to the idea that every pregnant mother should have access to obstetric care. Bangladesh also took part in all worldwide endeavours (Khanum *et al.* 2003: 1).

MHC services have received due attention since 1987 and have provided healthcare service delivery network through the country-wide. The community clinic, headed by the family welfare assistant and health assistant, provides services at the community level. A family welfare visitor (FWV) and a sub-assistant community medical officer or medical assistants mainly provide services at the union

level. In addition, there are 250 graduate medical officers stationed for providing MHC services in all union health centres at the *upazila* level. One junior consultant (gynaecology) is supposed to provide services in emergency cases, attend all deliveries taking place at the UHC and refer complicated cases. Besides all these centres, there are some MCWCs at district or upazila level which are equipped with basic and comprehensive emergency obstetric care (Rahman *et al.* 2003: 14).

4.7.5. General healthcare delivery system

All healthcare services except for MHC and FP are provided under the Health wing. A few specialised hospitals provide specialised healthcare services at the tertiary level. The district hospital, UHC, rural dispensary and newly emerging community clinics provide these services at district, *upazila*, union and village levels respectively. The following table shows how healthcare services are provided at different levels. Besides these, other facilities are available[55].

Table 4.1. Distribution of healthcare services provided at different levels

	Health	**Family Planning**
Tertiary		
National	Medical Colleges (including specialised hospitals)	None
Secondary		
District	District Hospital	Maternal and Child Welfare Centre (MCWC), 1 or 2 per district FP staff in District Hospital
Upazila	Upazila Health Complex (UHC)	FP staff in the UHC
primary		
Union	Rural Dispensaries	Family Welfare Centres (FWCs)
Village	Community	Clinics

Source: (WB, 2006: 1)

[55] There are 35 facilities available at the national level for providing health, population and nutritional services. Among these are one medical university, 30 post graduate institute hospitals, two alternative medical hospitals (Director General of Health service [DGHS]) and two family planning institutes (Director General of Family Planning [DGFP]). The total number of facilities available at the divisional level is 56: 18 medical college hospitals (DGHS), 28 other hospitals (DGHS), and 14 model clinics (DGFP). 221 facilities are available at district level, of which 61 are district hospitals (DGHS), 101 MCWCs, and 59 mother & child health-family planning clinics (DGFP). All UHC facilities are under the DGHS. Out of 5,168 union health centres, 1,449 are under the DGHS and the rest under the DGFP. 80,789 facilities are present at the ward level, the lowest administrative unit. Among them, are 14,025 community clinics (both DGHS&DGFP), 30,000 satellite clinics (DGFP), and the rest are community nutrition centres (National Nutrition Program).

4.8. Summary

Bangladesh, located in South Asia, is a culturally homogenous country where a patriarchal societal norm, co-existence of different religious communities, strong bondage between people, hierarchal administrative and social systems are found. The position of women in both household and society has been changing for various socio-cultural, economic, political and developmental reasons. Bangladesh has experienced a transition from an agricultural to an industrial economy. It has also experienced rapid economic growth, poverty reduction and income inequality over the last two decades. Although a parliamentary democracy, the control of the administrative system is concentrated at the political executive level, with the prime minister playing a central role.

The public healthcare system is organised parallel to the national administrative set-up. As a result, all specialised hospitals are in the capital and divisional cities. All types of healthcare services, such as homeopathic, allopathic, and indigenous, are available everywhere though the government provides primary, secondary and tertiary healthcare services at the union (and below), *upazila* and district, as well as division and its upper levels respectively. However, comprehensive MHC services are available only in certain *upazila* and district hospitals. The MOHFW has two wings, each provide a limited extent of healthcare services for mothers.

Socio-economic, administrative, political and healthcare service delivery systems generally influence people's decision on seeking primary, particularly maternal, healthcare services provided by different organisations, including both government and non-government what the study found in Chapters 2 and 3.

The contribution of this chapter is to highlight socio-economic conditions of Bangladesh which has links with people's availability of and accessibility to primary, mainly maternal, healthcare services.

The next chapter will explain how the study was carried out in this local context.

Chapter Five: Methodology

5.1. Introduction

It goes without saying that methodology is very important in any social science research as it is a guideline or framework for conducting research. This describes the methods of investigation, the concepts and the underlying analytical structures of a particular problem. Without a clear methodological framework, the direction of research may not be proper and scientific. In other words, a well-planned and sound methodological framework (which includes different tools, techniques and strategies) can help researchers conduct effective scientific investigation. Based on the contextual realities in Bangladesh (discussed in the previous chapter), the methodology of this study was designed and often modified to adjust to the social-cultural sensibilities, outlook and attitudes of the subjects of the research.

The main objective of this chapter is to detail the techniques followed to collect the primary data for this study. The first part of this chapter highlights the study objectives, whereas the second provides information about ways the primary data was collected. The third discusses how data was analysed, followed by a description of my role as the researcher at the field level. The types of barriers I and my research assistants faced are detailed in the 5th part. The penultimate part highlights socio-economic backgrounds of the respondents and a summary is drawn in the final part.

5.2. The study objectives

The main objectives of the study were to find out the possible reasons that prevented the reduction of high maternal mortality rate (MMR) and to make practical suggestions to narrow down the gap between rural and urban regions in terms of accessibility to and availability of maternal health care (MHC) services in Bangladesh. The main reasons for selecting maternal health as a research issue are

that the country has relatively higher MMR and is lagging behind in realising the target of the 5th MDG compared with other South Asian countries. Bangladesh has also many fragmented health policies which create tensions among frontline policy implementers and service users. By and large, the healthcare system appears not very functional. Other relevant objectives were to find out the drawbacks of health policies regarding this issue (problems in availability and access) and to explore the reasons that might be responsible for the persistent gap between the poor women in rural and urban areas in terms of accessibility to and availability of MHC services. A final aim of the study was to explore the attitudes of mothers towards different vertical (specific disease-oriented) interventions which are deemed to bring about positive outcomes in maternal health.

The specific objectives of the study were to examine:

- The type, extent and pattern of pregnant mothers' health seeking behaviours.
- The factors that influence pregnant mother families' selections of birthing places, modes and attendants.
- The extent and impact of user and unofficial fees on the accessibility to MHC services.
- The attitudes of health personnel about how the shortage of qualified healthcare providers can be met.
- The type, extent and pattern of healthcare services that different organisations provide at different levels.
- Nature and implication of health-related different policies in the improvement of maternal health.

Both primary and secondary sources of data were used to substantiate ideas and arguments. The nature of the primary data is qualitative (mainly) and quantitative. Secondary materials used were journal and newspaper articles, books, different reports (published & unpublished) and web-based information. They mainly provide quantitative and sometimes give qualitative information.

5.3. Methods

Following the above mentioned methodological principle, I used triangulation i.e., questionnaire interviews of service recipients and providers, focus group discussion (FGD), and direct observation with specific objectives of understanding and interpreting the problems, exploring the barriers to health care, watching the conditions of the poor women from their situations and mitigating problems of validity and bias. Similar logic has been advanced in different studies (Germov, 2002: 12; Marshall & McKeon, 1996: 151; Minichiello *et al.* 2008: 194). It was expected to provide two great advantages compared to other strategies. First, the deficiency of one method could possibly be offset by the strength of other methods and, secondly, to bypass problems generating from studies based on single method (Minichiello *et al.* 2008: 194).

A number of studies (Blum *et al.* 2006; Cham *et al.* 2009; D'Ambruoso *et al.* 2005; Fotso *et al.* 2009; Hulton *et al.* 2007; Izugbara, 2004; Khan, 2005; Killingsworth *et al.* 1999; Wagle *et al.* 2004) used in-depth interviews (either structured or semi-structured or both) on healthcare service users and providers, observation and FGD methods in order to assesss the acceptability, availability, quality and utilisation of healthcare services in many developing countries, including Bangladesh. It is important to mention here that most of the studies followed more than one method.

However, they all more or less viewed the problem from public health and medical science perspectives (see Appendix 1) even if using the triangulation method. This reflects that all questions asked are related to the use of medical interventions. The connection between society and the acceptance of these interventions is missing, which this study intends to address. All these studies selected either rural or urban areas for conducting their studies. This study is different as it focuses on the differentials in the availability of and accessibility to primary, particularly maternal, healthcare services between rural and urban areas by administering the same questionnaire at two different levels. It should be mentioned here that the researcher received ethical clearance from the University of New England for conducting his study in Bangladesh.

5.3.1. Interviews with mothers

The study used purposive sampling procedure in selecting the site. Respondents (mothers who delivered at least one baby in the last ten years) were chosen randomly.

5.3.1.1. Area sampling

As mentioned in Chapter 4, Bangladesh is divided into seven divisions, 64 districts, 481 *Upazilas* (sub-district) and 4,498 unions administratively. High MMR, lower proportion of births attended by the skilled attendants, less access to ante-natal care (ANC) services, and the non-availability of such a kind of study in this region (see appendix 1) were the main criteria for selecting one division (Rajshahi, located at the northern side of Bangladesh) from seven. Three areas of Rajshahi division (Bogra, Rajshahi city and Shapahar) were chosen based on the scale of rural-urban continuum, remoteness and clustering poor households. Rajshahi and Bogra are metropolitan cities where government and private organisations provide basic healthcare services. Shapahar, where government-provided healthcare services are available, is in the rural area of Rajshahi division close to the border with India and far away from the heart of Rajshahi and Bogra cities. The reasons behind choosing Rajshahi among other divisions are as follows:

- Rajshahi (2.9) and Bogra (3.0) regions within Rajshahi division have not been able to reduce MMR as much as other regions like Barisal (2.6), Pabna (2.6), Tangail (2.6), Dinajpur (2.8) (BIDS, 2003). MMR has been higher in other regions, such as Chittagong (4.2), Comilla (3.3), Noakhali (3.3), and Jessore (3.4).
- The proportion of delivery done by SBAs in Rajshahi is 18.2 percent which is the lowest compared to other divisions (UNFPA, 2003).
- Around 60 percent of mothers in Rajshahi division have no access to ANC provided by medical personnel, whereas only half of the mothers in Khulna division face the same problem (NIPORT, 2001).

- I compared public and public-private partnership in terms of their performance and poor women's accessibility.
- Due to the time constraint, it was more feasible to compare three regional set ups within one big area.

5.3.1.2. Multistage and random sampling

Primary data was collected from interviews using questionnaires. 'Multistage sampling' and 'random sampling' were used for site selection and conducting in-depth interviews of mothers respectively. Mothers of three particular areas (Bogra, Rajshahi and Shapahar) who delivered babies were the main targets.

For Bogra city, a search was made on the number of wards. From a total of 20 wards, Ward no. 6, where poor families usually lived, was selected. From within this ward, one particular area, namely North Chelopara, was chosen to interview mothers. The main criteria for the selection of respondents were mothers' household patterns and their motherhood status.

For Rajshahi city, a similar search was made for the number of wards. From a total of 30 wards, two very remote ones (Ward no 17 & 30) were selected for individual interviews. Kazla (Ward no 30) is situated in the eastern corner of the city and about eight kilometres away from the central business district. Naodapara (Ward no 17) is located in the northern part of the city and around 15 kilometres away from the city centre. The underlying reasons for selecting these two wards were: their remoteness, the number of poor people living there and the presence of several non-governmental organisations (NGOs) providing primary, including maternal, healthcare services, such as the Urban Primary Health Care Project (UPHCP). The other reason was to ascertain the differences between these two areas in terms of accessibility to and availability of primary, mainly maternal, healthcare services.

From Shapahar *upazila*, one village located far away from the administrative headquarter was selected for administering in-depth interviews of the women. This village—Nirmoil, had poor communication facilities and limited forms of transportation for travel.

Women who delivered at least one baby in the last ten years were selected randomly for interviewing in order to know whether they had access to MHC services, where deliveries of their babies took place and what delivery methods were followed. After selecting the first interviewee, the next one was selected based on the previous one's information regarding mothers who had already delivered. It was easy and time saving to handle purposive sampling procedure for collecting primary data.

Both open and close-ended questions were included in the questionnaire, which had six parts (see Appendix 4). Information about socio-economic condition of the respondents was collected to explore the effects of household situation on health-seeking behaviour. Mothers were asked what they experienced during the previous pregnancy and how that experience influenced the selection of birthing places, attendants and modes. The interviews also sought mothers' perceptions about pregnancy and childbirth and how that perception influenced their MHC seeking behaviour.

Before finalising the questionnaire, pre-testing was conducted on five households in the Rajshahi region for identifying potentialities and limitations of the originally drafted questionnaire. After completing pre-testing, it was realised that the questionnaire needed to be reframed for acquiring the required information more systematically and without any hindrances. This interview was administered for three months, October-December, 2010. They took an average of 30 minutes to complete. Sixty mothers were interviewed in Bogra and Rajshahi each and 40 in Shapahar.

5.3.2. Interviews with service providers

After the completion of the in-depth interviews, some idea was formed about the places where most respondents went for MHC services. Accordingly, the heads of seven healthcare centres—three

each in Shapahar and Rajshahi and one in Bogra—were interviewed for understanding their roles in healthcare service delivery and monitoring service quality. Open- and close-ended questions (see Appendix 5) were included in this questionnaire. The interviews explored their views regarding the imposition and waiving of user fees, the involvement of the community people in the service delivery system of the centre and the shortage of health personnel and how this problem could be addressed. They were also asked about patterns and types of services mothers usually received from them and how they maintained good quality services with specific objective of exploring type, pattern and quality of services mothers received. The underlying reason for using the structured interviews was that they were very focused and relevant to the research and did not require much time from the service providers (Minichiello *et al.* 2008: 49). Each interview lasted around 45 minutes.

5.3.3. Focus group discussions

Focus group discussions were arranged for understanding the accessibility to and availability of healthcare services in the researched areas. The researcher's personal connection was used as a gate keeper for arranging participants for group discussions. A structured format (see Appendix 6) was used to engage all participants in issue discussions. All participants were asked for discussing about patterns and types of available healthcare services at their closest centres. Their views about the acceptability of skilled in place of traditional birth attendants and the availability of referral systems for complicated cases were taken in the forum meetings. Eight FGDs (two each in Bogra and Shapahar and four in Rajshahi) were organised and each was conducted for about an hour. The researcher moderated the FGDs and took notes of proceedings. The number of participants in each FGD was on average five.

5.4. Analysis

After the in-depth interviews, each questionnaire was examined and errors in inserting responses corrected accordingly. All responses to the questions were coded manually for inserting the raw information into the Statistical Package for Social Sciences (SPSS) program. This provided me the information about respondents' socio-economic conditions and their selection of baby delivery procedures, place of delivery and choice of attendants. Responses to open ended questions, given by mothers, service providers and FGD participants were transcribed. Frequency distribution tables with percentages and cross tables were constructed to describe responses and opinions expressed by both service providers and users. Tables for expressing services users' responses were prepared using the SPSS programme, while those for service providers were done manually. Comments on different issues made by FGD participants have been quoted in the text. Each respondent's response is used as a unit of analysis.

5.5. Researcher's role

Given the fact that I lived and taught in Rajshahi as well as being engaged in research activities for several years[56], it was easy to collect both primary and secondary data. Nevertheless, some difficulties were faced that need to be elaborated here. After reaching Rajshahi, I decided to visit some key administrative personnel in all three selected areas. Visits were made to the head office of Rajshahi City Corporation, Bogra Municipality and Shapahar *upazila* centre for some basic information on these places. They asked for documents that indicated my identity, affiliation and field of research. When permission was sought for interviewing heads of healthcare service centres,

[56] I obtained Masters of Arts Degree from the Institute of Social Studies (ISS), The Hague, The Netherlands, in which comprehensive research methodology was taught and a research project as a part of the degree was accomplished. In addition, I was involved either as a Research Assistant or an independent Researcher in many projects focusing on primary and reproductive health care services in Bangladesh. Besides these, I participated in many workshops on qualitative research methodology.

they advised to apply for permission from the respective superior authorities. This permission was easily obtained within a few days.

The husbands of the respective respondents asked the researcher many superfluous questions, such as what benefits they would derive if they gave their valuable time for the interview. It may be mentioned that generally, most people refuse to spend their 'valuable' time without obtaining any positive impact or benefit in their lives. Therefore, some amount of persuasion was necessary to enlighten them about the academic purposes of this research and the long-term benefit that would derive from the study findings. Moreover, they were told that if they extended their cooperation to the researcher with appropriate answers to questions, their grievances and views would be communicated to the government after the research was completed. By doing so, their consent for interview was gained.

After a few days, it was realised that it was difficult to conduct interviews in three areas within the time frame without the help of locally-based research assistants. As a teacher at Rajshahi University (now on study leave), I had the opportunity to pick up students for this role. Two female postgraduate students from the Department of Sociology were selected. They both did a research project as a part of their honours degree and were involved in a number of projects as research assistants for collecting data. Before engaging them in the interview schedule, orientation on administering the questionnaire was provided so that their incomprehension or less experience did not obstruct the objectives of the research. However, the interviews of the service providers were personally undertaken by me. Sometimes, the interviewees (both mothers and service providers) were not interrupted when they talked too much in detail, often of no relevance to the issues pertaining to the research objectives, as doing so might have discouraged them to express themselves freely and openly.

The researcher had easy access to the Bogra Municipality and Rajshahi City Corporation offices, other research organisations and libraries. Officials at the head office of Marie Stopes (non-

governmental MHC service provider) in Rajshahi declined to provide information due to the researcher's teaching position in Bangladesh although they were shown the letter given from his supervisor.

For the sake of convenience, I always tried to use my position in Bangladesh for the smooth collection of relevant documents from different organisations. I felt that if I introduced myself as a post-graduate student from an overseas university, some of the officials might place undue demands for money in return for providing information and supplying documents. It is a truism that in an underdeveloped country, like Bangladesh, it is really tough for an outsider or anyone without a good position in the country to collect such information from different public offices.

5.6. Limitations

5.6.1. Shortcomings of the personal interview

As the main issue of the research is female health, I and my assistants tried to find solitary or private places where some personal questions could be asked of respondents. However, it was not always possible to do this because family members of the respondents showed curiosity and, particularly the husbands, did not like the idea of letting their wives talk privately to strangers. Since the respondents were forced by their 'guardians' to talk in an open space, they feared and felt ashamed to discuss any matter spontaneously. Thus it was difficult to maintain privacy of both interviewers and respondents. The researcher being a male and the two unmarried female research assistants, respondents felt shy to talk about reproductive health. If researchers were married females, they could have been able to extract more personal information from them.

5.6.2. Problems encountered during the focus group discussions

Some issues cropped up before forming focus groups for discussion. One was identifying the appropriate people to approach on getting their acceptance to be present on specific dates. Using

personal connection, the project coordinator of UPHCP at Bogra was persuaded to serve as the link between the researcher and FGD participants. He organised participants and fixed the date and time but even so, it took a while assembling all participants before the FGD meeting at the Chelopara centre. Only females but no males could be gathered, although the latter were also important for the discussion. Thus, 14 participants were divided into two groups. The timing for the discussion clashed with the time normally spent on household chores, such as cooking. Thus, these female participants hardly had much time to talk and were in a haste to leave the meetings and responded to questions as quickly as possible. Another problem was that some questions were so sensitive that they never wanted to disclose private matters in an open discussion.

In the rural areas the communication system is normally very poor. If anyone wants to visit the place for the FGD, they have to travel by a local public vehicle—'tempo' (an automated three-wheeler) or by self-driven motorcycle. But tempos are not always available; the waiting time is about an hour. In this case, for the FGD at Nirmoil, male participants could easily be arranged as they were found gossiping in tea stalls. However, it was tough to locate and arrange female participants. The medical assistant of the union health centre was used for retaining his female patients for a while for the FGD. On the day of the FGD, only a few females visited the centre as they preferred not to visit their nearest centres for treatment. Only poor women chose to make use of the free service.

Like Bogra, in Rajshahi, the project coordinator of UPHCP was used as the gate keeper for acquiring participants for the FGDs. They arrived on schedule but as in Chelopara, no male participants could be managed. However, all female participants were divided into two groups each in the two places (Noadapara and Kathalbari) the FGDs were held. There was no sitting arrangement for all as the place selected was small and the discussion had to be held with participants standing the whole time. As some of the participants had their homes near to the meeting place, they left for household work after replying to one or two questions. The others had to wait for their return. There was no

alternative but to have a mid-day time for the meeting as a cold wave was sweeping the region and that made it difficult for scheduling a FGD time in the mornings or late afternoons.

Some women in the group were more attentive in following the questions and in providing their opinions accordingly. Some were found imperceptible or were reluctant to express their opinions. Those who clearly provided their opinion were aware of health concerns and visited medical centres several times for themselves or others.

5.7. Profile of the respondents

The respondents' health seeking behaviour is associated with several characteristics. Information about the socio-economic and demographic profile of interviewees in different areas is needed for understanding the social background of the respondents. Personal demographic and socio-economic profile of the respondents will allow us to get a detailed idea about their age, marital status, education, family income and dwelling conditions which may help explore the relation of the background of the respondents with differential availability of and accessibility to primary, particularly maternal, healthcare services. This section attempts to discuss briefly the demographic profile and socio-economic background of mothers of the study sample.

Table 5.1. Demographic profile of the respondents

Different categories	Frequency	Percent	Cumulative percent
Age			
15-20	33	20.6	20.6
21-25	65	40.6	61.2
26-30	36	22.5	83.7
31-35	17	10.6	94.3
36+	9	5.7	100
Total	160	100	
Marital Status			
Married	155	96.8	
Widowed	3	1.9	
Divorced	2	1.3	
Total	160	100	
Age at marriage			
11-15	47	29.4	29.4
16-20	96	60.0	89.4
21-25	11	6.8	96.2
26+	6	3.8	100
Total	160	100	
Educational qualification			
Illiterate	63	39.3	39.3
Primary	44	27.5	66.8
Secondary	50	31.2	98.0
Higher-secondary	3	2.0	100
Total	160	100	
No. of family members			
1-3	125	78.1	78.1
4-6	30	18.7	69.8
7-9	5	3.2	100
Total	160	100	

Table 5.1 shows that most respondents were below 35 years of age (94.3%) and married (96.8%). Around 90 percent of respondents were married below the age of 20. Marriage at an early age is still prevalent and it could be one of the main reasons that caused early-married mothers to be at high risk, including death. More than three-fifth mothers were 25 years old or below. That means they attained motherhood immediately after marriage. It could be that they had more than one baby within five to seven years of their marital life, as they are culturally and socially conditioned to have babies one after another. Although I targeted interviewing mothers with at least one baby in the last ten years, the majority of mothers delivered at least one baby in the last five years. So there was little scope for recall bias. Sixty three out of 160 respondents were illiterate, while 44 and 50 had primary and secondary levels of education respectively. Around 78 percent of respondents had three-member- oriented families, while 19 percent had four to six members-based families.

As revealed in table 5.2, around 62 percent of respondents were Muslims and 34 percent Hindus. Almost all respondents were housewives. Around 44 percent of respondents reported that their monthly family income was less than 5,000 Taka (US$ 1=about 85 Taka), while half of the respondents reported an income between 5001 and 10,000 Taka. Only six percent of families had more than 10,000 Taka monthly incomes. Less than three quarters of respondents (71.2%) lived in *kutcha* type of residences, followed by semi-*pucca* (18.1%), tin shed (5.7%) and *pucca* (5%). More than half the respondents had bed, box and clothes hanger. The percentage of respondents having no household furniture was 18. Interestingly, the number of respondents having a TV was quite high compared to a more useful item, such as the refrigerator or a fan. It is important to note here that 37 percent of respondents reported that they did not have any consumer goods. Among respondents with consumer goods, the majority (43%) had only a single one, while 15 percent had two consumer goods. Only one-fifth of respondents had either two or more than two consumer goods.

If we take US$2 as a measure of income poverty, around 44 percent respondents were below the poverty line (Table 5.2). If poverty is multi-dimensionally treated, around 70 percent respondents were deprived of education and a decent living standard. It is worthy to mention here that no electricity was available in the study rural area where only rich people had solar energy. According to Alkire and Santos (2010), one household can be assessed as deprived if no household member has completed five years of schooling; household has no access to electricity; it has dirt, sand or dung floor; and it does not own more than one item of consumer goods. Based on the criteria set by them, 66.8%, 71.2% and 80% households in the studied areas were deprived from education, decent housing and not having more than one consumer item respectively.

Table 5.2. Socio-economic characteristics of the respondents

Different characteristics	Frequency	Percent
Religion		
Islam	99	62
Hindu	54	34
Christian	3	2
Adhivasi[57]	3	2
Total	159	100
Occupation (Multiple answers)		
Housewife	152	91.6
Job	1	0.6
Housemaid	5	3.0
Agriculture	8	4.8
Total	166	100
Income level (family monthly)		
Below 5000	69	43.9
5001-10,000	79	50.3
Above 10,000	9	5.8
Total	157	100
Household patterns		
Kutcha[58]	114	71.2
Pucca[59]	8	5.0
Semi-pucca[60]	29	18.1
Tin	9	5.7
Total	160	100
Household furniture (multiple answers)		
Bed	129	81
Box	120	75
Clothes hanger[61]	108	68
Table	8	5
Neither	28	18
Consumer items (multiple answers)		
Television	64	40
Refrigerator	12	8
Mobile	11	7
Fan	35	22
Radio	3	2
VCD	9	6
Cycle	6	4
Neither	59	37

[57] Aboriginal religion

[58] The walls and/or roofs of houses are made from materials such as un-burnt bricks, bamboos, mud, grass, tin, etc.

[59] The walls of house are made with burnt bricks and roof is concrete.

[60] The walls of burnt bricks and roof are made of corrugated tin.

[61] Keeping clothes and valuable items

5.8. Summary

This chapter provided an overview of methods by which the information about the research topic was collected. It also highlighted the way the interviews and FGDs were conducted and what hurdles the researcher and his research assistants faced during interview and FGD periods. The findings of the study about respondents' socio-economic conditions suggest that the majority of them were below 35 years old, married at an early age, delivered at least one baby in the last five years, had low level of education and lived below the poverty line.

The next chapter will explain health-related policies in the light of policy formulation cycle with the specific objective of finding out how these policies affect people's availability of and accessibility to PHC in the subsequent chapters. An analytical framework will be developed to explore the impact health sector reform policies have had in the availability and accessibility in different countries. This framework will help uncover how far Bangladeshi poor pregnant women are affected by these reforms in the following chapters.

Chapter Six: Bangladesh Health Policy

6.1. Introduction

Bangladesh has experienced both military and democratic rules since independence in 1971. During two stints of military rule, the presidential system of government replaced the parliamentary with all powers concentrated on the president. Parliamentary democracy was restored in 1991 and the office of the prime minister became the focal point of policy making and administration. The main focus of this chapter is to explore how health policies were developed and implemented during both military and democratic regimes. The review of the literature suggests that no academic piece analysed health-related policies in the way that this study attempts to do. The other objective is to find out how different health-related policies adopted and implemented have affected pregnant mothers' access to primary, primarily maternal, healthcare services. The first part of this chapter discusses the overall system of policy formulation in Bangladesh, while the next considers the general procedure adopted in formulating health policy. The third part highlights the historical background of different health-related policies. The fourth examines in greater detail the different phases of health policy process, whereas the debate on health sector reform policy (HSRP) is discussed in the fifth. The final part draws an overall summary of the prevailing health policy process in Bangladesh.

6.2. The policy process in Bangladesh

Like other developing countries, policy making in Bangladesh is virtually the domain of the bureaucracy. Apparently, bureaucrats gained their authoritative power in setting the policy agenda, formulating goals and making decisions in the wake of the continuing colonial legacy and the prevalence of a unique bureaucratic culture (Ahmad, 2003; Jamil, 2002; Siddiquee, 1999; Zafarullah, 1994; Zafarullah & Huque, 2001).

Generally, in non-democratic countries, the president with a military background tries to concentrate all powers in his hands by collaborating with civil bureaucrats, particularly top-ranking ones. This concentration and sharing of power with top level bureaucrats result in adopting a policy in any sector, including health, in a centralised manner. This basically hinders the wider participation of different stakeholders in the policy process and creates obstacles to effectively implementing policy at the field level (Khan & Van, 2007). Following the same principle, during military and pseudo-democratic rule (1975-1981 and 1982-1991), the policy process in Bangladesh became highly centralised. The president initiated major policies with inputs from the higher echelons of the bureaucracy. Minor policies were formulated at the ministry level where bureaucrats enjoyed total discretion in advancing their policy ideas and decisions. The whole process was bereft of any formal procedure to be followed. For instance, consultations between the minister and secretary (the administrative head of a ministry) were casual conversations rather than a formal dialogue. Moreover, no consultations with different stakeholders took place although some interest groups lobbied strongly for promoting their interests in policy matters relevant to them.

Parliamentary democracy, in place since the early 1990s, failed to bring about any significant change in the policy making process inherited from military rule. Top level politicians are, as before, engaged in collaborating with higher level bureaucrats in dominating the policy process leading to the framing of policies unilaterally by the government. In most cases, in partnership with the Planning Ministry, the Ministry of Health and Family Welfare (MOHFW) formulates and approves health-related policies and programs. In reality, however, the political executive appears to have had less control vis-à-vis the bureaucracy in policy development and implementation despite the prime minister enjoying full executive power. Indeed, the political actors are heavily reliant on appointed officials to facilitate the process. Other actors, such as interest groups, think-tanks, and legislators, are yet to fully participate in the policy process.

Invariably, the policy process has therefore been top-down. Parliament, where the governing party/coalition holds the majority of seats, simply rubber stamps policies designed by the executive in accordance with party choice and interest in mind. For all practical purposes, parliamentary democracy appears to be passive as the opposition parties habitually remain absent from most parliamentary sessions. The inactive parliamentary system and lack of knowledge of legislators on different issues provide bureaucrats the leverage to exert their power in policy formulation. Furthermore, parliamentary committees, comprising both elected members but supported by appointed higher officials, have been endorsing policies framed by the government without significant amendments. Bureaucratic dominance has been further strengthened under parliamentary democracy vis-à-vis military rule (Devine, 2002; Schurmann, A. T. & Mahmud, 2009; Zafarullah, 2003:278-79; Zafarullah, 2007). Thus, as in other developing countries, "the health policy process does not take place in a political vacuum but is embedded in a political and administrative context" (Khan & Van, 2007: 284).

6.3. Health policy making

For preparing a health policy, MOHFW usually forms a national health policy (NHP) formulation committee, comprising technocrats, bureaucrats and representatives of civil society and professional bodies. This committee formulates five sub-committees, each with a specific task. The main functions of the sub-committees are: to review and evaluate the existing health services and determine the goals (one sub-committee); formulate policies to ensure essential services (one) and hospital-based services (one); design strategies for human resources development (one); and integrate non-government organisations (NGOs) and the private sector and plan for resources and utilisation of funds (one). They submit their reports with recommendations after working on them for more than a year. This is followed by the formation of a working group, which compiles the reports and recommendations of the various sub-committees. It also organises consultation meetings at different levels with various groups on the findings and recommendations. Finally, the

working group submits its final recommendations to the formulation committee. Based on consensus, a health policy is ultimately finalised. The report becomes a policy after the cabinet committee approves it (MOHFW, 2000b).

In addition, a large number of international donor organisations[62] state and social actors (Ministry of Health and its affiliated departments), different national and International NGOs, civil society, professional groups,[63] different institutions[64] and think tanks[65] are directly or indirectly being involved in health policy process. Among them, some may have more influence on a particular health policy than others. For instance, the International Centre for Diarrhoea Disease Research of Bangladesh (ICDDRB) played a vital role in nutrition, while the BMA and WHO in the drug policy formulation process (Choudhury, 1981; Koehlmoos *et al.* 2011; Pelletier *et al.* 2011; Reich, 1994; 1995).

6.4. Background of different health-related policies

Before the introduction of the NHP of 2000, the government undertook a number of national five-year plans in which health was one component (Osman, 2004: 76-77). One of the earliest and most successful policies was the First Population Policy of 1976 under which the National Family Planning Program was adopted. Bangladesh introduced the Primary Health Care (PHC) under the Second Five-Year Plan (1981-85) following the announcement at the Alma Ata Conference of 1978 which boldly proclaimed "Health for All by the Year 2000". Being influenced by the conference agenda, like other developing countries, the military government often time shifted its focus from hospital-based

[62] World Health Organisation (WHO), United Nations Population Fund (UNFPA), United Nations International Children Emergency Fund (UNICEF), USAID, AUSAID, the UK Development Fund (DFID), World Bank, Asian Development Bank, Japan Fund (JAICA) etc.

[63] Bangladesh Medical Association (BMA), National Anti-Tuberculosis Association, Bangladesh Association of Voluntary Sterilisation, Bangladesh Family Planning Association, Bangladesh Red Cross, Obstetrical and Gynecological Society of Bangladesh (OGSB), Bangladesh Nurse Association.

[64] International Centre for Diarrhoea Disease Research of Bangladesh (ICDDRB), Bangladesh Rural Advancement Committee, National Institute of Population Research and Training (NIPORT), National Institute of Preventive and Social Medicine (NIPSOM), and different centres of various universities.

[65] Centre for Policy Dialogue, Bangladesh Institute of Development Studies, Transparency International of Bangladesh, and different print and electronic media.

medical care to public healthcare and promulgated a Drug (Control) Ordinance in 1982 whose principal objective was to promote essential drugs in the public sector by withdrawing non-essential drugs from the country (Alam, 2011; Islam *et al.* 2002: 158). The Third Five Year Plan (1985-90) also continued to focus on the provision of PHC services (Banik, 2003a: 257) and included one new dimension—Maternal and Child Health (MCH)—in the healthcare service delivery package (Osman, 2008: 265). In the meantime, the military ruler was eager to formulate a NHP but failed to do so due to internal (political parties and different groups) and external (multi-national companies, international NGOs) pressures.

Bangladesh executed many collaborative projects and programs with the World Bank and other donor consortiums during the Fourth Five Year Plan (1990/91-94/95). Meanwhile, the Health and Population Sector Strategy (HPSS) as a part of the HSRP was undertaken in 1996/97 for providing the Package of Essential Service (ESP) in order to contain population growth. The government realised that it was not possible to provide health services to all sections of the population through the ESP; rather it became necessary to rope in development partners to support integrated health services. Consequently, the government changed its strategy and moved from the project-driven to the program-driven approach under the Health and Population Sector Program (HPSP, 1998-2005)[66], a supplementary program of the Fifth Five-Year Plan (1997-2002) and an operational plan of the HPSS (Pearson, 1999: 3).

Meantime, the government adopted and declared a NHP in 2000 which had 15 goals and objectives, 10 policy principles, and 32 strategies (MOHFW, 2000b). One of the bold strategies incorporated in the policy was to unify both health and family planning (FP) wings with the objective of providing better healthcare services by minimising service delivery duplication and overlapping. The government realised that the existing health structure created tremendous problems in

[66] The idea of the SPSP is a constellation of different ideas or themes discussed in different forums in different times. For instance, the ICPD (1994), the country assistance strategy of the World Bank (1997), and the donor-led HPSS of 1997 entirely influenced the generating of this idea. The main aims were to bring revolutionary change in health system management and health-service provision (Osman, 2005).

realising/achieving their health target. The following comments, mentioned in the HPSS (1997 in Pendzich, n.d: 10-11), provide the rationale for the government's effort at integration.

> *The present organisational structure of the health and population sector needs further improvement to ensure a more sustainable and cost-effective delivery of essential services…The Ministry's [MOHFW] bifurcation into population and health wings, with separate cadres at all levels, dates back to the 1970s. This structure does not adequately respond to the needs of maternal health and clinical contraception and limits the potential for increasing the range, quality, and effectiveness of services. On the cost side, the current structure is a major cause of waste and inefficiency. Functionally, the bifurcation impedes referrals, generates internal conflicts, and contributes to the low utilisation of public facilities. In addition, current management systems provide few incentives to improve quality of care and respond to clients' needs. The management culture in the sector needs to be changed so that the providers are motivated to serve the needs of consumers. Public sector services will be the main focus for institutional reform. Public sector reform is also needed to improve the operating environment for all providers, and to effectively utilise the potential of the voluntary and private sectors.*

In 2001, the Bangladesh Nationalist Party (BNP)-led government returned to power and stalled the unification process. The main reasons advanced were: failure in slowing down total fertility rate (TFR) significantly; rapid shift to the sector wide approaches (SWAPs), influenced by the donor community; and lack of evidence-based assessment of the pros and cons associated with this approach (Bates *et al.* 2003: 89). The previous system was restored and the Health, Nutrition and Population Sector Program (HNPSP 2003-2010) was introduced in June 2003. The HPSP was replaced with the approval of the donor agencies in December, 2005. However, there was no policy program or any instruments in place for organising the health sector. Sector projects were implemented on an *ad hoc* basis for fulfilling certain sector needs during the interim period (2003-2005). The implementation of the HNPSP began in 2006. Meanwhile, MOHFW formed a 58-member core committee headed by the minister for updating the NHP, which was drafted and forwarded to the cabinet in July, 2006. However, the draft policy was never finalised.

The caretaker government (2007-08) continued the NHP 2000, albeit with certain changes. The draft policy was uploaded to the Ministry's website soliciting comments from different stakeholders. As this government was not an elected one and did not have the prerogative to adopt any new policy or substantially change an existing one, it faced tremendous pressure from different groups for not

formulating a new health policy. After the Awami League-led alliance won power in 2009, the Health Ministry took the initiative to formulate a new health policy by revising the NHP 2000. The draft version of the policy was posted on the Ministry's website for people's comments (Bangladesh-Health-Watch, 2010: 8-10) and was approved in a cabinet meeting in May, 2011.

It was the first time in Bangladesh's history that the 'NHP 2011' made attempts at incorporating homoeopathic and herbal medicare in all public hospitals along with the common allopathic form. The government made some bold decisions, such as banning the private practice of government health personnel and the introduction of health insurance for both public and private service holders with a provision to distribute health cards among the poor for free treatment at all government hospitals (*Daily-Star*, June 1, 2011). A new program—Health, Population and Nutrition Sector Development Program (HPNSDP)—will continue the HNPSP for the next five years (*Daily-Star*, August 24, 2011).

6.5. Analyses of all health-related policies

In this section, in light of the policy formulation cycle conceptualised by several scholars (Anderson, 2011: 4-5; Barker, 1996: 28; Bridgman & Davis, 2004: 26; Howlett *et al.* 2009: 12; Walt *et al.* 2008: 310), health-related policies that the government adopted at different times are analysed. Each phase of the cycle and the instruments used in implementing policies are assessed here. In general, the policy cycle encompasses the following phases: problem definition; agenda setting; policy formulation; policy adoption; policy implementation; and policy evaluation.

In general, before setting the agenda of any policy, the underlying problems are identified and analysed. Once problems are identified, different policy options (different solutions to a particular problem) are formulated in the policy formulation stage. This is followed by selecting a particular policy option in the final decision making phase. Policy implementation means how governments

translate policies into action, while both government and non-government sectors monitor the effects of policies adopted in the policy evaluation stage.

6.5.1. Identifying the problem and setting the agenda for health

Issues raised and deliberated at international conferences, internationally-set targets like the Millennium Development Goals (MDGs), emerging social issues, such as high population growth and external donor influences provide the stimuli for initiating health-related strategies in Bangladesh. The government on its own also adds elements to existing policies (sanitation, nutrition) or formulates completely new narrowly focused policies bypassing broader policies (e.g., maternal health care [MHC], nutrition, etc). As said earlier, the PHC got special attention when the government signed the Alma-Ata memorandum. Moreover, it has been emphasising the population issue since the 1970s. Accordingly, a separate wing on FP within the Health Ministry was created in the 1980s for attracting foreign donor support. However, this action of over-emphasising FP has had a detrimental effect on the health sector, in general.

Resolutions adopted at international conferences have often induced the government to adopt a new agenda in health-related policies. For instance, the government enthusiastically responded to the Safe Motherhood Initiative (SMI) and conducted an assessment of delivery services for MHC in 1988. Based on the findings of the assessment report, MHC was accorded greater priority in the Fourth Health and Population Project (FHPP, 1992-98). Ensuring safe delivery was one of the six objectives and both the government and NGOs implemented several maternal health pilot projects. Many interventions were introduced for achieving this objective, such as training of Traditional Birth Attendants (TBAs); screening and referral of high risk pregnancies; strengthening of antenatal, delivery and post-partum care; funding of a special maternal and neonatal care project; and strengthening obstetric and gynaecological services at sub-district health complexes and district hospitals. However, the Maternal Mortality Rate (MMR) did not decline as anticipated. The

government thus commissioned another assessment of the maternal health Programs in 1997 for exploring reasons behind this failure (Huque *et al.* 1999: 53-54).

During the interim period, at the 1994 International Conference on Population and Development (ICPD), another important international endeavour, all global leaders agreed to change their focus from curbing population growth to improving reproductive health. Consequently, the whole population policy paradigm shifted. Mukhopadhyay and Savithri (1998: 15-16) claimed that the ICPD brought about remarkable changes in the discourse on population policy. The action plan, adopted at the end of the Conference, directed the focus of the population policy from the macro to the micro level and the issue of the individual woman—her concerns, her choice and her rights over her body—in place of aggregative, target-driven, hierarchically designed fertility control programs started to get more attention.

As said earlier, the government adopted the HPSS with the specific objective of providing essential reproductive health and FP services from one stop centres at *upazila* level and below (Osman, 2005). As a result, the domiciliary-based services provided by visiting health workers were directed to the fixed-centre-based services. The HPSS had proposed many interventions between 1998 and 2003 for reducing maternal mortality and morbidity. It had seven strategies:

1) Focus on emergency obstetric care (EmOC) for reducing MMR;

2) Provision of essential obstetric care/basic maternity care services for promotion of 'good practices' including early detection and appropriate referral of complications;

3) Addressing the needs of women through a woman-friendly hospital initiative;

4) Communication for behaviour change and development;

5) Involvement of professional bodies;

6) Stakeholder participation; and

7) Promotion of innovation.

The International Summit on Millennium Development held in 2000 set eight goals. Among these, three are directly related to health issues. Following this summit and other international endeavours, the government prepared the National Strategy for maternal health in 2001 with the aim of promoting women's access to resources and ensuring better quality MHC services. The strategy focuses not only on essential maternal services, such as EmOC, antenatal care (ANC), skilled birth attendance (SBA), postnatal care (PNC), FP services and services for vulnerable women but also on improving referral systems and increasing human resources in remotest areas to achieve the target (Minca, 2011; Rahman *et al.* 2003: 14-16). It adopts an action plan for addressing access-related three delays (MOHFW & UNFPA, 2004). Later, the National Strategy for Anaemia Prevention and Control was adopted in 2006 (IPHN, 2007).

How the health agendas were set often depended on donor influence. As Bangladesh is a developing country and needs to depend on foreign financial assistance[67] for implementing any kind of public policy, the government is by and large compelled to be compliant with their agenda. Additionally, the key bilateral and multilateral donor agencies, such as the World Bank and aid-consortium member organisations and countries, introduced a new concept—SWAPs—for disbursing donor aid in developing countries through a single channel in the 1990s (Hill, 2002: 1725). This put pressure on the government to adopt a comprehensive and sector-wide strategy in order to continue obtaining further credits (Vaughan *et al.* 2000: 7). The government agreed to these reforms and formulated the HPSS. Meanwhile, the NHP was formulated in August 2000, the main target of which was to provide sector-wide rather than project-oriented services (Osman, 2008: 264-66). The following

[67] The government and donor are the primary sources of health care financing (Miller, 2001). Bangladesh spends less compared with other developing South Asian countries. For instance, Bangladesh spent less than three percent of its GDP on the health sector, while India, Nepal and Sri Lanka spent 5.0, 5.8 and 4.1 percent of GDP respectively in 2005 (Islam, 2009). The public sector contributed 26 percent of the Total Health Expenditure (THE), while the contribution of development partners and household in the THE was 8 and 64 percent respectively in 2006-07 (DGHS, n.d). Thirty-five percent expenditure of MOHFW is borne by 31 bilateral and multilateral organizations (Schurmann, A. T. & Mahmud, 2009). The donor's financial contribution in the newly approved HPNSDP is around more than 35 percent (*Daily-Star*, August 24, 2011).

excerpts indicate how donors had created pressure on the government for including this integration issue in the NHP.

The UNFPA stated that

> *Integration is a big issue. She made it clear to the prime minister that integration is crucial to the success of the reproductive health focus. We must integrate the health and family planning wings, and they must work together. Currently, the Family Planning Wing is strong, but the Health Wing is weak. Our program will not remain successful if there is no integration. Many facilities are underutilised, and the different facilities and their staffs don't collaborate. How to integrate is a key issue (Pendzich n.d:12).*

Another U.S. technical assistance organisation representative said, "Yes, integration will be difficult, but the advantages of integration far outweigh disadvantages. It will cost much less to incrementally build on existing services and service delivery sites" (Pendzich, n.d: 12). This foreign aid dependence puts the chance of sustainability of health-related programs and projects in question (Naripokkho, n.d).

In the policy domain, the bureaucracy, media and advocacy groups sometimes play an important role in placing an issue on a policy agenda. For instance, this issue of 'stunted growth' in babies became important after it received front page coverage in all daily newspapers. It was also brought to the fore by an internationally renowned research institute (ICDDRB) and UNICEF (Pelletier *et al.* 2011: 6). This prompted bureaucrats to include this as a key issue in the NHP agenda.

In sum, agenda setting in health policy has been influenced by both or either internal or external forces. It is sometimes difficult to sort out whether the former has had more influence than the latter. However, in general, external actors have more influencing power in agenda-setting than domestic interest groups in Bangladesh.

6.5.2. Formulating health-related policies

In Bangladesh, policy options are not prioritised or analysed based on research and logic. Whatever options are included in the final draft of the policy depend on some influential persons' or groups' preferences rather than on what is imperative or feasible. They could be the prime minister, particular ministers, bureaucrats, policy experts and the media. For instance, the BNP-led government reversed the integration policy on the pretext that this option was not properly based on solid evidence; rather donors influenced the choice (Bates *et al.* 2003: 89). Research findings are oftentimes accorded less importance when policy problems are analysed and options chosen. The main reasons for not using evidence in policy formulation by policy makers are lack of time, lack of orientation towards research and analyses and training in evidence-based research, on-going mistrust between policy makers and researchers and so on. Strong lobby groups like consumer or patient associations that push or create pressure on policy makers for using evidence or findings from different research and analyses are rare (Koehlmoos *et al.* 2009).

This, however, does not imply that policy is always analysed without evidence. Reports of national/international health-related organisations, such as NIPORT, NIPSOM, ICDDRB, Mitra and Associates, Institute of Health Economics, Dhaka University, Health Economics Unit, and MOHFW Department, have often been used as guides to policy development. For instance, the nutrition policy based on evidence presented in a ICDDRB report was finally approved (Pelletier *et al.* 2011: 8). Nonetheless, sometimes, these reports may not be value-free, being politically and ideologically motivated. So any policy based on such analyses could bring about misleading results.

As said earlier, the newly proposed NHP has taken a bold stand of restraining government doctors from private practice. Some analysts consider this a political decision to increase the present government's popularity (*New-Age*, May 31, 2011). In reality, this decision will always remain embedded on paper rather than executed. However, it is doubtful that its feasibility was analysed based on solid evidence.

6.5.2.1. Choosing policy instruments

The government has been using both persuasive and coercive instruments for enhancing the healthcare service delivery system. For instance, among governmental persuasive endeavours, training of the TBAs, upgrading rural health service centres, introducing new health worker cadre (known as *palli chikitsaks)* at the community level, and setting up new medical and nursing institutes for providing healthcare services at people's doorsteps have been prominent. Many other means like an awareness building campaign and media coverage for making people conscious about their own health issues have also been common. Because of these, people are apparently becoming more conscious about their health than before. These have also been complemented by coercive instruments. For example, the then military government promulgated a Drug (Control) Ordinance in 1982 for controlling the expansion of non-essential drugs (Islam *et al.* 2002: 158).

The government's FP initiatives, for instance, have widely been covered in both the print and electronic media. The observance of special days, such as women and population days, with specific slogans like 'a small family is a happy family', explanations of the advantages of having a small family on the pages of daily and weekly newspapers, short and long awareness-building plays on radio and television and publicity campaigns explaining the positive sides of having a small family and its sound maintenance and short documentaries in movie theatres preceding the main features have also been important instruments. Other forms of informing people on health issues have been religious sermons, especially in the rural areas, stimulating people to accept FP methods by dispelling religious orthodox notions, displaying FP-related posters and festoons in different public places and events. Besides these, the government announced financial incentives and free services to those undergoing permanent sterilisation. All these endeavours have resulted in implementing the FP program successfully. Bangladesh received an international recognition for this success in the 1990s.

6.5.2.2. Consulting with stakeholders

Anecdotal evidence shows that different types of policy actors, such as experts, political leaders, pressure groups, media, and common people, have actively participated in discussion meetings on health-related policies at different levels. Yet, in reality, successive government policies have been based on the ruling party's own political agenda. In other words, the government usually wants participation of people from different backgrounds but is selective in taking on board those views which would serve their political purposes. Generally, health-related policies are formulated in consultation with some political leaders mainly belonging to the ruling party, top-level bureaucrats, different pressure groups, such as BMA, and donor agencies (Koehlmoos *et al.* 2009). Policy reversals, interestingly, have also occurred through consultation with these actors as was the case with the BNP-led government's annulment of the NHP 2000 (Bangladesh-Health-Watch, 2010: 9). For instance, consultations among national and international agencies and NGOs, professional medical associations and research institutes took place before formulating the national anaemia strategy of 2006 (IPHN, 2007).

People hardly get the opportunity to channel their expectations about health policy or for that matter any policy. One of the most important drawbacks of all health-related policies is the lack of people's participation in their formation (Barkat & Sabina, 2006: 316). An evaluation study on the HPSP done in 2000 depicts how lack of people's participations affected the success of the policy. Only 10 percent of respondents knew that a community clinic group was active; among them, 85 percent did not know anything about its activities, while 10 percent reported the non-availability of clinics in their areas. Indeed, no consultation with common people happened when the community clinic policy was formulated.

The HPSS introduced unification of both health and FP services, previously run parallel to each other albeit under the same ministry. During the focus group discussion for this research, participants

welcomed this attempt at unification. Yet, the HPSP went back to the previous two wings system by disregarding people's views at the final stage. Moreover, the HNPSP replaced the HPSP in 2002 in total indifference to the idea of the community clinic. However, the HNPSP did introduce different modalities, such as local level planning and health users' forum for promoting community participation (Osmani, 2010: 69-70). Furthermore, Naripokkho[68] claims in an informal discussion during the field visit in 2010 that many governments have taken many initiatives in different names for involving community people in hospital management. But in reality, no participation takes place. The government limits the consultative process to influential people rather than the common people who are supposed to be the beneficiaries of the policy (Rahman, R. 2007: 198).

6.5.2.3. Policy sub-system: participation of different actors in health policy

Different policy sub-systems, comprising international, state, and social actors and institutions concerned with a particular problem, generally contribute to the making of a policy. In other words, these 'policy actors' can play a major role in the policy process, especially in agenda-setting and policy formulation. Policy sub-systems are forums where different actors discuss policy issues and engage in debates on effective policy options. Sometimes, they negotiate to resolve conflicts of interest. Such negotiations may happen in different policy phases and institutional arrangements (Howlett *et al.* 2009; Pandey & Jamil, 2010).

Actors in the policy process may be individuals or groups or institutions. A large variety of actors are directly or indirectly involved in the complete policy process. Howlett *et al.* (2009) have divided all actors into three broad sections: state, societal and international systems. However, by adding another category to the above classification, the study places the policy actors in four categories: state, societal, international and institutional.

[68] One of the major advocacy groups who deals with women's issues in Bangladesh.

- **State:** In general, the state itself is supposed to be neutral and refrains from saying anything about policy. But the governing party, being directly connected to the state apparatus, tries to exert its power in policy formation and implementation as the money for executing the policy depends on its approval. Political rivalry and interests work as barriers in policy implementation. Stalling the unification process of two wings under the Health Ministry can be cited as an example. Even, in some cases, all governing parties during their tenure partially or completely rejected the policies of its predecessor without fully realising their potentials. As most of the political leaders lack technical knowledge and training on policy formulation and execution, the inclusion or exclusion of important issues is left to the discretion of bureaucrats.

- **Societal:** As indicated earlier, the involvement of common people in the policy process is rare. The role of civil society is also questionable; they are called 'watch-dogs' and their opinions have never been taken into serious consideration in policy development. However, some associations, such as BMA, Bangladesh Nurse Association, and OGSB, sometimes create pressure on the government to either revise parts or completely withdraw a policy proposal. For instance, BMA called a country-wide indefinite strike for cancelling the committee formed for formulating the first NHP in 1990 (*Chicago-Tribune*, November 6, 1990).

- **International:** Agenda discussed and targets set at international conferences are often adopted by the government. International donor agencies providing financial support for a specific policy seem to have had significant influence. The SWAPs and HSRP clearly have resulted due to strong donor pressure.

- **Institutional:** By disseminating their ideas, research findings and policy opinions, many institutions, such as ICCDRB, NIPORT, NIPSOM, along with the print and electronic media, have oftentimes played important roles in agenda setting and policy formulation.

6.5.3. Adopting health policies

In Bangladesh, like other policy decisions, health-related ones are not always taken in a truly democratic way. Most policies invariably are approved in cabinet meetings on an *ad hoc* basis. A policy usually does not translate into legislation through discussion and enactment in parliament. The military regime's bold step in formulating a tough drug policy and following it with a NHP at the end of its tenure failed to garner enough public and political support as they were not adopted through democratic means. Similarly, health policies drafted in 1994, 2000 and 2006 during democratic rule had enough potentiality, such as a good referral system from rural to urban and introduction of community participation in healthcare service delivery systems, yet they were not thoroughly deliberated upon in parliament. Members of the opposition provided no input being absent from parliamentary sessions when the policy drafts were tabled (Akhter *et al.* 2009: 28-29). The present government approved the draft NHP in a cabinet meeting last year. The policy was placed in parliament and, as before, the opposition remained absent. Whether the lack of any coherent policy has had any effects on the health system and pregnant mothers' access to healthcare services will be examined in the subsequent chapters.

6.5.4. Providing health care: policy implementation

Lack of sincere political will and resistance from different professional and pressure groups create obstacles in effectively implementing health policy and its related programs and projects. For instance, a new-cadre of field-level health workers, namely *palli chikitsaks* (village doctor), was proposed in 1978 for reducing the gap between rural and urban areas in terms of accessibility to minimum healthcare services. The main aim of the proposal was to provide either curative or preventive healthcare services by using their training experience to support people who could not access or afford any form of healthcare. Accordingly, the government planned to provide at least one *palli chikitsak* for each village. However, implementation of the measure was not possible due to

determined resistance from qualified doctors who undermined the below-standard service quality of the health workers. Basically, they ignored the reality that the majority of the people did not have access to any healthcare services whatever the quality was and private medical practice was yet to take off. Specialised doctors supported this resistance as they felt that the proposed measure could affect their private practices (Khan, 2001: 295). Added to this problem was the fact that there were many inconsistent 'health policies' rather than a uniform one until the NHP was framed in 2000.

Due to intense partisan rivalries, no concrete policy could be formulated and implemented. Each incoming government reversed the policy or policies of its predecessor for mere political reasons. This situation created anomalies and indiscipline in the health sector that prevented people from receiving due benefits (Ahmed, P. S. A. 2009). Islam and Tahir (2002: 158) claim that the military government failed to implement the drug policy and to form a NHP due to immense pressure from the medical establishment within the country, the multinational pharmaceutical companies and other interest groups.

The integration of two wings, one important step of the HPSS, was to happen in different phases. By early 2000, the two wings were successfully integrated at the *upazila* level and below. However, because the Upazila Family Planning Officers (UFPOs) were forced to provide healthcare services under the supervision of the Upazila Health Officers (UHOs), who were lower in rank and status, there was a huge protest by the former against this unification. Officers of comparable status at district and upper levels refused to compromise their positions and protested against this move. This lowered the morale of the FP officers and disrupted FP and other activities and had a flow-on effect in stagnating the country's TFR.

Health experts have identified many loopholes in the new draft health policy. This indicates the current government's apparent lack of commitment to implement in the way intended. There is no strategy to check the malpractices of doctors and irregularities in the private sector; neither has any action plan been chalked out. There is no direction about who will implement particular pledges,

when and how. The 'poor' has not been clearly defined and there is no indication of how the doctor-patient relationship could be improved. Nothing has been said about compensating victims for wrong treatment (*New-Age*, May 31, 2011).

6.5.4.1. Lacking coordination, ownership and increasing duplications

Lack of coordination between the two wings is rampant in the MOHFW. This inhibits the government from efficiently delivering expected healthcare services. These two wings have separate activities; the health wing provides breastfeeding counselling, child immunisation, including tetanus toxoid for pregnant women, and preventive and curative health services. The FP wing renders FP services, commodities and MCH services, including ANC and curative services for the Reproductive Tract Infections and Sexually Transmitted Diseases. The FP wing was created to attract foreign donors for investing in this sector. Separate personnel cadres for these two wings were also created. This separation within one ministry has created duplication and overlapping between the activities of the two wings' personnel. For instance, a pregnant woman, receiving ANC from the Directorate of FP is required to go to the Directorate of Health for tetanus injection. This is unusual and unrealistic in the sense that immunisation for both mother and child is rendered by the Health Directorate and it should be included in the MCH services. The separation also creates both an internal conflict between two wings within the same ministry and the same between medical and non-medical health workers within the FP wing. The salary structure, status, financial and disbursement authority and career advancement of both the UFPOs and MO/MCH (Medical Officer for Mother and Child Health) create tensions between them. Moreover, both health and FP cadres provide MCH services which create not only duplication of the services but also rivalry between them (Martinez, 2008; Pendzich, n.d; Ssengooba *et al.* 2007). A report claimed that this unification process basically disrupted the management of cases of ANC, safe delivery, referrals and obstetric emergencies by

creating conflict between these two wings (Naripokkho, n.d) which indicates rampant anomalies in MHC provisioning.

Field experience suggests that the personnel of both wings hardly cooperate in successfully undertaking health projects exclusively linked with FP but also needing the support of the health wing. Furthermore, the ministry structure is designed to render healthcare services in rural areas. It thus appears that the structure creates problems when the government also attempts to provide healthcare services in urban locations, particularly in slum areas (Martinez, 2008: 1; Pendzich, n.d: 10-13). These conflicting orders ultimately hamper normal activities of both wings that may deprive pregnant mothers of receiving due treatment.

The SPSP failed to improve health conditions to the expected mark due to the failure of implementing it appropriately. This has been caused by a lack of ownership of the program (the idea originated and developed overseas), a lack of leadership for the administrative and political change-over during the program period, a lack of understanding among lower level health workers (LLHWs) about the objectives of the program and the concept of ESP, and haste in introducing the program for receiving huge financial support from donor agencies without sufficient consultation with LLHWs who are directly involved in program implementation (Osman, 2005).

Lack of coordination and overlapping are common in the formulation and implementation of health-related policies. The government has been adopting many policies to comply with conditions stipulated by various donor agencies. These policies included: the First Population Project (1975-82), Second Population and Family Health Project (1979-1985), Third Population and Family Health Project (1986-92), FHPP (1992-98), Bangladesh Integrated Nutrition Project (1996-2002), HPSP (1998-2005), National Nutrition Project (2000-05), HIV/AIDS Prevention Project (2001-06), HNPSP (2003-10), HPNSDP (2011-16) (*Daily-Star*, August 24, 2011; WB, 2006: 2). Too many policies or programs mean too many problems. The continuous changing policy indicates that no trust has been

developed in the previous government's efforts. It also creates confusion and mistrust among the frontline health workers and weakens on-going implementation (Siddiqi *et al.* 2004: 127).

Until 1996, health and nutrition issues, being integral parts of both mother and child development, were not seriously taken into consideration when health-related policies were adopted. Anecdotal evidence suggests that the government of the day was more obsessed with the population policy due to the availability of donor funding for population control-related projects. With these agencies agreeing to give their financial support through a single channel and preferring the sector-wide rather than the project-based approach, as in other developing countries, the government adopted the former and attempted to provide healthcare services in an integrated way. However, as said before, this sector-wide program was affected for many reasons.

6.5.5. Evaluating the impact of health policies

It appears that the government did not go for any ex-ante evaluation before adopting the health policies. For instance, the government adopted the HPSP quickly without undertaking any feasibility test of the program (Osman, 2005). Neither has any serious ex-post evaluation been undertaken after a policy was adopted. However, ex-ante evaluation studies are often carried out before a program or project is embarked upon only at the non-governmental level. Sometimes, the project is evaluated after implementation and corrected accordingly. Unfortunately, this trend is missing at governmental level.

The entire health policy process can be shown in the following page through a diagram:

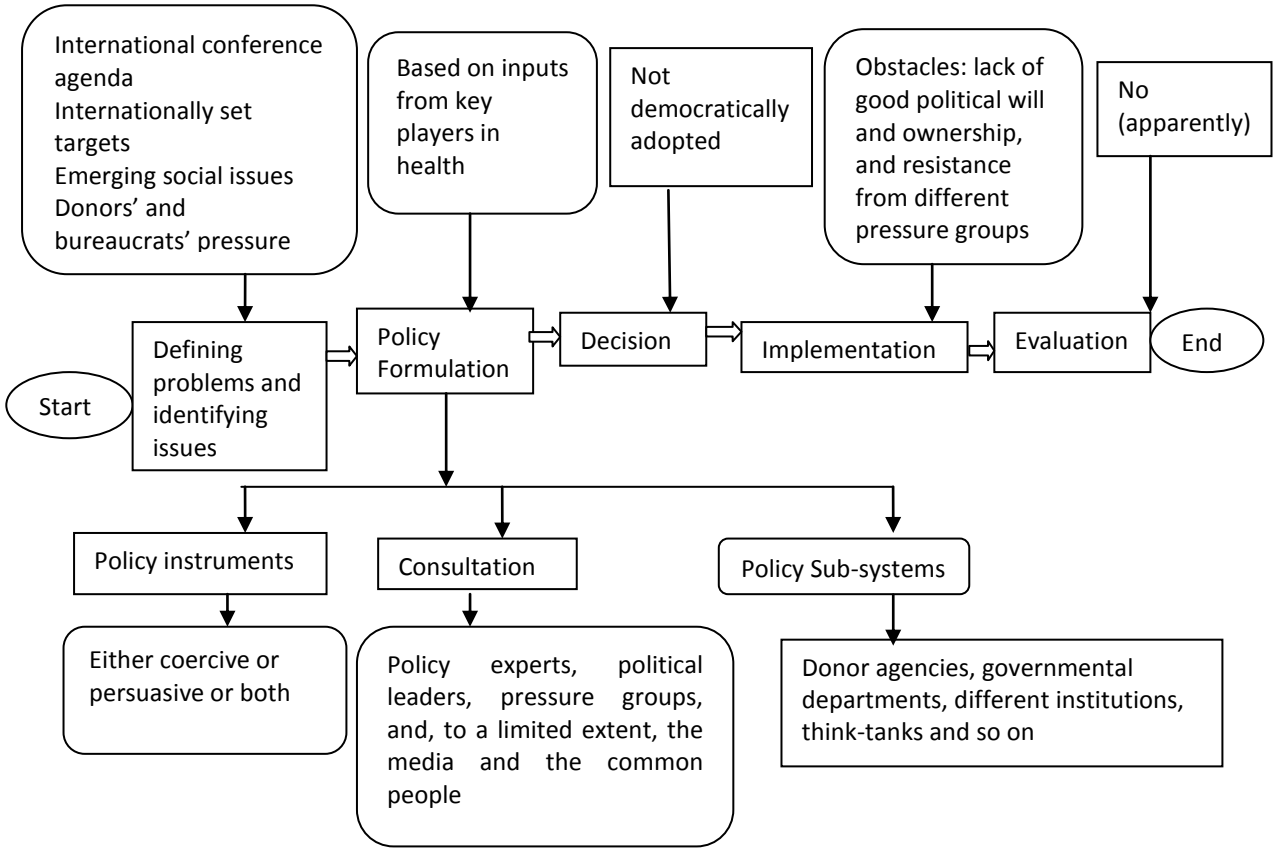

Figure 6.1 A path chart on Bangladesh health policy process

6.6. Health policy debate

Like the NHP of 2000, the present policy adopted in 2011 encourages the collaboration between the government and NGOs in delivering healthcare services in urban areas. It appears that the new policy is an attempt to comply with the HSRP, partially influenced by New Public Management (NPM), that seeks to involve NGOs in service provision through 'contracting out' (Mills, 1997). The Urban Primary Health Care Project (UPHCP), one of the largest government projects run by different NGOS in different city corporations and municipalities, has been formulated using the NPM model. There has been intense debate on the usefulness of 'contracting out'. For example, Mercer *et al.* (2004) and Ullah *et al.* (2006) highlight the successive stories of contracting out in terms of access to and quality of services, while Palmer (2000) and Mills (1998) look at success in terms of efficiency, accountability and good management. Conversely, the *World Development Report* of 2004 sketches

a negative picture of the scheme. It reveals that the involvement of NGOs might be effective for the mid-term but this cannot be sustained in the longer run because, as an illustration, such an approach failed to provide quality education in Bangladesh (WB, 2004: 17). Arguably, the observation of the report may prove valid for the health sector in Bangladesh in the near future.

Like contracting out, health-financing options like introducing user fees, community-financing mechanisms and the demand-side financing (DSF) maternal health voucher scheme are part of the HSRP. Health insurance and pre-payment systems are absent in most of the developing countries. Therefore, the World Bank has promoted the provision of user fees in order to recover the cost of services and enhance efficient health services. But most research shows that user fee schemes have failed to raise revenue and enhance equity and efficiency; rather these have reinforced social inequality or excluded the poor from benefits and services. For instance, Geest *et al.* (2000) show that community financing is a romanticised idea and it is possible to improve quality by imposing user fees.

Substantial evidence from Bangladesh, Russia, South Africa and Uganda show that no major difference in maternal health outcomes found for or not for imposing user fees. Even in some cases, informal fees are higher than any official fees set in the first place (Parkhurst *et al.* 2005). On the contrary, two negative consequences of the user fee provision have been reported in some studies. One is that revenue collected is lower than administrative costs (Creese and Kutzin, 1997 in Colclough, 1997: 20; Simms *et al.* 2001) and the other is decreasing utilisation rate of the services among the poor (Afsana, 2004; Creese and kutzin, 1997 in Colclough, 1997: 20; Sen, 2001: 143; Simms *et al.* 2001). Both official and unofficial fees seem to make not only MHC services inaccessible for the poor in developing countries but also the poor delay in seeking quality care (Borghi *et al.* 2006; Rosenfield *et al.* 2007; Suwal, 2008).

Interestingly, when Nyonator and Kutzin (1999) and Pradhan *et al.* (2005) explored the impact of the user-fee provision in Sub Saharan and Asian countries, they found a dissimilar picture. Islam

(2009) claims that the net revenue generated from the introduction of user fees in developing countries could be used to develop healthcare systems though the amount covered only two to five percent of the THE. However, this user-fee provision has created rampant corruption in the health sector in almost all countries where it has been applied. The same scenario is noticeable in Bangladesh.

There has been a tendency among developing country governments to focus on selective PHC provision, such as vertically delivered elements of the PHC, like FP, and growth monitoring, oral rehydration therapy, breast-feeding and immunisation, rather than on a full range of the PHC with specific objectives to fulfil the minimum responsibilities of these governments. In other words, all governments try to follow the principle of rendering few healthcare services free for making its expenditure cost-effective (Kabeer, 1995: 189-90).

It is doubtful if the World Bank considered the affordability of the poor to pay the service fees when proposing the introduction of the user fee provision for developing countries. This user-fee system does not help the poor enhance their access to health services; instead, the non-poor easily make use of this system to receive better health services. If the poor are sometimes bound to use this service, they are forced to spend less for other essential goods, borrow money from others, sell productive assets or delay the use of health services for want of money (Colclough, 1997: 19; Nahar *et al.* 2011; Sexton, 2001: 18; Thaddeus & Maine, 1994; Verheul & Cooper, 2001: 13). It may be noted here that anticipating the bad effects of user fees on the poor, the US government passed a bill which urged the International Financial Institutions to refuse any request for financial assistance that imposed any kind of user fees for the PHC and basic education (Verheul and Cooper**,** 2001: 13).

Following the residual approach popular in the social policy literature, providing limited free healthcare services to the poor is also part of the HSRP. The card system was designed to dispense free healthcare services among the poor. Accordingly, a targeting mechanism needs to be developed for defining the poor and distributing the cards among them. It can bring benefits for the low

income group in two ways: exemption and the revenue, collecting from the fees, can be used to improve the health services for the poor (Gilson *et al.* 1995: 369). However, two types of errors are likely to crop up in providing free service. The narrow coverage has the potential to exclude the poor from benefits of the project at the expense of the non-poor who take advantage. The under-coverage leads to exclusion error, while leakage causes inclusion error in the project (Skouifas *et al.* 1999: V). As the UPHCP targets giving 30 percent of its services to the poor free in urban slum areas and the draft health policy and the DSF scheme propose the introduction of the card system for delivering free healthcare services to the poor, the problems of leakage and under coverage will remain.

From the discussion on the HSRP, it is possible to develop an analytical framework to be applied to the study. This framework is as follows:

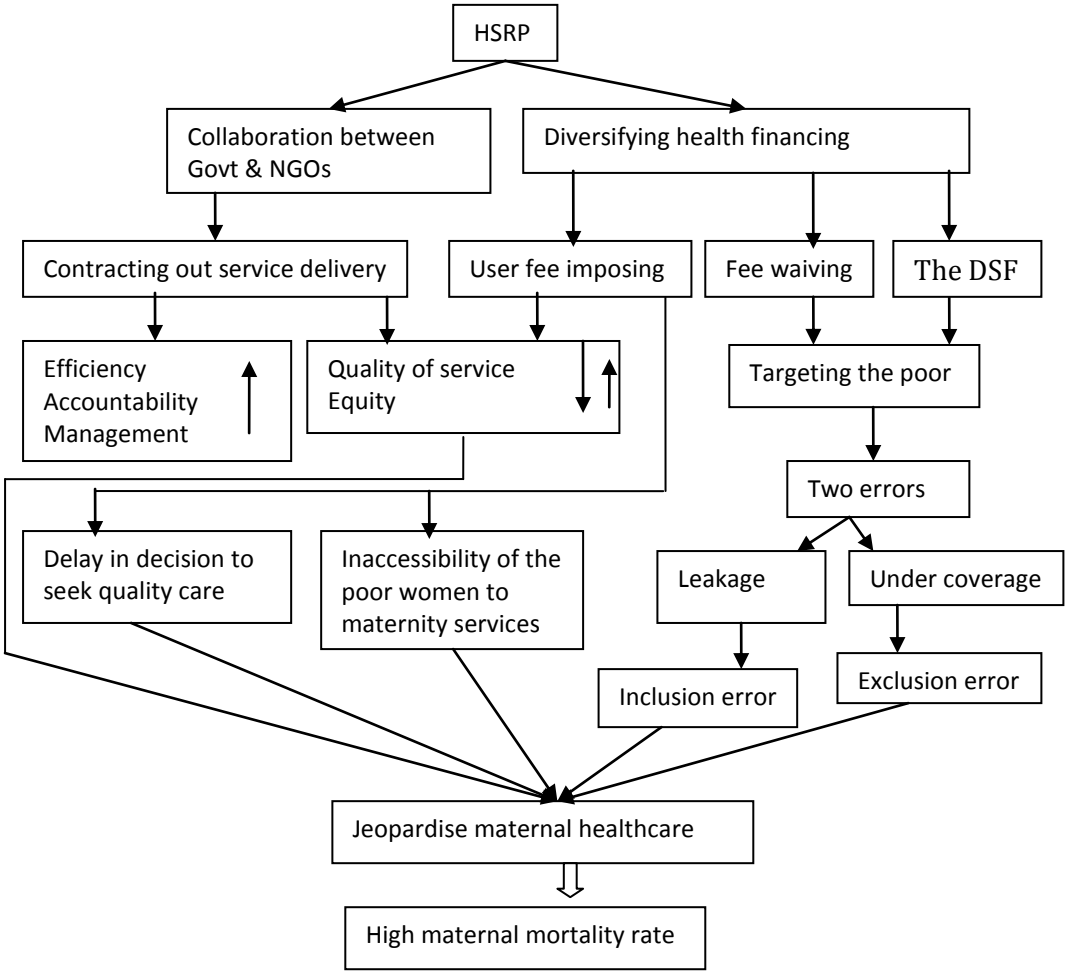

Figure 6.2 Impact of the HSRP on maternal health sector

Figure 6.2 reveals that various healthcare financing mechanisms and contracting out of healthcare services have been developed as part of the HSRP. It has found that the collaborative venture brings positive (efficient service delivery systems, strong accountability and monitoring systems, better quality services and the reduction of inequity) and negative (bad quality of care and increasing inequity) outcomes in health systems. The fee imposition makes the first delay (decision making) and creates barriers for poor women to MHC services. The targeting mechanism needs to be developed for implementing the fees waiving system successfully. This targeting system basically produces two types of errors—exclusion (those who are supposed to be included but are excluded) and inclusion (those with no rights to receive such types of services receiving them). All these issues (bad quality care, creating barriers for poor women and making decisions about seeking care delays) deter poor pregnant women from seeking care. This pushes poor mothers' lives at risks which ultimately increases rather than decreases the numbers of maternal deaths. I would like to apply this to explore how much each strategy affects the accessibility and availability of the people to be studied to MHC services in both city and rural areas.

6.7. Summary

The government has attempted to formulate a NHP on several occasions since independence. The bureaucrats, donor agencies, political leaders and pressure groups played important roles in all health-related policy formulation processes. Despite some efforts, no policy could finally be adopted due to the prevailing confrontationist political culture, lack of political will among governing parties/coalitions, resistance from bureaucrats, professionals and pressure groups. The fragmented health-related policies, mainly adopted in a non-democratic way, failed to provide the health-related organisations proper guidelines on providing healthcare services in an efficient manner and whatever targets the organisation needs to realise within a certain stipulated time-frame. As a

result, the healthcare system fails to perform efficiently. This ultimately dissuades people from going to public hospitals for the required treatment available there. Organisational inefficiency creates doubts among people (service users) about the usefulness of the user fee scheme, in particular, and the state-NGO partnership in healthcare.

This chapter has made contribution to opening up a new horizon in Bangladesh health policy domain which helps to understand whether the existing health policies are helpful or barriers to the increment of women's availability and accessibility to primary, primarily maternal, healthcare services.

The next chapter will show how far Bangladeshi people, particularly poor mothers, have availability of and accessibility to primary, especially maternal, healthcare services at both national and field levels. It will also explore whether Bangladesh has region and class-based differentials in availability and accessibility.

Chapter Seven: Results and Discussions: Availability of and Accessibility to Primary Healthcare Services

7.1. Introduction

The main focus of this chapter is to address these two issues: availability of and accessibility to primary, particularly maternal, healthcare services across region and class. The first part attempts to make a conceptual distinction between 'availability' and 'accessibility', while the second explores inequality in the availability of primary (mainly maternal) healthcare services across regions—highlighting healthcare infrastructure and health personnel. The third part depicts regional and class-based accessibility to primary, chiefly maternal, healthcare services. The final part draws a summary.

Bangladesh is a developing country where people largely depend on the state for healthcare services. While the government, on its part, has been more or less active in improving the infrastructure and increasing the number of health personnel for meeting the growing health needs of the people, these are not enough to cater for the increasing demand. The number of registered physicians has been increasing more than that of nurses and midwives. On the other hand, health infrastructure in private and non-government organisation (NGO) sectors has been expanding at a greater rate compared with the public sector. This uneven development in the health sector has adverse implications for those who depend on the state for free or inexpensive healthcare services. The situation, that is the availability of and accessibility to healthcare services, is even worse in the rural areas compared to the urban. Some findings of the research are highlighted to describe the real situation at the field level.

7.2. Distinction between 'availability' and 'accessibility'

Making a distinction between 'availability' and 'accessibility' is difficult. In many studies reviewed, they are sometimes used interchangeably or one is broadly encompassed or incorporated into another. For instance, Gulliford *et al.* (2002) consider 'service availability' as one of four dimensions

of access. However, they are used in this study to convey different meanings. Generally, availability means the physical presence of healthcare services and accessibility connotes the extent service users receive healthcare services when they need them (Leslie & Gupta, 1989: 14). The population base per facility is widely used as a criterion for measuring availability. Physical distance and travelling time to facility centres from a service user's home are also sometimes considered as indicators of availability measurements (Koblinsky & Campbell, 2003: 19). For example, in 1997, United Nations Children Emergency Fund (UNICEF), World Health Organisation (WHO) and United Nations Fund for Population (UNFPA) declared that a minimum of one basic emergency obstetric care (BEmOC) per 100,000 and one comprehensive emergency obstetric care (CEmOC) centres for 500,000 people should be made available for improving maternal health care (MHC) services (Pathmanathan *et al.* 2003: 30-31). This declaration has subsequently become a standard measurement of availability of MHC services.

Like 'availability', the concept of 'accessibility' has many dimensions. Gulliford *et al.* (2002) identify four dimensions of 'accessibility'—'service availability', 'utilisation of services and barriers to access', 'relevance and effectiveness' and 'equity'. Osmani (2010) uses physical, economic and informational dimensions of accessibility, whilst Leslie and Gupta (1989) highlight physical and social components of 'accessibility'.

7.3. Availability of primary healthcare services

Primary health care (PHC) services are jeopardised due to the shortage of services and personnel and the dismal condition of the health infrastructure. This section is divided into three parts: the first part highlights healthcare service availability, whereas the second and third look at the availability of health infrastructure and workforce respectively.

7.3.1. Availability of healthcare services

Bangladesh has made considerable improvement in coverage of healthcare services since independence. The number of government hospitals increased from 131 in 1975 to 660 in 1999 and then to 678 in 2005-06. Similarly, the number of private hospitals, clinics and nursing homes together rose from 613 in 1999 to 2,501 in 2010. The figures indicate that the private sector has been expanding more quickly than the public since the last decade. The figures for hospital beds also support the above argument. Between 1999 and 2010, the number of hospital beds in both the public and private sectors went up to 39,341 and 42,237 from 31,772 and 11,371 respectively. This incremental rise resulted in enhancing people's availability of hospital beds. Thus, at present, one bed is available for 1,860 people, whereas, in 1999, the number was 3,083 (MOHFW, 2000a; MOHFW, 2010; Osmani, 2010).

The MHC facilities are also increasing to meet the growing demand for obstetric care owing to the raising of awareness about seeking healthcare during pregnancy through, as mentioned in Chapter 4, mass education, increasing women's movements and participations in different activities, although this increment is not up to the standard requirements the WHO set in 2005. The government has divided the emergency obstetric care (EmOC) into three tiers i.e., first aid[69], basic[70], and comprehensive[71]. First aid is provided at the union level, basic at upazila, basic and comprehensive at the district, and comprehensive at the divisional level (Barkat *et al.* 1997). Almost all government hospitals at district and above levels have EmOC. Out of 4,451 unions and 490 *upazilas*, 3,632 and 402 respectively have EmOC (table 7.1). Presently one BEmOC facility serves 0.66 million people, while the figure for CEmOC is 0.64 million (Dewan, n.d). A study dispels the above claim reporting that around one-fourth BEmOC and one-fifth CEmOC of WHO-recommended

[69] It includes administering parenteral Oxytocin drug (Ergometrine), parenteral antibiotics and parenteral sedatives/anticonvulsants.
[70] It performs all functions of first aid and the manual removal of placentas and assisted vaginal delivery (vacuum extraction, forceps).
[71] It includes all functions of first aid and basic as well as surgery and blood transfusion.

facilities are available (Mridha *et al.* 2009). One of the possible reasons for this dearth is that every centre at each level might need more than one basic or comprehensive EmOC facility because WHO recommends each facility for a certain number of people. Another study claimed that the number of CEmOC facilities increased from 2 to 32, whereas that for BEmOC (20) remained the same in Khulna division (one of the seven divisions) between 2000 and 2002. That means, the availability of CEmOC significantly increased: 0.2 facility centre was available for 500,000 population in 2000, whereas that proportion turned into 1.0 in 2002 (Islam *et al.* 2005). However, this development is yet to meet the WHO standard of one CEmOCs per 500,000. Certainly, MHC services are in need of improvements. Current data hints that, in 2009, only four out of 9.4 million mothers received some form of MHC services (*Daily-Star*, March 1, 2012).

Table 7.1 Government facilities for EmOC services, 2006

Level	Name of the service centre	Total number of facilities	Type of facilities
Union (4451)	UHC/UHFWC[72]	3632	First Aid
Upazila (490)	UHC[73]	402	Basic
District (64)	District hospital, MCWC[74]	60 (district hospitals) 70 (MCWC)	Basic and Comprehensive
Division (7)	Medical college and hospital	14	Comprehensive

Source: Mridha *et al.* (2009: 129)

7.3.1.1. Regional differentials in healthcare service availability

PHC services in rural areas are meagre in comparison to urban areas. Public and private (including the NGO sector) are providing PHC services in urban areas, whereas only government and some NGOs are involved in limited forms of healthcare services in rural areas. Even in many cities, more essential healthcare services are available in private than in public hospitals (Koehlmoos *et al.* 2011: 54). As qualified health personnel prefer staying in town areas, private sectors can easily recruit them for rendering their services to patients in urban localities. NGOs are keener to serve urban areas as it is easy to target service users, to demarcate catchment areas and to provide services at

[72] Union Health Centre/Union Health and Family Welfare Centre.
[73] Upazila Health Complex.
[74] Maternal and Child Welfare Centre.

the micro level. By doing these, they can easily bring positive results in catchment areas which reflect the success of NGO activities.

Three reasons for the availability of the NGO-run healthcare services in urban areas are identifiable from the interviews of health personnel. These are: easy identification and targeting disadvantaged people who reside at certain points of cities, for rendering services; achieving the target is not complicated, as the coverage is limited and easy for people to access physically with the support of good communication systems; and health personnel tend to live in urban areas, as mentioned in Chapter 4, where other facilities, such as career advancement and educational facilities, for all family members are available. The study (table 7.2) found a rural-urban differential in the availability of PHC centres.

Table 7.2 Distribution of health centres where respondents went for maternal healthcare services

Areas	Types of health centres								
	SM	**RC**	**UC**	**BC**	**LP**	**NHC**	**SUHC**	**Others**	**TOTAL**
Bogra	27	3	24	0	0	0	0	4	58
Rajshahi	5	4	41	5	0	0	0	2	57
Shapahar	0	0	0	0	2	14	8	0	24
Total	32	7	65	5	2	14	8	6	139

SM=Shishu Mongol, RC=Ranirhat Clinic, UC=Urban Centre, BC=BRAC Centre, LP=Local pharmacy, NHC=Nimtoli health centre, SUHC=Shapahar Upazila Health Complex.
(Note: The missing value 21 indicates that they did not receive any type of MHC services from any centre during their pregnancy. SM, UC and BC are NGO-run centres, whilst RC is private and NHC and SUHC are public)

As reported in table 7.2, in Bogra, most respondents visited either Shishu Mongol (27 times) or urban centre (24 times) for MHC services. Mothers were not keen on visiting the government tertiary hospitals despite many of these being in their localities. In Rajshahi, a vast majority of respondents visited the urban centres, while, in Shapahar, respondents almost chose the government healthcare centres. Urban people have better options as a larger number of NGOs-operated healthcare centres are available to them. Overall, government healthcare centres do not seem to be popular for those who have other options (NGO or private centres) for healthcare services. It is also important to mention here that 40 percent of respondents living in the rural areas did not receive MHC services from any health centres.

This study (table 7.3) also found variance in the availability of nearest health centres in different areas. Most respondents in both Bogra and Rajshahi reported urban centres as closest to where they live, whilst almost all respondents in Shapahar said that the union health centre was the nearest.

Table 7.3 Distribution of nearest health centres in the study areas

Name of centres	Name of areas			Total
	Bogra	Rajshahi	Shapahar	
Union Health Centre (UHC)	1	1	33	35
Urban Centre*	53	57	0	110
NGO run centre	4	0	0	4
Total	58	58	33	149

*This centre is under the Urban Primary Health Care Project (UPHCP)

In other words, the UPHCP has been able to reach the doorsteps of the people with healthcare services in both Bogra and Rajshahi slums, whereas Shapahar did not provide that option apart from the government union healthcare centres. This indicates that NGOs penetration in service delivery was higher in urban than rural areas.

Furthermore, as mentioned in Chapter 4, the family planning (FP) wing of the MOHFW[75] has set up MCWCs for providing comprehensive MHC services, including CEmOC and Caesarean section. These MCWCs are available at district and upazila levels. District hospitals under the Health Wing also provide comprehensive MHC services in district towns. Many private and NGOs clinics are there in district towns providing the same services on a competitive basis which ensures good quality and better options for urban people. One of the plausible reasons as indicated in Chapter 6 is that urban centred top-down policies basically give more focuses on urban problems. So they encourage other organisations to set up healthcare centres in urban areas which create competition and wider options there.

Rural areas are inadequately served by these though the Health Wing took steps for upgrading rural health centres (UHCs) and, as of 2007, only one-fifth of them were upgraded (Mridha, et al. 2009: 136). Based on statistical data, Chowdhury (2004 in Rahman *et al.* 2005: 4) argues that most of the

[75] Ministry of Health and Family welfare

specialised hospitals and their services are available in urban areas where around 30 percent of people reside. His figures indicate that 44 and 28 percent of the government and private facilities in that order are available for the rural areas, whereas 56 percent government and 72 percent private healthcare facilities are urban-based.

7.3.2. Availability of health infrastructure

People in Bangladesh, as mentioned in Chapter 4, are beginning to experience a better quality of life due to huge expansion of transportation, communications and utility services. Many rural habitats have been transformed into towns. This has been caused by a myriad of developmental activities undertaken by government and NGOs, a huge flow of remittances from abroad and the transformation of the agrarian economy to a mixed one. However, the outcomes of most of these are unevenly distributed among the population and regions with marked influences on health infrastructure development. In the following section, we discuss differences in development of health infrastructure across regions.

7.3.2.1. Regional differentials in health infrastructure

Technology and technicians are not always available in rural areas. In general, there is no facility for blood-grouping and cross-matching. In some areas, even facilities for blood transfusion are absent (Anwar *et al.* 2009: 149). The recent estimate suggests that one blood bank is available for every 523,000 people which is poor compared to the WHO's recommendation of one bank for every 100,000 to 120,000 people (McPake & Koblinsky, 2009: 103). The chief medical officer of one *upazila* said during the field visit that at least one anaesthetist and a surgeon are essential for safe delivery of babies. In this regard, Huque *et al.* (1999: 55) reported that a medical officer with no special training in obstetrics/gynaecology usually holds this position. No trained anaesthetist is posted at the UHC unless any particular project requires their presence. Even where technical facilities, such as X-ray and blood transfusion machines, were available, pregnant mothers were deprived from their

use due to the lack of technicians handling them. Even if technologies are available in rural areas, lack of infrastructure and frequent breakdowns hindered their proper functioning. No electricity and water supply facilities were available at some UHCs and UHFWCs investigated during the research and these were also unable to provide medicine according to patients' requirements. For instance, the SUHC faced black out problems most of the time and lacked an adequate supply of pharmaceutical products.

In contrast, in urban areas, many organisations, such as government, NGOs, private, and voluntary organisations, provide a range of healthcare services. Thus, town people have wider options than their rural counterparts. All organisations are expected to offer healthcare services in an efficient manner for attracting clients and may need to compete with each other for continuing their activities and services. Utility facilities (electricity, gas and water) are relatively better in towns and cities and can help in providing comprehensive healthcare services easily in emergency situations. They can also refer complicated cases to the nearest big hospitals located in major cities. For instance, the clinic manager at the Bogra Comprehensive Reproductive Healthcare Centre (BCRHCC) mentioned all available facilities, such as anaesthetics, sinology and surgery, in the centre he runs. The doctors there had training on sinology and child delivery and the staff were aware of five dangerous signs of pregnancy and three delays related to the delivery process. If they failed to treat complicated patients, they can be referred to a bigger teaching hospital located in Bogra city. Being former students of this teaching hospital and all doctors known to them, their referred patients automatically received immediate treatment on a priority basis.

Table 7.4 shows types of medical technologies related to healthcare that were available in the areas studied. About three-fourths of respondents in Bogra and Rajshahi knew that clinical maternal care, immunisation for mother and child, counselling on reproductive health service (RHS) and FP, pregnancy, blood, and urine tests were available in the nearest healthcare centres.

Table 7.4 Distribution of healthcare facilities available at centres of areas studied where respondents visited during their conception and after delivery

Types of healthcare facilities	Knowledge of service								
	Bogra			Rajshahi			Shapahar		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Clinical maternal care	50	0	3	56	0	2	1	0	0
Immunisation for MCH	54	0	2	55	0	3	29	0	0
Counselling on RHS&FP	49	0	7	55	0	3	16	0	0
Ultrasound	29	6	21	31	12	15	0	0	0
Operation	16	8	30	15	26	17	0	0	0
X-ray	27	4	25	30	10	18	0	0	0
Pregnancy test	42	2	12	45	1	12	1	0	0
Blood test	42	1	13	44	1	13	0	0	0
Urine test	41	1	14	42	1	14	0	0	0

Respondents in Shapahar knew about the availability of immunisation facility for mother and child (29 of 40) and counselling on RHS and FP (16 out of 40) at their closest centres where they made visits before. Besides these six facilities, surgery, ultrasound and X-ray were less available in both Bogra and Rajshahi. Other facilities, except immunisation and counselling on RHS, were unavailable in Shapahar. It reflects the fact that rural women are more vulnerable than urban females. Nonetheless, pregnant mothers in Shapahar are used to receiving services from the government healthcare centre, whilst those in Bogra and Rajshahi have been receiving healthcare services from different organisations, particularly NGOs. Facilities of the former appear to have remained antiquarian, whereas the latter provide healthcare services incorporating all facilities relating to safe motherhood. Pregnant mothers receiving healthcare facilities from government hospitals are likely to face more complications during delivery than from the NGO-run centres.

There is a huge difference in health infrastructure between urban and rural areas. One study found that the lack of pure drinking water is one major problem for both service providers and users, whilst toilet maintenance is another issue at UHFWCs. Toilets in some centres are sometimes used

as storerooms (Rahman, A. P. M. S. 2007: 8). A large number of doors and windows in 48 rural health centres are in a pitiable condition (IDRF, 2007: 21). A study, reporting on 33 rural health centres, observed that there was no standard reception room for patients and their companions in most of the centres. Even, in some cases, poor ventilation facilities were found in waiting rooms. Almost all centres were unhealthy and unhygienic. Patient privacy was hardly maintained there. In most centres, many essential equipment except blood pressure machines and stethoscopes and drugs were lacking (GUS, 2008: 27-28).

As observed during field visits, the UHFWC, situated in a rural setting, is a two storeyed building. Each floor has three rooms on the first floor and these are used as residences for the health staff. Three other rooms on the ground floor are used for rendering services. One room, consisting of six beds, is used for the admission of patients, another is used for storing medicine and the other as a lounge for the staff. There is no waiting room for patients. They usually wait in a vacant bedroom. There is no electricity and water supply and no toilet facility for patients. The building condition is poor, discourages people from going there for services and thus needs immediate repairs. Diagnostic equipment is either missing or is not in working order and the absence of ambulatory service makes it difficult to send complicated cases to upper level hospitals.

One of the possible reasons for this dismal condition (indicated in Chapter 6) is that most health-related policies fail to address the needs of local, rural people due to the fact that the policy makers are from urban areas and there is a lack of common people's participation in policy formulation. The other reason is that the government has not given due attention to the improvement of the rural health infrastructure. For instance, the current budget (2012-13) does not allocate any extra or special money for rural health infrastructure development (*Daily-Star*, June 8, 2012).

The government hospitals in urban areas are neither hygienic, nor user friendly. Most of the district hospitals have been upgraded without ensuring a sufficient supply of necessary items, such as

equipment, beds, pharmaceuticals and skilled health personnel. Patients were found to be lying on the floor. Imaging equipment have been out of order for long periods (Akter *et al.* 2008; Bilu, 2010; *Daily-Star*, February 13, 2011; Daily Star, October 13, 2011). In one study, for instance, a medical officer summed up the real situation of an orthopaedic ward in a big national hospital situated in Chittagong, the second largest city: "Today there are 118 patients in the ward. We have only 92 beds. You can see that the rest are lying on the floor" (Zaman, 2004: 2030). Anecdotal evidence suggests that policy experts have good access to private healthcare facilities. So they hardly give attention to the physical conditions of government hospitals.

By comparison, as observed by the researcher, NGO-run urban centres are in far better condition. For instance, each urban centre is housed in a two-storeyed building. The facade is very attractive making patients cheerful and comfortable in seeking healthcare services there. There are rooms for the clinic manager/medical officer, paramedics, counsellor and service promoters on the first floor. Besides these, a room with fan, television and bathroom has been dedicated for waiting patients, while another is used for storing medicines and other items. The clinic is equipped with diagnostic apparatuses to test the general condition of patients immediately. The operation room is air-conditioned. The centre can easily dispatch complicated cases to tertiary level hospitals with its ambulatory service.

7.3.3. Availability of health personnel

Bangladesh has a huge shortage of qualified health care providers (QHCPs) compared with other South Asian countries (Ahmed *et al.* 2011) despite increasing the numbers of QHCPs by 38,805 between 1999 and 2010 (MOHFW, 2010) and recruiting around 39,000 recently in the last couple of years (*bdnews24*, February 7, 2012). The density of the QHCPs per 10,000 in Bangladesh is 7.7, way less than the international standard (23) set by the WHO in 2006, whereas that in Sri Lanka, India and Pakistan are 21.9, 14.6 and 12.5 respectively (Ahmed *et al.* 2011). As of 2007, the total numbers

of doctors, nurses and health technologists[76] were 38,537, 15,023, and 9,230 respectively although, according to the WHO standard for meeting health-related MDGs, Bangladesh needs 98,550 doctors, 295,450 nurses, and 492,750 health technologists. Thus, there is an acute shortage of health professionals in the country.

The current estimate suggests that among health care providers (HCPs), 5.2 percent are skilled[77] and 1.3 percent semi-skilled[78] (BHW, 2007). Among unqualified health care providers [UHCPs], (93.5%) serving 80 percent of population, the most available HCPs are traditional healers[79] (43%), followed by traditional birth attendants (22%), village doctors (9%), sellers of allopathic medicine (8%), community health workers [CHWs] (7%), and homeopaths (4%) (BHW, 2007; El-saharty & Ahsan, 2011). A study revealed that 16 percent of rural pregnant women with complications received treatment from QHCPs. The rest went to either village doctors or homeopaths or, in some cases, none of these. Another study found most rural pregnant mothers were making contacts with UHCPs before visiting UHCs. One in five of them went to traditional practitioners, such as untrained village allopaths and homeopaths (Khanum P. *et al.* 2000). Another study, suggests that inadequacy of competent health personnel jeopardises sexual and reproductive health (SRH) services in the safe motherhood project area. It indicates that altogether 62 facility centres with only 109 doctors, 126 paramedics and 205 nurses were available for providing SRH services to 1.8 million people (Barkat *et al.* 2006).

The main reasons for the high acceptability of UHCPs services, particularly in rural areas, are deeply embedded in the local community: respect for local customs and rituals, no extra fees charged for consultancy, easiness of approach whenever help is needed, and the availability of better options to pay for medicine costs, such as deferring payments, paying in kind instead of cash, etc (Ahmed &

[76] They include sanitary inspectors, dentists, laboratory technicians, pharmacists, radiographers and physical therapists.
[77] Physicians (3.7%), nurses (1.3%) and dentists (0.2%).
[78] It includes Medical Assistants/Sub Assistant Community Medical Officers, Family Welfare Visitors, and lab technicians or physiotherapists.
[79] Kaviraj, totka, herbalist and faith healers are included here.

Hossain, 2007; Ahmed *et al.* 2009; Begum, 1997; BHW, 2007; Khanum P. *et al.* 2000; Wahed *et al.* 2010).

Healthcare, particularly maternal, services are imperilled due to the shortage of skilled manpower. For instance, the dearth of obstetricians and anaesthetists has been there since independence. As of 2006, there were 873 specialists in gynaecology and obstetrics (Mridha *et al.* 2009) though another data set claimed the number to be 1,070 (Minca, 2011). If 15 percent of pregnant mothers with complications sought specialist care, each gynaecologist and obstetrician would need to treat around 514 childbirth-related cases each year. As they are involved in different activities other than providing comprehensive MHC services, the actual number could be less than the hypothesised number. In order to address the shortage of skilled manpower in the health sector, the government took the step of providing one-year training for medical graduates (MBBS) in each specialist area. According to the 2007 data set, 156 graduates received training on obstetrics (Mridha *et al.* 2009: 136). In 2003, the government also took another bold step by creating a community-based skilled birth attendants (CSBAs) cadre with technical and financial assistance from the WHO and the UNFPA. With the help of the Obstetrical and Gynaecological Society of Bangladesh (OGSB), it has initiated six months long training to two groups of lower level health workers (LLHWs)—Family Welfare Assistants (FWAs) and female Health Assistants working at ward level. Along with the OGSB, the Family Welfare Visitor Training Institute, nursing institutes and MCWCs also provide this training to these local two groups of health workers. On average, 480 CSBAs are produced annually. As of 2007, 3,000 CSBAs were trained from 216 *upazilas* (BHW, 2007). Though the number of specialised personnel has been increasing gradually, the government fails to develop enough skilled manpower, deploy and retain them in rural areas (Mridha *et al.* 2009: 136). The table (in Appendix 7)—indicating the number of MHC service providers from top to down levels—suggests that the number of new gynaecologists/obstetricians and anaesthetists every year is around 150 each. Probably, they prefer living and serving urban to rural areas. The recruitment of family welfare visitors (FWVs)/FWAs was stopped from 1995 and that of health assistants from 2004. All these three groups of LLHWs usually

provide healthcare services in rural areas. That indicates that rural mothers were/are deprived more from due services vis-a-vis their urban counterparts.

However, the number of health personnel in both public and private sectors has been increasing. The number of registered physicians, nurses and midwives increased from 29,746, 16,972 and 14,915 to 51,993, 25,018 and 23,472 in that order between 1999 and 2010. This indicates that the number of physicians has been increasing more quickly than nurses and midwives (primary caregivers to expectant mothers) in the last decade. It also indicates that the ratio of population per physician and nurse has been decreasing; population per physician and nurse in 1999 was 4,521 and 7,923 correspondingly, whilst, in 2010, it is 2,785 and 5,782 respectively. However, despite the increasing number of physicians and nurses, the ratio of physician-nurse is increasing; it was 2:1 in 1999, while it is 2.07:1 in 2010 (MOHFW, 2000a; MOHFW, 2010). It hints that the nurse-physician gap is widening which is unusual in other countries and quite far from the standard distribution of three nurses per one physician (BHW, 2007). For instance, equal numbers of nurses and physicians are available in South Central Asia and Latin America, whereas there are three or more nurses per physician in Africa, North America and Europe (Leslie & Gupta, 1989: 9-10). As of 2001, the physician-nurse ratio in India, Nepal, Pakistan and Sri Lanka was 0.83, 0.19, 1.4 and 0.54 respectively (Hongoro & McPake, 2004: 1452). It has been suggested that the ratio in Bangladesh is better than Pakistan and worse compared with the other three South Asian countries. The following section will explain the main reasons for this situation.

7.3.3.1. Social structure creates barriers to nursing

The persistent gap between physician and nurse in Bangladesh has been attributed to the prevailing socio-economic situation, including the cultural preference condition. There is a misconception and social stigma about the nursing profession in the country. This profession is perceived as a female-oriented low level and 'unclean' job as it usually does not require intelligence and income associated

with this profession is very low compared to others (Nursing-Promotion-in-Bangladesh, n.d). This wrong perception dissuades both Muslim and Hindu parents from sending their daughters to take up this profession unless situation compels them. Theoretically, as Darr *et al.* (2008: 157) mention, there is no conflict between Islam and nursing, but in reality some dogmatic Muslims do not want to see their female family members become nurses as, in their opinion, Islam does not support the touching of the bodies of people other than their closest relatives and the wearing of uniform. In the Hindu religion, touching of the body is problematic but not uniform. An ethnographic study found that most of the nurses are from the Muslim and Hindu communities and a small number from the Christian community. For many years the majority of nurses in Bangladesh have been Hindus because the notion of *purdah*—seclusion or veil—has prevented Muslim women from taking any profession that requires being outside their homes (Zaman, 2009: 367). One study found a huge shortage of nurses in the Sylhet region, one of the most conservative areas in Bangladesh. Due to religious barriers and societal conservativeness, women there are very reluctant to adopt this profession and the people there cannot think of letting their female family members serve male patients not related to them (Anwar *et al.* 2009: 152).

In addition, sometimes people associate the nursing profession with 'prostitution' and see it as an 'immoral' profession as they stay in the hospitals or nursing centres at night with doctors (lady doctors are normally off duty at night) and other males. For this reason, their demand in the marriage market is low. Even if doctors marry nurses, they are teased for marrying them (Hadley *et al.* 2007: 1170; Zaman, 2009: 371). The following excerpt, made by one nurse, reflects how common people recognise this nursing profession.

> *People think that our work is not decent. We do night duties. It is bad for a Muslim woman to stay outside her home at night. They think nurses have illicit relationships with doctors or other males. As a result nurses face trouble in getting married. One of my fellow nurses had an affair with a doctor and they got married. But the doctor's family rejected them. His family did not come to the wedding. The doctor's family thought that it was a shame for the doctor to marry a nurse (Zaman, 2004: 2030-31).*

Women from middle and higher classes are therefore not willing to engage in this profession as career advancement to higher levels in this profession is not guaranteed. Generally, females of poorer families, widows and destitute women reluctantly accept a career in nursing, since finding work as a nurse is comparatively easier than other professions (Hadley *et al.* 2007; Madden *et al.* 2011; Zaman, 2009). The following excerpts, found in different studies reporting interviews with nurses, indicate social conditions that basically push women into this profession.

> *I have five sisters. When I was 17 my father died. This brought the family into a financial crisis. Then my uncle insisted that I join this profession. After I had been admitted into the nursing diploma course some of our relatives and neighbours severed relation with our family. They even tease my mother, implying that there is no difference between the nursing profession and prostitution (Hadley et al. 2007: 1170).*
>
> *I have five sisters but no brother. My father used to have a small job. It was difficult for him to maintain the family. As the eldest daughter, I decided that I would earn money and help my father. My father didn't have the ability to provide me with a higher education. In our time there were not many jobs for women. Nursing was the best option.*
>
> *One of my aunts was a nurse. I used to come to hospital with her. I was very impressed. I had a dream that one day I will wear this. My family was not economically stable, so I also wanted to be economically independent. I did not have much higher education, so I took nursing.*
>
> *Two years after my wedding, my husband died. I had to find a job to survive with my little one-year-old boy. Nursing was suitable with the qualifications I had. Moreover, I once wanted to be a nun. Nursing gave me the opportunity to fulfil the duty of God. It also helped me to survive economically (Zaman, 2009: 371).*

All these comments suggest that women basically come to this profession when they are not able to lead decent lives due to poverty that has been caused by the lack of sufficient incomes or deaths of their family bread winners (father, brother, husband and so on). Through training and practice, they become skilled workers who prefer migrating to developed countries for earning more money that could help mitigate the financial crises of their families. This overseas migration of skilled nurses is another important reason for widening the ratio gap. For instance, in 1991-2004, more than five percent of female labour migrants abroad were reported to be nurses (Aminuzamman, 2007: 14). As

of 2007, 40 percent of nurses in Malaysia were from different nationalities, including Bangladesh (Matsuno, 2009: 14).

7.3.3.2. Complex recruitment process

Healthcare services in the public sector are affected due to failure in filling vacant posts, though the number of health staff, it has been claimed, is increasing. For instance, the current estimate hints that around 20 percent of sanctioned posts are vacant. Most vacancies are in nursing at *upazila* level (El-saharty & Ahsan, 2011). According to another dataset, at government level, in comparison to the health sector, more sanctioned posts in FP and nursing sectors were found to be vacant. More shortages in the class II category in both health and FP sectors and class I in the nursing sector have been reported. In 2011, the percentages of vacant posts for class 1 staff in health, FP and nursing were 24.33, 48.21, and 98.80 respectively. The figures for vacancy in class II staff were 30.79% (health), 59% (FP) and 70.72% (nursing) (MOHFW, 2011). There are more vacancies at lower levels than at higher. As of March 2007, 500 medical officers (Maternal child health-family planning), 66 medical officers (family welfare), 2,089 sub-assistant community medical officers, and 5,075 FWVs were present against 716, 250, 2,500, and 5,705 allotted posts respectively (GUS, 2008: 1).

Similarly, all ten posts for medical officers in Tahirpur UHC, Sunamganj district, are reported to be vacant since 2009 and only one trained nurse against ten is available for rendering services in a 31-bed hospital (*Daily-Star*, February 17, 2012). The same condition found in Madaripur Sadar hospital:

> *There are 22 sanctioned posts of doctors in this hospital. But maximum of the posts remain vacant for a long time. Is it possible for me to run a 100-bed hospital with only 12 doctors? There is no consultant for the departments of surgery, medicine, cardiology and orthopaedics. As no major operation takes place at the hospital, patients often have to rush to private clinics and count extra money (Zannat, 2010).*

The field report based on observation of the SUHC indicates the same condition at grassroots level. It found seven (class-I) against 26 sanctioned posts, 45 (class-III) in place of 73, and 18 (class-IV) against 28 staff were available. The highest number of vacancies was noticed at the upper strata

responsible for providing healthcare services. The question arises why the government fails to fill-up vacancies, particularly in rural areas. Migration of health staff to overseas and urban centres has complicated the recruitment process and emerging private and NGO sectors are the main causes of this situation. As said earlier, different pull factors push QHCPs to work for either NGOs or private sector organisations. For instance, Banik (2010b) and BHW (2007) hint that NGOs are paying competitive salaries to all HCPs which are higher than those paid in government positions. The clinic manager of the BCRHCC told his interviewer that he was in this clinic for around two years because of longer project duration, high salary, many facilities and the possibility of transforming the project into a revenue-earning initiative. Another medical officer, working in an NGO clinic in Rajshahi, complained against the doctors' recruitment process in the government sector. She believes that doctors should have the opportunity to enter directly into the public sector after finishing their internships and follow a separate recruitment process.

In the public sector, the recruitment procedure is more bureaucratic and time consuming. It may take more than three years to complete the process. In general, many steps need to be followed to create a new post in the MOHFW and it takes between six months and two years to complete the process[80]. The recruitment procedure is sometimes obstructed for political reason. Strangely, the recruitment process for LLHWs has often been halted for not inducting governing party workers (*Daily-Star*, February 1, 2010; Zannat, 2011).

7.3.3.3. Regional Differences in the availability of healthcare workforce

Compared to QHCPs, UHCPs serve rural people at greater length. The percentage of urban people receiving healthcare services from QHCPs is 36.2, whereas the figure for rural areas is 1.8 percent. In

[80] The first step is that the MOHFW proposes the Ministry of Establishment for creating a new post by identifying the necessity for it. The Ministry of Finance then creates funding for this new post, approved by the Establishment Ministry. The proposal is finally tabled for the cabinet approval. Once the proposal is finally approved in the cabinet meeting, the National Implementation Committee for Administrative Reforms permits the MOHFW to advertise the sanctioned post. It may take a further three months or more to fill up the post (El-saharty & Ahsan, 2011).

contrast, 64.1 percent of urban folk receive services from UHCPs, while 96.7 percent rural people receive services from UHCPs (El-saharty & Ahsan, 2011; BHW, 2007). The CHWs from NGOs and village doctors are mainly providing services in rural areas (Ahmed *et al.* 2011). However, rural people can have more services from the latter, as discussed in Chapter 6, unless the *palli chikitsak* scheme stalled due to resistance from QHCPs, particularly specialised. On the other hand, drug vendors are evenly distributed in both rural and urban areas reflecting the expansion of this sector without any hindrance (El-saharty & Ahsan, 2011; BHW, 2007). The current estimate suggests that there are roughly 80,000 unlicensed drug stores where 70 percent out-of-pocket expenditure is made (Ahmed *et al.* 2009: 473). This unobstructed expansion has resulted in the availability of drugs at competitive prices (low).

Government health staff in urban areas are more serious and sincere in providing healthcare services as they are always under tight supervision and prefer remaining there for longer periods for various reasons. Sanctioned posts in rural areas always remain vacant longer than in urban centres. For instance, the chief medical officer at the SUHC reported during the field work that two female medical doctors negotiated their transfers using political connections and went from *upazila* (rural) to Dhaka (capital).

The Bangladesh doctors' association is divided into two groups[81] in alliance with two major political parties. The governing party doctor association always exerts pressure in personnel matters (especially postings and transfers) and in keeping doctors at their desired stations. In this regard, a manager of the EOC program office said,

> *In the case of posting of doctors, political interference is the major hindrance. Often a professional organization controls posting and transfer bypassing the formal line-authority. As a result, those who are politically motivated or maintain a good liaison with unionists can easily avoid rural posting. Also sometimes, it happens that doctors posted in remote areas subsequently manage a transfer or deputation to better/urban areas by lobbying with the authority. As a result, the functionality of EOC in remote rural areas*

[81] Swadhinata Chikitsak Parishad—Independent Doctor Association—is aligned with the current governing party i.e., Awami League and Doctor's Association of Bangladesh is associated with the present main opposition party—Bangladesh Nationalistic Party (BNP).

remains the number one problem in the context of Bangladesh with existing management-organisation culture (Anwar et al. 2009: 147).

The government doctors sometimes remain absent from their posts if they are assigned a remote and rural areas. For instance, 70 percent of doctors in one UHC were found to be away during office hours (Chowdhury, R. H. & Chowdhury, 2009: 89). Another study, focusing on two of seven divisions, found a similar situation. In Khulna and Sylhet divisions, on average 15 (urban) and 34 (rural) percent of posts for all doctors have been vacant (Anwar *et al.* 2009: 144). The government has been taking many steps (including suspensions of personnel and salary cuts) to improve this situation. However, all steps appear to have been abortive in bringing about positive outcomes in rural healthcare service delivery (Bol, 2011). Furthermore, due to bad communication facilities and heavy workloads, it is difficult for supervisors stationed in *upazilas* or districts to monitor the activities of local level medical officers. After three attempts during the fieldwork, the community clinic was found open. These community clinics are often closed or inoperative due to the shortage of trained health personnel and lack of equipment with health assistants and FWVs mainly running them (Afrin, 2011; Moral, 2011c; Zannat, 2010). Furthermore, the UHFWC usually opens at 11 am and closes by 2 or 3 pm daily, whereas the stipulated official hours are from 9 am to 5 pm. Some service receivers complained during the focus group discussion that they did not receive emergency services at night. The study also found regional variation in the availability of health workforce (Table 7.5).

Table 7.5 Distribution of health personnel in areas studied

Name of areas studied	Provider			Total
	Health worker	Doctor	Nurse	
Bogra	27	28	2	57
Rajshahi	47	9	1	57
Shapahar	22	1	0	23
Total	96	38	3	137

Table 7.5 reveals who provided MHC services to respondents in different areas. In Bogra, the number of respondents receiving services from health workers was the same as doctors. It indicates that both doctors and health workers were available for providing healthcare services to pregnant

mothers. On the other hand, in Rajshahi, the number of health workers (47) was over five times than that of doctors (9).Thus, respondents in Rajshahi had more access to health workers than to doctors. The condition of rural areas was worse compared with urban areas. Nearly all respondents received services from health workers in Shapahar where doctors are not in sufficient numbers.

However, one new health worker cadre, known as 'CHW', has been developing in Bangladesh for taking healthcare services to the doorsteps of people. The CHW generally provides PHC services at community and home levels. Almost all respondents from three areas reported that CHWs visited their homes. Apparently, both the government and NGOs have been trying to reach the people through them. As Bangladesh is a poor country, it is difficult to provide healthcare services to people by doctors. This has been a positive development; CHWs are now engaged in providing healthcare services particularly to mothers and infants in the rural areas.

7.4. Accessibility to primary healthcare services

Physical infrastructures or availability of healthcare services does not mean that people have easy access to them. Yet, people's accessibility to PHC, including maternal, services has been steadily improving since the 1990s. For instance, the percentages of mothers in receipt of at least one ante-natal care (ANC) service increased by four between three years. The figure for 2004 was 56 percent, whilst it was 60 in 2007. Moreover, between 2004 and 2007, the coverage rate of qualified doctors in ANC services increased from 31.3 to 35.5 percent, whereas that of nurse/midwife/paramedic went down to 15.7 from 17.4 percent (NIPORT *et al.* 2005; NIPORT *et al.* 2009). Anyway, the increase in Bangladesh has been caused by inbuilt program components of the Health and Population Sector Program (HPSP, 1998-2003) and Health, Nutrition and Population Sector Program (HNPSP, 2003-10), the presence of one-stop service delivery centres, women's education, empowerment and behavioural change communication (BCC) programs (Hossain, A. H. M. K. 2010: 404). By contrast, for

two or more tetanus toxoid injections, one vital component of the ANC service, the up-taking rate dropped from 63.6 to 59.7 percent between 2004 and 2007. The shortage of tetanus injections at government level and the perceived idea about no further need to inject pregnant mothers who had it before could be the result of this low rate (NIPORT *et al.* 2009: 109).

Mothers' accessibility to facility centres for delivering their babies also improved. In 2004, six and three percent of mothers delivered babies in public and private health facilities respectively, whereas it was turned into seven and around eight percent correspondingly in 2007. That means, mothers' preference for home delivery went down. In addition, the percentage of mothers receiving assistance from qualified doctors at delivery rose to 12.7 (2007) from 7.5 (2004) (NIPORT *et al.* 2005; NIPORT *et al.* 2009). It also documented that mothers' accessibility to MHC facilities increased slightly between 2000 and 2003. The percentage of babies delivered at government facilities, private or NGO-run clinics, and home was seven, four, and 89 respectively, while it was six each at government and private and 84 at home in 2003 (Cockcroft *et al.* 2004: 5). The respondents of the study (table 7.6) stated that they went to the nearest centres for MHC services. Around 84 percent of mothers visited their nearest centres from one to four times. That indicates, most pregnant mothers went there for essential check-up and medicines, important for both mother and child.

Table 7.6 No. of times respondents visited the nearest centres for maternal health care

Range of visit times	Frequency	Percent	Cumulative Percent
1-4	118	84.3	84.3
5-8	15	10.7	95.0
9-12	6	4.3	99.3
12-16	1	.7	100.0
Total	140	100.0	

However, increasing accessibility to ANC and delivery services does not mean that people across regions and classes have the same extent of access. It differs from region to region and class to class. The following section highlights regional and class-based differentials in accessibility to primary, particularly maternal, healthcare services.

7.4.1. Regional inequality in access to primary healthcare services

Urban mothers have more access than rural mothers to primary (mainly maternal) healthcare services. For instance, in 1996-97, the percentage of babies delivered at health centres was 2 in rural and 23 in urban areas. The gap between rural and urban areas was 21 percent. The figures for 2007 indicate that this regional gap remained but reduced slightly from 21 to 20 percent. On the contrary, the gap between rural and urban in terms of receiving assistance from trained health personnel was further reduced between 1996-97 and 2007. In these two years, the figure for rural area was five and 13 percent, whilst that for urban areas was 35 and 37 percent respectively (Moral, 2011b). Two reports, however, contradict the earlier position and indicate that the gap between rural and urban areas in terms of accessibility to facility centres for delivery increased by about five percent in the last three years. The percentage of babies delivered at rural centres between 2004 and 2007, was 6.2 and 10, whereas the urban mothers' percentage was 21.9 and 30.7 correspondingly (NIPORT *et al.* 2005; NIPORT *et al.* 2009). The study (table 7.7) also found a regional differential in accessibility to birthing place.

Table 7.7 Study area-wise distribution of place of delivery

Names of areas	Birthing place in the last delivery				
	Home	Hospital	Clinic	Others	Total
Bogra	35	12	12	0	59
Rajshahi	27	16	15	1	59
Shapahar	35	5	0	0	40
Total	97	33	27	1	158

A majority of respondents in all places studied preferred home-based delivery. However, the number of mothers delivering babies at hospitals and clinics was higher in the urban areas. In Bogra and Rajshahi, mothers had access to hospitals or clinics to some extent, while Shapahar mothers were forced to deliver babies at home. If complications arose, rural patients were transferred to either hospitals or clinics. The transportation system, availability of the required amounts of money for services, knowledge of clinics and presence of relatives in towns influenced the decision to transfer expectant mothers to hospitals or clinics, which are mostly situated in towns.

The gap between rural and urban areas in trained health personnel assistance remained constant. In 2004 and 2007, the percentage of urban mothers receiving QHCP support increased from 19.4 to 26.1, whilst the figures for rural mothers rose to 9.2 from 4.6. It also indicates that rural area coverage rate in medical assistance during delivery increased two-fold, whereas it increased by 35 percent in urban areas during the same period.

The rural-urban variance in accessibility to ANC is also large. In 2004, 50.9 percent rural and 74.8 percent urban pregnant mothers had at least one ANC visit, while, in 2007, the figure for rural and urban was 56.1 and 75.7 percent in that order. It reflects that rural mothers' accessibility to ANC increased more than their counterparts between these three years. However, it is worthwhile to mention here that rural mothers' accessibility to medically trained providers' ANC services did not increase though their accessibility to ANC increased in these three years. The percentage of rural pregnant mothers who received medically trained personnel's ANC services was 46 in both 2004 and 2007. On the other hand, urban mothers' access to the same services slightly increased from 71.3 percent in 2004 to 72.9 in 2007. Also, the tetanus injection coverage rate decreased slightly in both areas. In urban areas, the percentage decreased from 88.1 to 83.5, whereas in rural areas it went down from 84.2 to 82.4 between 2004 and 2007. In addition, urban pregnant mothers have more access to the Caesarean than their counterparts though the Caesarean rate in rural areas increased by more than triple, whilst in urban areas it increased by a half in three years. In 2004, the Caesarean rate in urban and rural areas was 10.5 and 1.7, while it became 15.9 and 5.4 percent in 2007 in that order (NIPORT *et al.* 2005; NIPORT *et al.* 2009). The study (table 7.8) also revealed the same scenario.

Table 7.8 Study area-wise distribution of mode of delivery

Mode of delivery	Name of areas			Total
	Bogra	Rajshahi	Shapahar	
Normal	53	48	40	141
Caesarean	7	12	0	19
Total	60	60	40	160

The table indicates that only urban mothers had access to the Caesarean during their last delivery. It reflects that no facilities for Caesarean delivery in the rural area (Shapahar, in this case) are available. This lack of facilities places rural mothers at higher risks of near death if they face any complications during delivery.

7.4.2. Class-based inequality in access to primary healthcare services

Like other developing countries, rich people in Bangladesh always have more access to better quality healthcare services than the poor. Anwar *et al.* (2008), Chowdhury *et al.* (2006), Koblinsky *et al.* (2009) and Mridha *et al.* (2009: 137) found that poor and uneducated Bangladeshi women have less access to different sectors which provided modern healthcare services. One of the main reasons for the unwillingness of the poor to use government services is the burden of having to pay unofficial fees though these services are to be free (Anwar *et al.* 2004: 11; Anwar *et al.* 2008: 256). One participant on an FGD, conducted in Noadapara, Rajshahi city, shared her hospital experience in this way, "If you want any service from a hospital, you have to pay. I bought medicine from outside which cost 1,000 Taka (equivalent to US$ 15) during the birth of my baby. No beds were there for me. I was on the floor between two beds after delivery".

The rich-poor differential in accessibility to facility centres for delivery and the use of services of trained health personnel increased between 2004 and 2007[82] (Moral, 2011b). Similarly, only 4.4

[82] In 2004, only two percent of the poorest mothers were able to deliver their babies at these centres where the figure for the richest was 30. The difference between two extreme classes was 28. This report claimed that

percent of the poorest mothers delivered babies in health facilities and received skilled assistance, whilst the figure among richest was 43.4 and 50.9 percent respectively. It also highlights that 30.8 percent of the poorest mothers received ANC from trained health personnel compared to 83.6 percent of the richest mothers (Akhter & Mazhar, 2009: 44). The other study revealed that 14 percent of the poorest pregnant mothers had access to ANC services provided by medically trained persons in comparison to 59 percent for the richest quintile (Barkat & Sabina, 2006: 323). It also found that, in 2001, 1.8 percent of the poorest and 29.7 percent of the richest mothers delivered babies with the support of skilled assistants (Ahmed, 2005: 7). Sen (2001 in Barkat & Sabina, 2006: 323) claimed that there was a disparity between income quintiles receiving MHC services from skilled health staff[83]. Anwar *et al.* (2008: 254) discovered that the percentage of deliveries with SBA attendance in the poorest quintile was 15.6 compared to 63.3 for the richest. In addition, they uncovered that 3.3 percent of the lowest asset quintile used Caesarean delivery, whereas the figure for the highest was 28.4 percent.

It has been found that the richest and poorest differential in accessibility to ANC and tetanus injections reduced but the variation of these two extreme classes in access to place of delivery, skilled birth assistance during delivery and Caesarean delivery increased between 2004 and 2007[84](NIPORT *et al.* 2005; NIPORT et al. 2009). Collin *et al.* (2007: 5) show that the percentage of urban women with secondary or above education in the richest quintile received ANC from

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this difference increased to 39 in 2007. The same report indicates, three percent of the poorest mothers received assistance from trained health staff, whereas 40 percent of the richest received the same service in 2004. The difference was 37 at that time. However, it rose to 46 in 2007.

[83] Thirty percent of rich mothers gave birth with the assistance of trained birth attendants, while only two percent of poorest mothers received same services.

[84] In 2004, 33.7 percent of the poorest and 84.1 percent of the richest pregnant mothers received at least one ANC service compared with 41.6 and 86.4 percent respectively in 2007. In 2004 and 2007, among the poorest ANC service users, only 12.3 and 15 percent respectively received service from QHCPs. At the same time, 65.6 and 71.6 percent of the richest correspondingly received ANC service from QHCPs. The percentage of the poorest with at least two tetanus injections increased from 56 to 58.3, while that of the richest decreased from 70.7 to 62.3 between 2004 and 2007. In 2004 and 2007, only 2.4 and 4.7 percent of the poorest mothers delivered their babies at facility centres in comparison to 32.1 and 43.8 the richest respectively. Moreover, at the same time, only 0.8 and 3.5 percent of the poorest mothers had assistance from skilled assistance during delivery, whilst the figure for the richest was 26.9 and 39.4 respectively. Furthermore, in 2004-2007, the utilisation rate of Caesarean section by the richest and poorest increased by 11 and one percent correspondingly.

professionals during pregnancy and used Caesarean more than rural women who were uneducated in the lowest asset quintile. Besides these, it revealed that 87.2 percent poorest mothers gave birth at home; among them, 85.7 percent received assistance from unskilled attendants and the rest from midwives. The percentage of richest mothers delivering babies at home was 59.5 and among them, 54.2 percent received no assistance from trained health staff and the rest received services from midwives. Only 11 and 30 percent poorest and richest mothers respectively used facility centres as birthing places. The difference between the poorest and richest in accessibility to ANC services is not large; 78 percent of the poorest mothers made at least one ANC visit compared to 87 percent for the richest quintile (Anwar *et al.* 2004: 7).

Information from interviews at field level shows a class-based disparity in accessibility to professional assistance and baby delivery place and mode. It found that most of the poorest (defined in Chapter 5) respondents (72.1%) delivered their babies at home followed by hospitals (17.9%) and clinics (10.1%). Also, 88.6 percent of the babies were delivered normally, whereas the figure for Caesarean birth was 11.4 percent. They had less access to professional birth attendants. More than half of the deliveries (61.1%) were carried out by *dais*[85] followed by doctors (19%), nurses/midwives/paramedics (10.1%) and relatives (9.5%).

7.5. Summary

The availability of PHC facilities in both public and private sectors is increasing although the EmOC facility is yet to reach international standards. Four in five mothers went for MHC services at least once at their nearest centres. However, all these facilities are not evenly distributed. All healthcare-related facilities, such as blood transfusion, ultra sonogram, and Caesarean, are more available in urban than rural areas. However, the shortage of health personnel, particularly specialised in maternal health, the unusual ratio of physician and nurse, the uneven distribution of QHCPs and

[85] Traditional birth attendants with or without training are locally known as 'dais'.

health infrastructure and lack of recognition of UHCP contribution to healthcare services in the mainstream health system all jeopardise MHC services.

Public healthcare centres in both urban and rural areas are not user-friendly due to lack of policy makers' attention and lack of sufficient allotment in budget, whereas the NGO-run centres, mostly located in urban areas, are better equipped. Healthcare infrastructure (building condition, facilities for waiting patients) is more attractive in urban and the private, including NGO, sector than in rural and the public sector. Many facilities for immediate diagnosis of patients are conveniently available in urban areas compared to the rural. The QHCPs (6.5%) serve only 20 percent of the population and they want to remain in urban areas. If the public sector urban facilities fail to treat, they usually switch to the NGO-run centres, which are mostly urban-based. The UHCPs (93%) give services to 80 percent of people. Socio-economic and organisational factors force people to use UHCP services.

The majority of urban mothers had access to NGO-run healthcare centres, whereas six in ten rural mothers had access to the government services. The rest (4 in 10) rural mothers received no MHC services from any centre. A large number of urban mothers received clinical maternal care, immunisation for themselves and their children, counselling on RHS and FP. Around three-quarters could obtain pregnancy, blood and urine test facilities. Less than half had facilities for ultrasound, operation and X-ray. By contrast, three-fourth and less than half of rural mothers received immunisation for themselves and their children, and counselling on RHS and FP respectively.

The shortage and absence of health personnel are acute in rural areas. The opening and closing time of rural health centre is different from the stipulated official hours. Urban mothers received healthcare services from both doctors and CHWs, while rural mothers receive the same services from only CHWs. Six in 10 mothers delivered babies at home. However, the tendency of urban mothers to deliver babies at facility centres is more compare to rural mothers. That means, urban mothers had total access to Caesarean section.

All these factors (dismal condition of health sector, non-availability of comprehensive MHC services, more absence of HCPs, more vacant posts and unusual opening and closing time of centres) place rural mothers' lives at great risk. Urban mothers receive services not from the government healthcare centres but from private, particularly NGOs-run, centres.

Lack of recognition of nursing as a profession is the cause of higher physician-nurse ratio. Nursing has for long been considered a female-oriented low level profession and sometimes associated with prostitution. For this reason, parents of middle and higher classes do not encourage their daughters to choose this profession. Overseas migration and religious ideology appear to work as reasons for this situation. Job opportunities in government are higher than in the non-government sector. Higher salary structure, easy recruitment process and other facilities encourage HCPs of the NGO sector to stay there. By contrast, complex recruitment procedures and political intervention create obstacles to filling up vacant posts in the government sector. All these shortcomings (low physician-nurse ratio, vacancy, highly bureaucratic and time consuming recruitment process) in the public sector create obstacles to catering to the needs of primary, particularly maternal, healthcare services which are easily available in the private and NGO sectors.

Healthcare services in the non-state sector have been expanding more rapidly vis-à-vis the government sector. The high costs of private sector services and informal payments paid to unscrupulous government employees in the public health sector deter poor women from seeking healthcare services. Consequently, poor women have less access to healthcare services whatever sector they are served by than those from the relatively affluent section of the population. Rich women have better access to ANC, tetanus injection, professional and Caesarean delivery services than others.

Three-quarters of the poorest women delivered babies at home. Nine in 10 poorest mothers delivered normally. And six in ten deliveries in the poorest households were attended by local *Dais.*

In Chapter 3, all countries were divided into two categories: marginal and massive deprivation. As all but not the poor have access to PHC services, Bangladesh is positioned in the former category.

This chapter has made contributions to disseminating the idea that class and region-based inequity in terms of accessibility to and availability of primary, mainly maternal, healthcare services still prevails though both availability and accessibility at both regional and national level increased. This suggests that the existing healthcare system has not been able to improve MHC services as expected. This relates to the 5th sub-research question (in what ways and to what extent the existing healthcare system improves maternal health?) mentioned in Chapter 1.

This region and class-based differentiation in the availability of and accessibility to different organisations providing primary, mainly maternal, healthcare services has been caused by different factors that are discussed in the next chapter. The application of the figure 6.2 will also be shown.

Chapter Eight: Results and Discussions: Barriers to Access in Primary Healthcare Services

8.1. Introduction

The Bangladesh government has taken various steps, such as the upgrading of rural health centres and the establishment of new medical colleges and institutes to enlarge the availability of healthcare services for people. However, the vast literature reviewed and the findings of the study in Chapter 7 indicate that such availability does not always ensure people's access to these services and also highlight several obstacles to people's accessibility to available healthcare services. The main objectives of this chapter are to explain these barriers, broadly divided into three types: physical, social and organisational and to explore how far these barriers, as hinted in chapter 3, cause three delays (delays in making decisions about seeking care, in reaching in the facility centre and in receiving adequate services) well-known in health sociology literature. The arguments the study puts forward are based on main findings of this and other research undertaken in Bangladesh. The first part deals with spatial and temporal barriers highlighting distance and waiting time. The second discusses social obstacles, while the third deals with organisational impediments. The following part talks about some socio-demographic factors that are sometimes associated with the utilisation of formal medical healthcare services. The final part draws a summary.

8.2. Physical barriers

In Bangladesh, more than 20,000 mothers die each year due to pregnancy-related complications, of which, 13,744 die in the rural area (MoF&P, 2011). If complications arise, pregnant mothers have difficulty accessing healthcare services as clinics or hospitals are few and far away. Three important physical barriers, such as distance, waiting time and opportunity costs associated with healthcare seeking behaviour, are discussed in detail in this part.

8.2.1. Distance

Distance appears to work as a key deterrent to access. Because pregnancy and labour are physical conditions that cannot permit pregnant mothers to walk or travel for long, these can bring about adverse effects on the health of a mother and the child she is carrying (Leslie & Gupta, 1989: 73). To offset the lack of a good communication system and its effects on the health of pregnant mothers and their babies, the government has taken the initiative to provide basic healthcare services at the doorsteps of the people. The introduction of community clinics (one stop service centres) is one such initiative. The government also encourages non-government organisations (NGOs) and international organisations to set up healthcare centres in remote areas so that people can easily access healthcare services. One study conducted in Khulna city, found 40 percent of the people could attend the Urban Primary Health Care Project (UPHCP) centre located within a half kilometre distance, while 15 and 22 percent had a government and private hospital respectively within the same range. About three-fourths had a UPHCP centre within one kilometre, whereas less than half and near half residences had a government and private hospital correspondingly within the same radius (Islam & Aktar, 2011: 39). The study (table 8.1) found that people had healthcare centres within a one or two kilometre radius.

Table 8.1 Distance of the nearest centres

Range (km)	Frequency	Percent	Cumulative percent
1	76	50.7	50.7
2	37	24.7	75.4
3	29	19.3	94.7
4	4	2.7	97.4
5	2	1.3	98.7
6+	2	1.4	100.0
Total	150	100.0	
No response	10		

As said in table 8.1, half of the respondents (50.7%) reported that their nearest health centre was within a one kilometre distance. One quarter (24.7%) mentioned that distance to be almost two kilometres, while 19.3 percent of respondents reported the need to travel three kilometres from

their homes. Thus, both the government and NGOs in the studied areas have been able to set up healthcare centres within the reach of the people.

As said in Chapter 7, all types of healthcare services in urban areas, such as government, NGOs, and private, are more readily available compared to the rural. This huge involvement of different organisations in healthcare service delivery provision creates wider options for urban dwellers. In order to attract service users, these centres continue to steadily emerge and reduce the distance between them and households. By contrast, only government and some NGOs with limited coverage are engaged in rendering healthcare services in rural areas. The government usually sets up such centres following the normal administrative structure. Rural NGOs also build up centres according to their convenience and for these reasons, rural people have to travel a long distance to obtain healthcare.

Fifty-nine percent of urban residents, compared to 26 in rural areas, travelled less than 30 minutes to reach a provider or facility centre. Half of the richest travelled 30 minutes to receive services, while the figure for the poorest was 23 percent (NIPORT *et al.* 2003: 87). It also uncovered that on average rural people travelled 11 and 35 kilometres to reach *upazila* and district hospitals respectively to receive emergency obstetric care (EmOC) (NIPORT *et al.* 2005: 219). Similarly, this study (table 8.2) found regional variations in distance to healthcare centres.

Table 8.2 Distance of nearest centres in study area-wise

Range (in KM)	Name of areas			
	Bogra	Rajshahi	Shapahar	Total
1	24	49	2	75
2	23	4	10	37
3	4	0	25	29
4	2	1	1	4
5	0	2	0	2
6+	2	0	0	2
Total	55	56	38	149

The number of respondents with a one kilometre reach was more than double in Rajshahi than in Bogra. Conversely, only five percent of respondents in Shapahar had it within the same distance. The number of respondents living two kilometres away from health centres was more than double in Bogra than in Shapahar. The number of respondents with the nearest healthcare centre within three kilometres was highest in Shapahar compared with Bogra and Rajshahi. People from Shapahar thus need to travel more to reach the nearest health centre than in Bogra and Rajshahi. The huge development of NGO-based healthcare centres is one of the reasons for urban health centres being closely-spaced, whereas the rural people still depend on government healthcare centres which are not always handy.

There is a huge difference in communication systems between urban and rural areas. The urban areas researched have better road communication that makes it easier for service users to travel to health centres either by rickshaw or on foot. On the other hand, the village studied is located far away from the administrative headquarter. This village had poor communication facilities and limited forms of transportation. If any patient from this village sought healthcare services, they had to arrange transportation on their own. The study found that almost three quarters of respondents travelled to the nearest centres by walking, while one quarter used cycle rickshaws as the preferred means of travelling to healthcare centres.

8.2.2. Waiting time

Sometimes patients need to wait for healthcare services. If this waiting time becomes longer, they are discouraged from going to health centres. Increasing the number of health personnel in these centres is one way to address this issue. As said earlier, many organisations in urban areas endeavour to provide services in a timely manner so that patients do not lose their patience. With more choices, the urban folk can so easily make decisions about seeking care from any particular centre where, as perceived, they need not wait too long for treatment. For instance, around 80

percent service recipients at urban centres run by an NGO reported the waiting time to be less than 20 minutes (Banik, 2010a: 36).

Rural people (Shapahar), on the other hand, have only the limited options of going to government hospitals for healthcare services. With inadequate health staff, as said in Chapter 7, and with most remaining absent and sanctioned positions being continuously vacant, patients at government centres usually need to wait a long time to be treated. Sometimes, rural health centres open at unusual times (official opening time is 9 am and closing is 5 pm). If patients follow the usual business hours of the centres, they are forced to wait until the centre actually opens. For instance, the rural health centre visiting during the field trip opened at 11 am. At that time, only two women were waiting for the centre to open. They reported that they always had to wait for about an hour before being seen by the nurses or doctors. Sometimes, the actual hours of service do not suit women doing informal work, as house maids, for example. Taking time off from work for receiving healthcare services affects their daily income (Titumir & Hossain, 2004: 32). For instance, a substantial number of poor respondents were reported to be unable to receive healthcare services from their nearest centres because the timing followed did not suit their daily routines (Banik, 2010b). Long waits and inconvenient opening and closing times of health centres often caused delays in receiving care (the third delay) and hampered the normal progression of pregnancy.

In many cases, women from rural and urban slum areas with low levels of formal education do not know where to go for proper treatment. They usually spend more time locating an appropriate health centre. This long search process puts some pregnant mothers at great risk or may even prove fatal for both mother and child. For instance, a pregnant mother commonly goes to a local *dai*-traditional birth attendant (TBA). If the *dai* identifies any anomalies in the pregnancy, she is sent to either the village doctor, who has no proper training, or the union health centre. As rural health centres are not well equipped with essential drugs and medical aids, pregnant mothers are sent to

the upazila health complex (UHC). If the UHC fails to provide the required treatment, the patient is finally sent to either the district hospital or mother and child welfare centres (MCWCs) located at the district level (Chowdhury R. H. & Chowdhury, 2009: 88-89).

8.2.3. Opportunity costs

Uncertainty regarding the government hospital's formal atmosphere and the not-so-friendly attitude of health staff there generally discourage rural people from visiting them. This delays making decisions about seeking healthcare from public hospitals. That means, the first delay occurs. Expectant mothers often find it difficult to get someone who knows the hospital environment and staff well and who is willing to provide time to accompany them. Even after being there on time and with a companion, it is not always easy to get the treatment commenced immediately or even in a short time. All these factors can be a waste of time and energy for both patient and her companion. For instance, Afsana (2005) depicts how Papreen's mother-in-law failed to convince Monira to go as an accompanying person to the UHC during Papreen's first baby delivery: "We must convince Monira to go with us. We don't know anything in the hospital. Doctors and nurses will be annoyed if we can't communicate with them" (Afsana, 2005: 116).

The time spent by attendants diverts them from income generating activities and other domestic work, such as cooking and taking care of family members, particularly children. Thaddeus and Maine (1994: 1095) rightly mention, "Time spent getting to, waiting for and receiving health services is time lost from other, more productive activities, such as farming, fetching water and wood for fuel, herding, trading, cooking and so on".

A study documented that mothers, sisters, mothers-in-law, husband's sisters, husband's brothers or cousins and their wives, and wives of husband's uncles provided support during and after their pregnancies (Edmonds *et al.* 2011: 166). Similarly, the study (table 8.3) found that around half of the

respondents went outside for seeking healthcare services with husbands; 30.6 percent went alone, while 15.2 percent were accompanied by relatives.

Table 8.3 Who accompanied you when you went outside for seeking healthcare?

Name of accompanier	Frequency	Percent
Neighbour	3	2.1
Husband	73	50.7
Daughter	2	1.4
Relatives	11	7.6
Alone	44	30.6
Mother/in-laws	11	7.6
Total	144	100.0
No response	16	

One participant (Ms Usha) in the FGD conducted in Kathalbaria, Rajshahi city, mentioned that as her husband was the only bread winner, it was difficult for him to accompany her when she went to the medical centre for consultation and treatment. Like her husband, most husbands of participants were daily earners. For this reason, most pregnant mothers were invariably accompanied by their female family members. Likewise, female family members or female neighbours accompanied mothers in Shapahar when they went outside their homes seeking health care. Here economic reason is less important than social sanction (a woman should be accompanied by another female when outside).

8.3. Social barriers

Each year in Bangladesh, over 20,000 mothers die at childbirth and over 50,000 pregnant mothers experience life threatening complications. UNICEF (2009) says that four of five maternal deaths can be prevented if basic healthcare is provided at the proper time. However, the social structure sometimes dissuades people from receiving healthcare services available at their doorsteps. The following section highlights some social barriers, such as perception of disease and pregnancy, decision making systems, financial costs associated with healthcare seeking behaviour and so on.

8.3.1. People's perception, beliefs and attitudes towards health-related issues

Most of the people living in urban areas migrate from the countryside for various reasons, such as overcoming economic hardship, maintaining a political connection with the town, continuing higher education and so on which are detailed in Chapter 4. Migrated people bring not only their physical characteristics but also all sorts of cultural beliefs and attitudes to the urban areas. As most of urban poor women researched are illiterate and lead unhealthy lives, they are incapable of keeping pace with the changing conditions of urban life. In other words, no urban mentality generally develops among them, though they live in cities (Jamaly & Wickramanayake, 1996). Consequently, their perception of, beliefs and attitudes about illnesses and health conditions usually develop from their rural background and the views of senior members of their families. It is well known that the poor commonly perceive illness as a normal way of life (Castro-Leal *et al.* 2000: 68). Makinen *et al.* (2000: 60) find class-based differences in health seeking behaviour as the rich relative to the poor can procure medicine and hospital care easily and early in their illness cycle.

The classification of illnesses and treatment has for long been influenced by the perceptions people have developed or are developing about diseases. For instance, people generally use homeopathic treatment for cold-related problems and allopathic when the case appears to be complicated. Preferences about treatment also depend on the age of patients; homeopathic treatment is perceived to be preferable for the children, whereas allopathic for the old. The reasons for giving preference to homeopathic treatment for the children are: it is not harmful for them, it requires no consultancy fees except medicine costs and the cost is low compared to other treatment (Banik, 2010b: 37).

One study suggests that the perception of the *bastee* (slum) people about illness determined what types of treatment they sought. They prefer traditional medicine for certain illnesses like jaundice, chicken pox and so on, and modern medicine for diarrhoea, vomiting, fever, cold coughs and the like. Evidence also reveals that the common tendency among people is to seek treatment for

children early because their sickness is perceived to be more serious and requiring urgent attention (Kabir *et al.* 2000: 713). Another study revealed that people generally go to professional care givers only when the condition of the patient, be it children or others, deteriorates or does not improve with the medication prescribed by unqualified healthcare providers (BHW, 2007: 13). However, the perception of pregnancy and childbirth is somehow different from that of other diseases and associated treatment.

In Bangladesh, pregnancy and childbirth within marriage are always welcome. A woman without a child has no dignity in society. A woman's ability to carry and bear a child is considered as something that needs to be celebrated and a source of status for her family. As Ahmed (1981: 144) mentions,

> *The news of the first pregnancy is hurriedly dispatched to the girl's father and there is always much enthusiasm on such occasion. There is a popular belief in the rural areas that unless the girl becomes a mother, her position in her father-in-law's house remains insecure and this is also one of the reasons why the girl's side is happy to hear the news.*

However, pregnancy cannot be declared publicly; even a pregnant woman cannot share her complications with her husband or mother-in-law unless she really needs to because of circumstances beyond her control. She always endeavours to carry out household activities as long as possible. Women generally feel proud if they can manage their household chores during pregnancies and deliver babies with assistance from relatives or TBAs without disturbing male members of the family, particularly husbands, in arranging hospital care.

Normally, pregnancy and childbirth are not considered as illnesses, but are seen as normal activities of women which they have to carry out at a particular stage of their lives. Some people, nonetheless, think that both pregnancy and childbirth can lead to greater risks in a woman's life. The perception of pregnancy and childbirth as not being illnesses makes people indifferent to seeking proper medical care and booking hospital beds prior to delivery. Even in some cases, the deaths of either child or mother or both are not taken seriously. One study found that rural pregnant mothers did not use professional assistance during delivery from their existing perception—'service not

needed'—unless there was any serious obstetric difficulty. It also reported that this perception sometimes works as a barrier to seeking professional help in emergency situations (Gayen & Raeside, 2007: 911).

This fatalistic view regarding pregnancy and childbirth creates a perception—the condition is not amenable to treatment—that works as an effective barrier to making a timely decision on seeking timely care (the first delay). Socio-cultural prescriptions and interpretations play vital roles in recognising the critical conditions of pregnant mothers. For instance, Afsana and Rashid (2000: 23-24) mention that rural women perceive childbirth as a normal and natural phenomenon, although there is a big difference between 'normal' and 'complicated' childbirth. The former is defined by using different signs, such as a normal progression of the birth process without any prolonged pain, not rupturing the membrane before the beginning of labour pain and delivering baby with an intact placenta, while the symptoms of the latter include prolonged labour pain without further progress, membrane ruptures before labour pain starts, cord comes out beforehand and being pregnant after a long queue (more than five years).

The perception of childbirth and labour pain varies from class to class. Working class women realise that they are pregnant when they sense a delay in their menstrual cycle. Sometimes, they get the clue from physical symptoms, such as morning sickness (nausea and vomiting), lack of appetite, feeling of dizziness, sensitivity to taste and smell in food and so on. In contrast, women from middle class family basically get pregnant according to their plan. For making their assumption on pregnancy, based on physical symptoms, more accurate, they go to medical centres for urine tests.

Enduring labour before childbirth is not an exceptional experience in the lives of working class women. By observing the conditions of many pregnant mothers closely, an idea is developed among them that labour before delivery is normal and it should be taken for granted. They also know that

babies cannot be delivered unless they experience the pangs of labour. On the contrary, middle class women are scared of the distress of labour as they do not have much of an opportunity to closely observe other's labour pain (Sultana & Islam, 2007: 23-30).

People generally perceive that other than physical causes, the influence of evil spirits and specific food eaten are the main causes of pregnancy-related complications. As claimed by Caldwell (2002: 8), beliefs of rural women on childbirth are a reflection of Islamic, Hindu and pre-Hindu beliefs; they basically mix up everything together[86]. This belief ultimately discourages mothers from seeking external institutional facilities, including the need for doctors, and sometimes forces some pregnant mothers to take precautionary measures to save themselves and their would-be-born babies from the hands of evil spirits. For instance, some Muslim pregnant women wear *tawiz* (amulet) on which *moulvis* (religious leaders) write some verses of the Holy Quran so that, in their beliefs, their children remain safe and sound in their wombs (Ahmed, 1981: 144). Like Muslims, Hindu women also go to their respective religious priests for sacred water that keeps them safe from the effects of evil spirits during pregnancy and its aftermath. They also follow some restrictions, such as refraining from going outside at night or in the afternoon, going out with one's hair down, or allowing the end of one's sari to trail on the ground for avoiding the bad effects of spirits. Food taboos are also followed. For examples, pineapples are said to cause abortion, coconuts are believed to make a baby blind and duck's eggs are thought to develop asthma in babies (Edmonds *et al.* 2011: 170; Rahman *et al.* 2003: 32).

In some societies, pregnancy and childbirth associated complications, such as prolonged labour pain, breech presentation, and pre-mature births, are considered to be the result of the evil spirit. For instance, one young rural woman had premature twin delivery and both her babies died within an hour. Her family members believed that it happened due to the attacks of an evil wind. One of her

[86] For instance, mothers generally abstain from doing anything that attracts 'evil spirits', observe the Islamic concept of *purdah* and stay at home during pregnancy and delivery time, the Hindu concept of pollution, and the pre-Hindu notion of evil spirits.

family members explained, “She went to her mother’s house. On her return in the evening, she was attacked by *batash* (evil wind). After that, she developed slight pain and gave birth much earlier than her due time” (Afsana, 2005: 64).

UNICEF (2000 in Rahman *et al.* 2003: 33) discovered as many as 27 different types of superstitions that are deemed harmful for pregnant mothers. Among them, internal manipulations and massage, introduction of oils into the vagina, use of fundal pressure or tight abdominal bands during labour, pulling on the umbilical cord, choking or inducing vomiting in the mother to expedite placental delivery and not using uterine massage to prevent and treat postpartum haemorrhage are some of the most dangerous practices.

From what was observed during the field trip and from ideas gained about pregnancy while talking with respondents, most women perceive that they have to abstain from doing heavy and hard work though doctors now suggest engaging in household works as much as possible with a view to delivering babies in a normal way. In this regard, one respondent during the interviews said that in the past, all pregnant women used to carry out all household activities. Nowadays, a new thinking that pregnant women should take rest as much as possible has developed. This trend makes them confused about carrying out household work during pregnancy.

Most women generally prefer to go to natal homes for delivering babies as they receive help from their closest relatives, such as mothers and grandmothers during pregnancy and after childbirth (Sultana & Islam, 2007: 24-26). The following text contains some excerpts from a study that highlight the types of facilities pregnant mothers usually receive after coming to the natal home. They are as follows:

1. One interviewee said, “In my father’s house, they did not let me do any work. I ate and slept. They did not even let me hang my mosquito net. My mother or sister did this for me. My sisters also washed clothes for me.”

2. Another said, “I did not work in my father’s house. My younger sister and mother did all the work.”

3. The other said, “When I was in my mother’s house, my sisters helped me. They brought for me whatever food I could eat. I used to vomit instantaneously after eating. I could not keep the food inside. They used to prepare what I wanted to eat”(Edmonds *et al.* 2011: 196).

Most respondents from the rural area (Shapahar) went to natal houses during the last trimester of their pregnancies for receiving extra care from their own family members, particularly mothers, grandmothers and sisters. It is a long lasting traditional culture in rural areas that women leave their husbands’ places for parental homes to receive extra care during delivery time. However, in urban areas (Rajshahi and Bogra), as observed, mothers usually do not get such kind of extra care. This is because they live far away from their natal homes and do not find anyone who can help carry out household activities during their absence.

The study found that almost all respondents (96.9%) said that every mother should get immunised for the protection of both mother and would-be-born babies (table 8.4). The same number said that they had to be always cautious in their movements during their pregnancy. However, very few among them (three percent) mentioned making regular visits to clinics/hospitals for check-ups. It was observed that though they were aware of being careful during pregnancy, circumstance forced them to disregard this rule. Most respondents were poor and they did not have enough money to engage maids or use other forms of domestic help and had to do all the hard work themselves. They were, of course, cognisant of the fact that with proper rest and support from others in managing household work, it would be easier to deliver babies normally. Most rural respondents said that they had to carry out all household chores and contribute to farming activities being unable to obtain anybody to help.

Table 8.4 Perception of how life should be patterned during pregnancy (multiple)

Sorts of perception	Frequency	Percent
Cautious movement all time	158	96.9
Taking all inoculations	158	96.9
Check up regularly	5	3.1
Total	163	100
No response	2	

Some rituals centring on childbirth may cause adverse impacts on the health of both mothers and children. Prior to starting labour pain, a separate room is set up where pregnant mothers deliver their babies. For instance, Hindus usually prepare a separate room for delivery and seclusion, whereas Muslims use their kitchen or the room where *dhekhi* (an implement for paddy and wheat husking) is kept. This practice of seclusion has been followed for two reasons: expectant mothers could not be able to pollute the outside world and could be saved from evil spirits. Belief in pollution is stronger among Hindus than Muslims because the former observe seclusion for 30 or 40 days, while the latter for seven days only. Mothers usually take many precautions to save the lives of themselves and their newborn children. They live in a secluded room, put pieces of iron around it, place a piece of leather near the bed, burn incense and make outsiders clean their feet with water before entering the room (Goodburn *et al.* 1995: 25-27; Huque *et al.* 1999: 54). After delivery, a kind of bamboo reed is used to cut the umbilical cord though a razor, considered to be an instrument of operation in the hospitals, is readily available. The placenta is buried deep down in the earth so that no animals or evil spirits can drag it out. It is believed that if anyone touches the placenta, mothers or babies will face physical complications (Khanum, S. M. 2000: 37). After childbirth, Hindu women are restricted from eating meat or fish for 30 days, while a seven day restriction is observed by Muslim women. Other forbidden food includes bananas with seeds, eggs and leafy vegetables, especially pumpkin leaves. Some believe that mothers should take nothing except water for the first few days after delivery. For instance, one Hindu participant reported that pregnant mothers should not eat in the evening or on a moonless night. Doing so would annoy *Rahu*

(a Hindu god) (Goodburn *et al.* 1995: 24-25). All these practices result in protein deficiency in the mother's health.

This traditional practice (seclusion) does not either allow health workers to enter the secluded room for checking the health condition of both mother and child or permit mothers to go to hospitals for post-natal check-ups. Moreover, the secluded room tends to be unhygienic being always closed, dark and with poor ventilation. This unhygienic environment basically is unsafe for both mother and child though it protects the 'sanctity and purity' of the common people (Afsana & Rashid, 2000: 39-40). Furthermore, perception of childbirth as 'normal' and 'natural' deters pregnant women from seeking any assistance at delivery time. For instance, the recently developed NGOs healthcare facilities have induced working class women to go for pregnancy confirming tests, visit healthcare centres regularly for check-up, get essential pathological tests done and take inoculation during their pregnancy. However, they still prefer delivering baby at home rather than at centres or in hospitals (Sultana & Islam, 2007: 36). Another study found that Bangladesh originated overseas women were in favour of medicalisation of pregnancy (i.e., antenatal check-ups) but they did not want any medical intervention during childbirths from their traditional, particularly religious, beliefs and practices (Khanum, S. M. 2000: 37).

All these ideas developed or perceived and rituals followed indicate that pregnancy is considered as a natural event. That means, holistic model of pregnancy and childbirth (see in Chapter 2) is dominant here. This does not necessarily mean that all people in Bangladesh are in the same boat. A certain portion of Bangladeshi women, particularly urban-based highly educated, have begun to treat pregnancy as an illness which reflects the main ethos of Parsonian 'sick role' model. As Parsons thought that illness does not permit people to do normal activities. Once treatment starts or it is recovered, patients return to their normal activities (Gray, 2006). As such, pregnant women come back to daily routine works after the successful completion of pregnancy. That means, the bio-

medical approach, as discussed in Chapter 2, has had a greater influence in developing such kinds of perception.

8.3.2. Social networks

Bangladesh is a kinship-based society where people are connected through blood or marriage. Women, in particular, have various informal and formal associations. The former has traditionally emerged among peer groups and the latter because of the huge development of micro-credit programs emphasising the group formation of women for credit disbursement and repayment. The utility and quality of primary, mainly maternal, healthcare services during and after pregnancy is discussed during associational meetings (Edmonds *et al.* 2012). Such association also provides both physical and emotional support when needed. For instance, one study documented that rural pregnant women usually receive eight types of support[87] during and after pregnancy (Edmonds *et al.* 2011: 166). Another study suggests that Bangladeshi rural pregnant women with centralised social networks could be less likely to seek professional assistance during child delivery (Gayen & Raeside, 2007).

Durkheimian integration theory shows us that if people have more integration and cohesiveness, they have less tendency to resort to deviant behaviour like suicide (David, 1999). As rural people have strong associational bondage reflecting more integration, they usually do not consider seeking assistance from outsiders at delivery time. To some people, asking help from outsiders is treated as deviant behaviour. In contrast, urban mothers have less social networks indicating in-cohesiveness; they are likely to ask for professional help more at delivery time. However, they obtain vast information on pregnancy from different sources, such as print and electronic media, which helps them to make proper decisions about when, how and where they should go for medical aid. In other words, rural people, particularly mothers, have much of what Haq, Sen and Nussbaum call social

[87] Practical help with routine activities, information and advice, emotional support and assurance, resources and material goods, logistic communication, prayer and spiritual rituals, nutritional support, and accompaniment outside the homestead.

capital that helps them not to seek medical assistance at delivery time compared to urban mothers (see in Chapter 1).

8.3.3. Position of women in society

As discussed earlier in Chapter 4, women usually experience discrimination in every stage of their lives. This discrimination in food intake and other facilities, such as education and recreation, has deleterious effects on their health. It has been argued that feeding practices, favouring boys over girls from childhood to adulthood, result in under nutrition and micronutrient deficiency in girls and women (Kutzin, 1993) which might ultimately bring adverse effects on pregnancy and in its aftermath.

However, as has been explained in Chapter 4, women's position in society has been improving which gives women power to place demands upon the government to ensure their constitutional rights to quality reproductive healthcare services and to have services available at their doorsteps. This in-built awareness helps increase the utility of professional birth assistance during delivery which will eventually reduce prevailing high maternal mortality rate (MMR).

8.3.3.1. Decision making power

Lack of women's decision making power and opportunities to move outside of family for various purposes cause second type of delay in getting healthcare centre at the proper time (Thaddeus & Maine, 1994: 1098). For instance, one study found that women had hardly any ability to make decisions about seeking healthcare services, particularly reproductive healthcare; male members of the family usually take the decision. In some cases, a husband and his wife have different belief patterns of healthcare that create a conflicting situation: the husband's belief pattern determines the nature and degree of treatment sought for female members of the family. However, in certain cases, women are able to obtain whatever they think beneficial to them (Khanum *et al.* 2003: 29).

Another study also found that husband and in-laws played a more vital role than women themselves in the decision making process (Ahmed *et al.* 1999: 22).

The study (table 8.5) shows that the number of husbands controlling and implementing everything in the family in Bogra was three times higher than that in Rajshahi. This indicates that a positive change in the family domain is yet to emerge in Bogra. The slums there are more conservative than those in Rajshahi. On the other hand, half of respondents from Shapahar reported that their husband was the sole person in controlling and implementing everything relating to family matters. The number of women directly involved in controlling and implementing family business in Shapahar, was very insignificant compared to that in either Bogra or Rajshahi. The most interesting finding is that 38 percent of respondents from Shapahar reported that both husband and wife shared household matters together, whereas this figure was significantly low in Bogra (1.6 percent) and in Rajshahi (6.6 percent). Thus, gender parity in Shapahar was higher than in Bogra and Rajshahi. Various factors, such as development initiatives that create opportunities for females, huge media coverage about positive roles they can play in society, and the increasing number of female enrolments in school, might be serving as driving forces for this positive change in rural areas. One of the important reasons for Bogra and Rajshahi conditions, as said earlier, could be that their mentality (patriarchal and traditional) remains the same as it was before. Koehlmoos *et al.* (2011: 72) consider this gender parity in rural areas an essential element for reducing MMR.

Table 8.5 Distribution of controllers in areas studied

Areas studied	Types of controllers and implementers						Total
	Husband	Wife	H&W	Mother/in laws	Father/in-laws	Others	
Bogra	30	24	1	1	1	3	60
Rajshahi	10	33	4	11	2	0	60
Shapahar	18	3	15	0	4	0	40
Total	58	60	20	12	7	3	160

The percentage of joint (husband & wife) decision on seeking women reproductive healthcare increased to 42 in 2007 from 23.5 in 2004 (NIPORT *et al.* 2005; NIPORT *et al.* 2009). It also revealed

that the percentage of women taking their own decisions about ANC services doubled in four years; the figure for 1999 was 19, while it became 38 percent in 2003. When both husband and wife took the decision together about ANC services the possibility of receiving this service became strong (Cockcroft *et al.* 2004: 5). Furthermore, around half (51%) of mothers took the decision themselves on seeking assistance during the delivery period. Twenty four percent respondents mentioned that their husbands were the sole decision maker for seeking delivery assistance followed by in-laws (13%) and their own parents (9%) (Koenig *et al.* 2003: 49). However, this study's findings do not contradict the national scenario. As revealed in table 8.6, the number of decisions about seeking healthcare services made by both husband and wife was higher in three areas compared to either husband or wife. The highest gender parity was in Shapahar (82.5 percent) followed by Bogra (51.6 percent) and Rajshahi (48 percent).

Table 8.6 Distribution of decision makers about seeking healthcare in areas studied

Areas studied	Types of decision makers							Total
	Husband	Wife	H&W	Mother/in laws	Father/in-laws	All Family members	Others	
Bogra	17	2	31	3	2	2	3	60
Rajshahi	13	6	29	10	1	0	1	60
Shapahar	2	1	33	0	2	0	2	40
Total	32	9	93	13	5	2	6	160

8.3.4. Financial factors

Costs associated with seeking maternal health care (MHC) services seem to have discouraged pregnant women, particularly the poor, from receiving healthcare services at the proper time. As the government and different NGOs have been involved in providing PHC services, including maternal, to the common people, pregnant mothers can easily receive basic MHC services that include ANC. However, if a mother's condition in rural areas becomes complicated before delivery, she needs to be transported to a district hospital where all facilities are deemed to be available. If the district hospital fails to provide proper treatment, the pregnant mother is transferred to the upper level hospital i.e., medical college hospitals located in a divisional or capital city. Transportation costs

from rural areas to the district or divisional headquarters in an ambulance or just a microbus is much higher than other related costs. For instance, one participant mentioned that she spent around 2,000 Taka (equivalent to US$ 28) on travelling from her home to the district hospital during her labour. In another study, it has been reported that patients and their relatives bear the expenses of transporting patients from primary or secondary peripheral centres to tertiary level hospitals, mostly located in either the capital or divisional cities. In this sense, poorer families in Bangladesh are most vulnerable (Mahdy, 2009: 412).

Public healthcare services in developing countries are theoretically free. In practice, widespread corruption (including misuse of resources and bribery) among health staff makes free services costlier. Government doctors in Bangladesh demand extra money from patients for their services that are supposed to be free. Patients are sometimes willing to pay extra or unofficial money for various reasons, such as lack of basic services or to receive due or additional care from hospital personnel (Ensor & Ronoh, 2005: 52). This is also true for other South Asian countries, such as Pakistan. A woman there explained that a private midwife was happy to get 10-15 rupees, but in hospital, you had to pay the same amount to each staff and the doctor's fee was on top of that (Schmidt 1983 in Leslie & Gupta, 1989: 28). In this regard, Afsana (2005: 138) states:

> Poor patients were forced to pay for medicine, laboratory investigations, blood transfusion and foods causing huge financial burden. They had to pay money to the ayahs, trolley pullers and gatekeepers at different points for the simplest tasks. On refusal of payments, the patients and their families were misguided and the staff became uncooperative.

Another study suggests that middle and poor income patients in Bangladesh pay more unofficial fees in government hospitals compared to rich patients (Killingsworth *et al.* 1999: 157). The study has also found a similar scenario and one participant complained that after she got admitted to a hospital she had to pay extra money for proper service and another reported that a surgeon delayed her operation for ransom just before her delivery time.

Corruption associated with medical practices of doctors and drug management is widespread in Bangladesh. In most cases, doctors send their patients to private clinics for pathological tests, available at government hospitals in order to earn extra money known as 'commission'. Doctors sometimes unethically ask patients to have pathological tests conducted in their recommended clinics that usually pay commission to them even though patients already have pathological reports on the same issue from other clinics. They also force patients to purchase medicine from private pharmacies. The irony is that patients usually are forced to buy medicines supposed to be given for free at the public hospitals from outside with government stamps. Moreover, doctors sometimes prescribe costly medicines in order to receive graft from multinational companies. Even in some cases, private doctors ask about a patient's economic conditions before prescribing drugs. The more a patient is financially well-off, the more expensive brands are prescribed.

There is no information indicating total costs of MHC services, including transportation, drugs, tests and medical services. However, some studies calculated average costs of normal and Caesarean delivery in which indirect costs like transportation and unofficial fees were not included. For instance, the estimated cost for normal delivery is TK 800[88] at the UHC and TK 1,600 at the medical college hospital, while that for Caesarean is TK 15,000 (Afsana, 2005: 138). Another study calculated mean costs of normal (Taka 1275) and Caesarean (Taka 4,933) delivery (Nahar & Costello, 1998: 419). Yet another estimated that Caesarean delivery cost was between 20,000 and 30,000 Taka (Sultana & Islam, 2007: 35).

Nahar and Costello (1998:420) calculated the amount and mode of expenditure pregnant mothers spent for delivery. They found that 80 percent of mothers with normal delivery spent about half of their family monthly income, while more than a half of the mothers with Caesarean delivery spent eight times their monthly incomes. Among normal delivery mothers, only 30 percent had insufficient money, while the figure for Caesarean delivery was 74 percent. A little over 50 percent borrowed

[88] One US Dollar is equivalent to 70 Bangladesh Taka (TK).

money from relatives, friends or money lenders. It is interesting to note that another half had savings which they used to repay extra costs related with healthcare services. The study (table 8.7) also found different ways respondents managed extra money if they needed.

Table 8.7 Different ways of managing extra money if needed

Types of ways	Frequency	Percent
Borrowing from friends, relatives and money-lenders	65	50.4
Saving	63	48.8
Share-cropping	1	.8
Total	129	100.0
Missing	31	

My field experience suggests that respondents in Rajshahi were more aware of their health concerns. They tried to obtain healthcare services from the nearest centre from the first trimester of their pregnancies until delivery. After conception, they saved little amounts of money on a daily or monthly basis. They believed that this saving could give them the support they would need if they fell into hardship.

As said earlier, pregnant mothers tend to go to natal homes for their first delivery. So any costs-related with MHC services, particularly childbirth, are borne by their families. For this reason, one respondent told that her husband did not need to borrow money from others. Moreover, around 95 percent of respondents reported that they were able to manage extra money very quickly. Table 8.8 shows the different methods used by respondents for repaying borrowed money.

Table 8.8 Different methods of repaying money

Types of repayment methods	Frequency	Percent
Very slowly	34	51.5
No repayment	16	24.2
Repayment with micro credit	10	15.2
Repayment with more work and less food	6	9.1
Total	66	100.0
Missing	95	

Around half of respondents returned borrowed money over a period of time. One quarter of respondents said that they did not need to repay as that money came from their relatives. As

Bangladesh is a traditional society, there is a custom that if someone borrows money from close relatives, it is sometimes not mandatory to return that money. The rest repaid money after obtaining loans from micro-credit agencies or following the rule of making extra money by investing more time for work and having less food. Ms Shapla, a participant in the fourth FGD and who underwent Caesarean delivery had to manage extra money by borrowing at a high interest rate. Her family also sold poultry and two goats to manage to get the extra money. After leaving hospital, they provided extra labour in the lenders' lands as share-croppers. In order to repay the borrowed money, they also sold shared crops. Even after doing so they were unable to repay all the money within a year. In another instance, Mr Monir, a FGD participant took his wife to a clinic situated at Nazirpur for delivery. At that moment, he had around 10,000 Taka in his hand. The Caesarean cost was around 13,000 – 15,000 Taka. So he was forced to sell his essential goods to arrange for the rest of the money.

The costs associated with seeking MHC services, such as transportation, medical services, pathological tests, and drugs, are so high that it creates delays in people making decisions to seek healthcare services (the first delay) from facility centres (Killewo *et al.* 2006; Pitchforth *et al.* 2006; Thaddeus & Maine, 1994: 1092).

8.4. Organisational

Research indicates that organisational factors, such as the gender of health staff, availability of drugs and health policy and personnel, and quality of healthcare services, can exert an influence on people's decisions about seeking healthcare services from certain centres. If the cases are pregnancy-related, people generally give high valuation to organisational capacity before making a final decision on seeking MHC. This section particularly highlights the gender of health staff, quality

of care and policy matters with the objective of finding out how much they play a vital role in pregnant mother's decision making process about seeking healthcare.

8.4.1. Gender dynamic

Gender of health personnel is an important factor that influences pregnant mothers' decisions about utilisation of formal MHC services. As Bangladesh is a conservative country and the urban slum dwellers and rural women researched have traditional ideas and beliefs, female patients are hesitant to go to the centre for receiving treatment from male doctors during the complication period, despite the availability of female paramedics for primary care. Khanum (1999 in Banik, 2003b: 26) has identified a number of constraints women have been facing in receiving health services in one rural village in Bangladesh and mentioned *purdah*[89] as an important barrier. She reveals that a considerable number of respondents (69%) were female and hesitant to consult male doctors regarding female problems. Nine respondents had vaginal infections, five experienced whitish discharge and three had prolapsed uteruses, but none of them disclosed these to male doctors. Another study found that rural women were not interested to go to the UHC where male doctors were present during child delivery. One of the reasons is that the presence of a male doctor during delivery is not culturally accepted. For instance, one participant told her, "I don't dare to go to the hospital. *Purush* (male) doctors work there. They will see your body. It's a matter of *sharam* (shame). Everyone in the village will know that a *purush* doctor has seen your body. They will tease you and also insult you" (Afsana, 2005: 117).

Women also need more personalised and emotion-laden services during the delivery period. Like many other cultures, childbirth-related activities in Bangladesh are deemed to be female activities. It has been observed during the fieldwork that heads of all service centres except two were males. For

[89] Literally, Purdah means curtain or veil. Observing this Islamic practice means that Muslim women uphold their modesty by making themselves secluded from the outside world. This practice basically imposes restriction on women's physical movements (Zaman, 2004).

this reason, cultural practices and taboos may deter pregnant women from receiving healthcare services from there.

8.4.2. Quality of care

Adequate physical facilities, such as health personnel, infrastructure, and medicine, behaviour and attitude of service providers towards service users, service providers' extent of knowledge and use of hygienic procedures when dealing with patients are important determinants of understanding the quality of services. The pitiable condition of physical facilities has been discussed in Chapter 7. A plethora of studies reviewed the nature of interaction between service providers and users, an important pillar that determines the utilisation rate of MHC services. Most of the studies reported that service providers' behaviour towards patients was harsh, rude and uncaring. During delivery, pregnant mothers prefer people as their assistants who are well-mannered. As pregnant mothers perceive rude and harsh behaviours of health personnel working at government hospitals, they prefer to seek assistance from TBAs or local unqualified 'doctors' during delivery (Leslie & Gupta, 1989: 39-40). The following remarks, made by different service users of child or maternal treatment in one study (BHW, 2007) depict the contrasting behaviour of local doctors and MBBS doctor working at government hospital. These are as follows:

A mother spoke of a popular village doctor, "Nirmol dakter[90] is the first choice as his medicine works very fast and he behaves well too. As he is a local fellow, everyone can talk openly with him about his/her illness. Because of this, everyone goes to Nirmol dakter and he does not charge much."

Another woman explained reasons for going to a local doctor, "Taher dakter (doctor) behaves well with us. And I came to him more because of his good behaviour. He has seen my child with care, hasn't hurried, and has explained the medicines well also. Of course I have asked questions. If I don't ask questions then how will I know everything?"

[90] *Dakter* is a local dialect which means medical doctor

The other woman mentioned that bad behaviour of the government hospital MBBS doctors kept her away from there. As she said, "I like this doctor (village doctor) because of his polite behaviour for which I do not go to any other place. Once I went to the government hospital, there was a big crowd. The doctor prescribed medicine without examining the child. The doctor did not even look at the child for an extended period. Then I asked the doctor 'how long may it need the child to get well'? He scolded me right then. After that experience I do not go anywhere else."

One participant of the study on an FGD held in Rajshahi stated, *"Ratan dektar is very good. His behaviour is amicable and he gives patients much time to explain reasons for diseases and how to take the given medicine. He provides medicine in credit if anybody does not have money during seeking treatment period. All these reasons led all nearby mothers to go to him for first hand treatment."*

In addition, 90 percent of patients who had visited qualified private and unqualified practitioners were satisfied with their behaviours and attitudes towards them. Only 66 percent were satisfied with government service providers. It also found that government officials behaved roughly with patients who came from poor socio-economic background CIET (2001 in Osmani, 2010: 58). Another study documented that overall quality of EmOC in all public health centres except the medical college hospital was poor. The worst quality was found at *upazila* level (Anwar *et al.* 2009: 150-51).

The study (table 8.9) found that half of the health personnel interviewed did not have any training on baby delivery. Only three had training and two of them have been working in NGOs. All except the chief medical officer of the Shapahar upazila health complex (SUHC) knew of pregnancy complications. All agreed that they had capacity to refer the complicated cases to the upper level hospitals. Four of seven mentioned that they were handed pamphlets which dealt with pregnancy and related issues.

Table 8.9 Knowledge of health personnel on baby delivery and its related issues

Name of Centres	Training on Delivery		Knowledge of dangerous signs		Referred hospital		Pamphlet on delivery	
	Yes	No	Yes	No	Yes	No	Yes	No
SUHC		√		√	√			√
NUHFWC	√		√		√		√	
FCC		√	√		√			√
BCRHCC	√		√		√		√	
KCRHCC		√	√		√			√
NCRHCC	√		√		√		√	
KC		√	√		√		√	

(**Note:** NUHFWC=Nirmoil Union Health and Family Welfare Centre, FCC=Fukanda Community Clinic, BCRHCC=Bogra Comprehensive Reproductive Health Care Centre, KCRHCC=Kashiadanga Comprehensive Reproductive Health Care Centre, NCRHCC=Noadapara Comprehensive Reproductive Health Care Centre and KC=Kazla Centre)

The study also uncovered that all health personnel but the chief of the SUHC had knowledge of identifying dangerous signs of pregnancy. As of table 8.10, four out of seven health personnel said that they had given decisions about the immediate needs of patients. Most health personnel's treatment was rarely reviewed. However, the conduct of health staff working in NGOs was sometimes reviewed.

Table 8. 10 Capacity of the health personnel to identify pregnancy-related complications and their treatment

Name of centres	Identifying dangerous signs		Decision on necessity		Judgment of treatment		Review treatment	
	Yes	No	Yes	No	Yes	No	Yes	No
SUHC		√		√		√		√
NUHFWC	√		√			√		√
FCC	√			√		√		√
BCRHCC	√		√			√	√	
KCRHCC	√			√		√	√	
NCRHCC	√		√		√		√	
KC	√		√		√		√	

The study also found that health staff working in urban areas use hygienic methods more than the rural health staff. As reported in table 8.11, BCRHCC and KCRHCC followed all types of hygienic methods for keeping patients out of danger. Contrary to this, the NUHFWC did not follow any methods. The SUHC used only one method (not using the used needles), while the FCC was trying to

follow all hygienic procedures. However, it is doubtful that all hygienic procedures are actually followed at the FCC. Highlighting positive images of the centre and fear of losing jobs could be reasons for providing such types of information. The NCRHCC staff did not wash their hands before touching patients' bodies and those at the Kazla centre did not wear gloves and use barriers when patients were treated.

Table 8.11Distribution of hygienic procedures the health staff of centres have been following

	Name of health centres						
Types of procedures	**SUHC**	**NUHFWC**	**FCC**	**BCRHCC**	**KCRHCC**	**NCRHCC**	**KC**
Hand washing before touching body or organ	No	No	Yes	Yes	Yes	No	Yes
Wear gloves	No	No	Yes	Yes	Yes	Yes	No
Use barriers (protective goggles, face mask or aprons)	No	No	Yes	Yes	Yes	No	No
Not recapping or bending needles	Yes	No	Yes	Yes	Yes	Yes	Yes
Proper instrument procedure	Don't Know	No	Don't know	Yes	Yes	Yes	Yes
Disposal of medical waste	No	No	Yes	Yes	Yes	Yes	Yes

How established service providers are may sometimes be an important indicator of the quality of services. One participant of the FGD held in rural areas (Shapahar) reported that the head of their nearest centre was aged and suffered from night blindness. So if someone went to the centre for emergency treatment at night, they hardly received any quality care or, in some cases, any treatment. Most participants of other FGDs held in Rajshahi city complained that ultrasound and urine test results of their nearest centres invariably led them to wrong directions; pregnant women were dismissed as non-pregnant and vice-versa. One of the reasons for this misleading information, they mentioned, is that technicians were incompetent because of old-age. All these facts suggest that healthcare quality in urban areas is better than rural. Moreover, the NGOs are providing better quality of services compared to the governmental sector.

8.4.3. Inefficient distribution of benefits

As reported in Chapter 6, the UPHCP has a provision to cater 30 percent of its services free to the poor. The question that emerges then is how the poor are to be defined and the extent of free

services gauged. If all patients who come one day to the centres are poor, are they all rendered free services? The project manager reported during the field visit that local political leaders created pressures on him to give free services to the non-poor. He also showed many fake documents that many non-poor used for receiving free services. One of the main reasons for entertaining undue requests causing exclusion error, as mentioned by the manager, is to continue project activities smoothly. Another study indicates that the poor have been defined based on reports made by locally-oriented health workers who could be biased towards someone that can cause both inclusion and exclusion errors (Banik, 2010b). As observed, it also introduced an antenatal care package worth 50 Taka for pregnant mothers reaching the last trimester to monitor the progression of pregnancies. Higher delivery costs for the Caesarean are not fully waived for the poor women. So the lack of well-defined free services and high costs of comprehensive MHC services could create tensions among poor mothers that deter them from going there for treatment.

8.4.4. Lack of coordination, ownership and people's participation in policy

As said in Chapter 6, Bangladesh is yet to adopt a national health policy (NHP). The reasons for the delay are the bureaucratic and centralised policy formulation process, the lack of sincere political will and resistances from different professional and pressure groups. Moreover, people's expectations and participation are being ignored. For instance, most policy makers in Bangladesh are male though the prime minister and the leader of the main opposition party are women. Apparently, these two leaders show an inclination to the so-called traditional patriarchal norms, values and ideologies. The recent trend suggests that a small number of females with urban and higher educational backgrounds are becoming policy makers. They hardly protest discrimination against women. If they, in certain cases, raise their voices, their concerns are on the improvement of conditions for urban and better educated women. So poor women's health problems are not duly addressed. One woman activist has recently remarked that there was no discussion or special stories

in newspapers on reproductive health when the International Population's Day was observed at the national level (Akhter, 2012)

Even in some cases, an adopted policy has not been fully implemented because of partisan rivalry and lack of government commitment. The stalling of community clinic activities is the best example. However, Bangladesh has many segmented policies and unsustainable programs and projects due to the foreign aid dependence and the existence of two wings within the Health ministry that create many problems, such as duplication of the services, rivalry between service providers, overlapping among different policies and weakening on-going implementation. Local needs are not reflected in these policies as the involvement of external forces in policy agenda setting has always been high. Even the newly proposed health policy fails to provide any direction about its implementation and how to stop the malpractices of doctors and the irregularities in the health sector. All these factors seem to have created anomalies and indiscipline that have prevented people from receiving due treatment.

8.5. Other socio-demographic factors

Many research findings show the associational relations of socio-demographic factors of pregnant mothers with utilisation of formal MHC services. This study highlights three socio-demographic factors, such as mother's age, education, and parity, which are discussed below in detail.

8.5.1. Maternal age

Maternal age affects the utilisation of MHC services positively; the older mothers are, the more chances they use MHC services (Anwar *et al.* 2004; Leslie & Gupta, 1989) . However, some studies show variations in the trend finding a 'U-shaped' relationship. For instance, in Bangladesh, Chowdhury (1986 in Leslie & Gupta, 1989: 48) found that teenage (below 20) and elderly (over 30) mothers used a rural health centre more frequently compared with young adult mothers. One of the

main reasons for using more services by a particular age group of mothers is that they are prone to suffer from pregnancy-related physical complications during that period.

The study (table 8.12) found that 35 percent of girls aged between 13 and 18 became mothers. The figures indicate that respondents had babies before they reached a mature age. Getting married at an earlier age is one of the reasons for attaining early motherhood. One shows that 32 percent of Bangladeshi girls got married before they were 15 years old (*Daily-Star*, October 27, 2011) and the other reports that 33 percent of girls aged between 15 and 19 became pregnant first. Both corroborate my findings. One of the main reasons for early pregnancy is that people tease a young wife if she fails to get pregnant within one year of her marriage. Even in some cases, if it takes too long to be pregnant, males attempt to get married again. This social taboo forces young girls to be pregnant at an early age in order to establish their position in their in-laws' families. They have no physical and mental maturity that helps them to make the decision about not having children at an earlier stage (Hossain, M. 2010).

These young mothers were precluded from getting the proper schooling which they were expected to receive because after marriage their husbands disapproved the continuation of their education. For this reason, they remained half-educated or even illiterate making them insensitive to health and reproductive issues. They were not familiar with the fact that they had to look after their own health and were unaware of the number of children they should have in their whole reproductive cycle. Decisions on the timing, frequency of having children and seeking healthcare services, particularly reproductive, seem to come from husbands or other family members. It could therefore be assumed that respondents had little chance of receiving MHC services as much as possible.

Table 8.12 Age intervals of the pregnant mothers (multiple)

Age interval	Frequency	Percent	Cumulative percent
13-18	108	35	35
19-24	136	44	79
25-30	48	15.5	94.5
31-36	14	4.5	99
37-42	2	1	100
Total	308	100	

8.5.2. Parity

An associational relationship between birth order and use of MHC services has been documented in many studies. As physiological complications are believed to be related with first and last pregnancies and pregnant mothers with first or fifth baby case have a strong tendency to consult with health staff from the beginning of their pregnancy. After having their first baby successfully, their experience gives them confidence. For this reason, experienced mothers do not seek healthcare services in the subsequent parity. If multiparous mothers have resources constraints, they avoid healthcare services (Anwar *et al.* 2004; Chakraborty *et al.* 2003; Leslie & Gupta, 1989). The study (table 8.13) shows that all respondents had at least one child. More than half of respondents (90) have two children, while 36 and 15 respondents have three and four children respectively. The number of mothers with more than four children is insignificant.

Table 8.13 No. of previous pregnancies (multiple)

No of pregnancies	Frequency	Percent	Cumulative Percent
1	160	51.9	51.9
2	90	29.2	81.2
3	36	11.7	92.9
4	15	4.9	97.7
5+	7	2.2	98.7
Total	308	100.0	

It is reflected from the figures that there has been much positive change in the number of children women are expecting now. Many factors, such as cost of raising children, increasing rate of female education, later female marriages than before, female engagement in different economic activities, and media influence at grass roots level, have been influencing both married partners to keep their families small. It also reflects that about one in five respondents have had either three or more children with resource constraints and so they would have less chance to consult with healthcare providers in their subsequent pregnancies which could lead to greater risks for their lives.

8.5.3. Mother's education

It is a well-known fact that there is a positive correlation between a mother's educational level and utilisation rate of formal healthcare services (Anwar *et al.* 2004; Chakraborty *et al.* 2003). Mothers with higher educational background generally gain a more scientific and western knowledge that creates awareness of immunisation and other pregnancy-related services which ultimately push them to seek care at the proper time (Leslie & Gupta, 1989: 50). As shown in Chapter 5, sixty two of 159 respondents of this study were illiterate, while 44 and 50 had primary and secondary level of education respectively. The figures indicate that they had a low tendency to seek formal healthcare services during their pregnancy.

8.6. Summary

As a substantial number of mothers researched have healthcare centres within their reach and no more than four children, distance to the healthcare centre from their homes, and gender parity appear not to have any vital influence on the utilisation of primary, particularly maternal, healthcare services. However, distance, waiting time and opportunity costs are barriers for rural pregnant mothers to receiving MHC services as mothers with rural backgrounds need to travel for longer distances to reach a health centre, wait a longer time for receiving treatment and kill more opportunity time that can be used for productive purposes compared to urban mothers.

The study findings suggest that the majority of Rajshahi and Bogra mothers travelled one and not more than two kilometres respectively, whereas a large number of Shapahar mothers travelled three kilometres to receive healthcare services. More than four in five mothers had two babies. Approximately one in two mothers were accompanied by their husbands and about one in three went alone for receiving MHC services. Four in 10 rural mothers took decisions about household matters together. The figure for urban mothers in this regard is insignificant. However, regarding healthcare seeking decision making process, rural area is in advance compared to urban areas. The

majority of rural (Shapahar) women took decisions together, while a slightly more than half (Bogra) and approximately a half (Rajshahi) mothers took decisions jointly.

People's perception of pregnancy and childbirth, high financial costs associated with health seeking behaviour owing to extra money required, lack of female health staff, low level of educational background and early pregnancy due to marriage at an earlier age are potential barriers to the use of MHC services. As found in the study, a quite good number of mothers believe that every mother should go to health centres for immunisations and move cautiously during their pregnancies. Most of them have had to do all household activities because of failure to organise helping hands. Mothers' families have to pay extra money to receive due treatment. Four in 10 families borrowed money and one in 10 faced hurdle repaying it. Five in seven centre heads were male. One-third mothers became pregnant at an early age and had no or little education.

Other important barriers to access include the lack of women's capacity to make a decision on seeking healthcare on time, lack of a guiding principle in the health sector, improper distribution of benefits and low quality of services. All these factors may delay the seeking of MHC services at the proper time.

Many more healthcare centres are now available in urban than rural areas. Both government and private (including NGOs) are providing MHC services on a competitive basis which ensures better quality of care and provides less expensive services. In addition, many NGOs are targeting poor women to provide these services at a minimum cost. Even they can easily refer complicated cases to the nearby big hospitals due to good road and communications services. Sometimes, they also take service users' views about the improvement of quality of care and in expanding coverage into consideration seriously. In contrast, only government healthcare services and limited range of NGO services are available in rural areas. The quality of care is poorer and it is difficult to transfer complicated cases to higher levels due to dismal road communication. The study findings indicate that health personnel in urban areas use more hygienic procedures than those in rural areas. The

quality of care in the urban area is therefore better compared to the rural. All these factors hint that urban pregnant women face relatively less physical, social and organisational barriers to receiving proper healthcare services compared to rural mothers.

I have found that the collaborative project (UPHCP) is able to reach the people and to provide good quality service which encourages pregnant mothers to come to centres for services that increase mothers' accessibility to services. The failure of the public sector and success of NGOs in providing better quality healthcare services support the arguments, made by neo-liberal thinkers, that everything, including healthcare services, will be of better quality and more efficient as well as effective if they are treated as commodities. If so, poor are definitely deprived from their access due to lack of their capabilities as Haq, Sen and Nussbaum have argued. This is the same condition I noticed during the study. High user fees at NGO level and unofficial fees at government levels dissuade pregnant mothers from receiving basic and comprehensive EmOC and cause the first delay in making the decision for seeking care. Both inclusion and exclusion errors obstruct the poor's access to services which reflects the partial application of the figure 6.2 which is shown as follows. As it shows, contracting out enhances the efficiency, accountability and accessibility to services. The utilisation rate and quality of the services might be deteriorated and decisions to seek healthcare could be delayed due to imposing user fees. It further shows that there is a possibility to find out both inclusion and exclusions errors in fee waiving system.

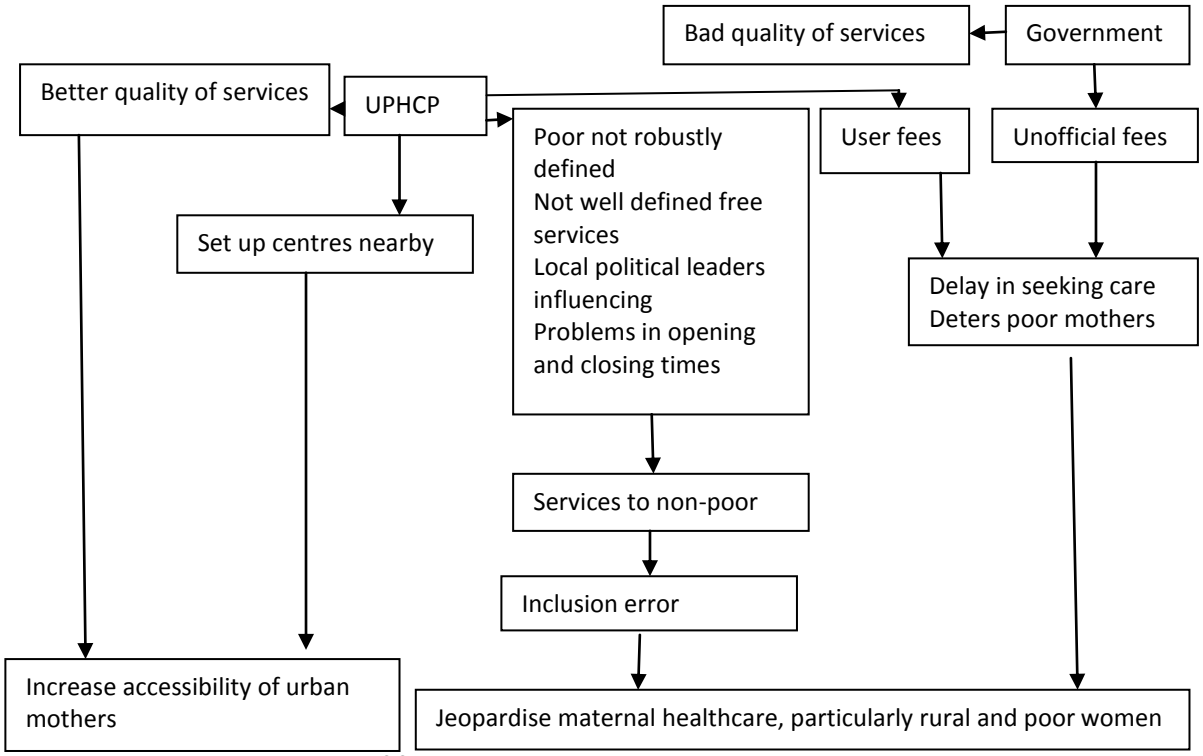

Figure 8.1 Partial application of figure 6.2

The contributions, this chapter has made, are to identify potential access barriers and to find out variations in barriers across region and class that ultimately affect mother's access to healthcare services. This chapter has basically answered three sub-research questions (2, 3 and 4).[91] The lack of a NHP and segregated health programs, including maternal-related, are potential organisational hindrances to the improvement of maternal health. Mothers face three types of barriers (physical, social and organisational) during their usages of maternal healthcare services, but these barriers are not faced equally —the variation appeared across region and class.

The next chapter will explore the effectiveness of different interventions adopted in different forums, discussed in Chapter 2, in Bangladesh context. It will also show how far the figure 3.1 can be applicable in local context.

[91] Sub-research question 2: what is the rationale of sound maternal health management in the context of Bangladesh? ; 3) What types of barriers do pregnant mothers usually face during the use of maternal healthcare services?; 4) are there any differences in terms of barriers across region and class ?

Chapter Nine: Results and Discussions: Safe Motherhood: Issues and Interventions

9.1. Introduction

Ante natal care (ANC), family planning (FP), safe and clean delivery and essential/emergency obstetric care (E/EmOC) are four pillars of maternal health and safe motherhood initiatives (SMIs) (Ahmed, 2005; Bergsjo, 2001). As developing countries (99%) have higher maternal mortality rates (MMR) compared to developed ones (1%), they are constantly investing their resources in expanding contraceptive prevalence rates, increasing ANC coverage rates, ensuring safe and clean delivery and ensuring the availability of the E/EmOC at pregnant mothers' doorsteps. Most developing countries have taken bold steps towards introducing skilled birth attendance (SBA) in place of traditional birth attendance (TBA) schemes and encouraging pregnant mothers to have their babies delivered at facility centres, even through Caesarean section (henceforth Caesarean) if required, instead of home deliveries for ensuring safe and clean deliveries. The main objectives of this chapter are to know how far all these interventions, discussed in Chapter 2, are effective in reducing high MMR in the local context, to find out the extent of pregnant mothers generally using the services of SBAs and facility centres and to explore hindrances that service users experience using them.

The chapter is mainly premised on several studies, including my one, based in developing countries. The first part of it highlights reasons for expectant mothers making ANC visits and the effectiveness of these visits. The second deals with TBA versus SBA debate, while the third focuses on the preference of pregnant mothers for the place of delivery and reasons for these preferences. The fourth is a discussion on the positive and negative dimensions of normal and Caesarean deliveries. The fifth part explores the way developing countries, particularly Bangladesh, can resolve tensions surrounding safe motherhood-related interventions and a summary of the chapter is drawn in the final part.

9.2. Ante-natal care services

As said in Chapter 8, pregnancy in Bangladesh is not conceived as an illness but a natural event that generally requires no medical interventions, pregnant mothers only go for ANC services if they go through any bad experience during pregnancy (Pendzich, n.d: 2). However, pregnant mothers have begun to visit ANC centres of both government and non-government organisations (NGOs) as a matter of routine (Afsana, 2005). Chapter 7 shows that the availability of and accessibility to ANC services have been increasing.

Inter-class and generational differences in attitude to the acceptance of ANC services have been found. One study claims that a number of mothers made visits for ANC services only to confirm their pregnancies or to discuss consequences and remedies of physical problems that they experienced during their pregnancies. Rich women made more visits than the poor ones. Comments of one slum dweller and a rich woman confirm the above claim. One slum mother said, "As no one expects to be sick during pregnancy, visiting the centre for a check-up is not necessary. What is the point for going for a check-up in a healthy condition?" (BRAC & UoA, 2001: 38). By contrast, the rich woman explained her reason: "I would not have gone for check-up if I did not have *pani bhangga* (leak in the membrane) from the sixth month of my pregnancy. I thought that I didn't require any check-up if I wouldn't have any problem" (BRAC & UoA, 2001: 39). The same study found generational differences towards acceptance of ANC services. In rural areas, the older women, particularly mothers-in-law, never thought of going for ANC services and also discouraged their daughters-in-law from attending ANC sessions. Conversely, many mothers in urban slums encourage their daughters-in-law to visit ANCs and, in some cases, accompany them (BRAC & UoA, 2001: 41).

A negative relationship between birth order and seeking ANC services from medically trained staff is present. In 2007, for instance, 67 percent pregnant mothers with primiparous compared to 24 percent with grandparous sought ANC services (NIPORT *et al.* 2009: 109). Another study indicated,

females younger than 20 years with primiparous are more likely to receive ANC services. The possibility of developing complications in first order birth is more than later ones (Hossain, A. H. M. K. 2010: 400).

A number of reasons, such as confirming pregnancy condition (normal or complicated), position of the baby, and the estimated date of delivery, lead pregnant mothers to seek ANC services. For instance, among 41 percent of Bangladeshi ANC service users during their last pregnancies, around three quarters (76%) went for general check-up, while the remainder went to deal with specific problems (lower abdominal pain was the most common case) (Koenig *et al.* 2003: 42). More or less the same reasons were found in the Ghana (Mills & Bertrand, 2005: 55) and Maharashtra, India (Griffiths & Stephenson, 2001: 355) studies.

Ignorance, costs associated with services, religious and customary restrictions, perception of ANC to be a curative not preventive, apathy towards the use of medical care services and familial problems are documented as the main reasons for the under utilisation of ANC services (Bergsjo, 2001; Griffiths & Stephenson, 2001; Hossain, A. H. M. K. 2010; Koenig *et al.* 2003; Rahman *et al.* 2003). For instance, lack of mood for ANC (62%), religious and customary (27%), monetary (21%), lack of transportation (10%) and service-related (8%) were the important reasons for under-utilisation of ANC services in Bangladesh (Koenig *et al.* 2003: 42). The other ones included a lack of women's decision making power, multiple demands on women's time, restrictions on women's movement during pregnancy and costs associated with services as main barriers to making ANC visits (Rahman *et al.* 2003: 23). Besides these, lack of folks at home to take care of their children in their absence is a key reason that prevents mothers from going to ANC centres for check-ups though they feel the need for doing so (Hossain, A. H. M. K. 2010: 404).

9.2.1. Effectiveness of ante natal care services

There has been a growing debate on the effectiveness of ANC services in the reduction of maternal mortality and morbidity (MMM). Some argue that these have a positive impact, while others are against such services. For instance, a Zaire study claimed that the MMR was reduced 17-fold following the effective use of ANC services, while a Vietnam study reported that it could be reduced by improving nutritional status and screening for high risks during ANC visits. Conversely, a Tanzania study revealed no relation of ANC attendance to MMR reduction. Another study from Lesotho found that MMR was not substantially reduced through increased ANC visits (Mcdonagh, 1996: 8). As discussed in Chapter 2, improved services during delivery not before childbirth had contributed significantly to the reduction of high MMR in Europe and North America in the 19th and early 20th centuries (Loudon, 2000). The following section highlights both positive and negative sides of ANC services.

9.2.1.1. Positive sides of ante natal care

ANC services are effective in reducing MMM, encouraging pregnant mothers and their families in taking the right steps for safe child delivery and making referral to the right places at the right time. Proper ANC services can identify certain individual characteristics, such as history of haemorrhage or coagulopathy in an earlier pregnancy, polyhydramnios, hypertensive disease of pregnancy, and premonitory bleeding in the current pregnancy. The ANC also identifies placenta previa at earlier stages and suggests the proper way of managing it, as well as keeping mothers free from puerperal sepsis by advising on clean delivery (Bergsjo, 2001). A study on Tanzania claimed that 81 percent of risk cases could be identified from ANC visits (Mcdonagh, 1996: 3). All the roles that the ANC plays appear to reduce MMM though there is no solid evidence that it always successfully reduces high MMR (Bergsjo, 2001: 47-50).

The ANC can also contribute to safe childbirth. It has been assumed that mothers with ANC services are more likely to ask for professional assistance at delivery time. Because pregnant mothers and SBAs become familiar with each other during ANC visits, they feel at ease knowing that the same SBAs attend them at delivery time. ANC creates an opportunity for pregnant mothers and their family members to be aware of the expected date of delivery and of making a 'birth and emergency preparedness plan.' So family members know when, how and why they seek EmOC if needed (de Bernis *et al.* 2003: 47). Another study has claimed that ANC can bring positive results in certain screening interventions (measuring blood pressure to identify hypertension and fundal height for finding multiple pregnancies) and referral systems (Jahn & Brouwere, 2001: 232-33).

9.2.1.2. Negative sides of ante natal care

ANC services are not effective, in some cases, especially in identifying complicated cases and raising awareness of the dangerous signs of pregnancy. Providing iron supplements, making women aware of various aspects of pregnancy, conducting screening tests (particularly urine and blood), measuring mother's weight and blood pressure and checking progression of foetus growth are the main areas that ANC services should cover. However, it has been found in the case of Bangladesh that only 38 percent ANC service receivers were informed of dangerous signs of pregnancy, though weight (80.3%) and blood pressure (86.4%) were measured in most cases. Also, service providers gave iron tablets to 54.8 and took urine and blood samples from 54.2 and 36.8 percent mothers respectively (NIPORT *et al.* 2009: 114). The exact cause for mothers' not being aware of dangerous signs of pregnancy has not been identified. Perhaps, service providers are not given instructions to share this information with pregnant mothers or they do not have sufficient time to converse with them possibly because of heavy workloads. It also shows that less than half of pregnant mothers were not given iron supplements by ANCs. Non availability of iron medication could be one reason for this situation (Hossain, A. H. M. K. 2010: 402-4).

Difficulties in identifying risk factors due to wide ranges, using inappropriate techniques reflecting low quality services, not taking referral advice seriously into consideration and a ritualistic approach to ANC seem to have made services ineffective (Afsana, 2005; Jahn & Brouwere, 2001). In India, 87.2 percent pregnant mothers with high risks delivered normally, but 15 percent of them were not diagnosed properly during the ANC visits (Mcdonagh, 1996: 3). Main (1991 in Mcdonagh, 1996: 4) claims that risk screening has a low predictive power that causes stress and high costs to both women and families, not to speak of creating hassles (pregnant mothers are sometimes referred unnecessarily).

Pregnant mothers have been found to be nervous and pallid during their ANC visits being afraid of what the service providers would say about their pregnancies. They are also uncertain about certain procedures used there. One participant, for instance, said, “I feel scared because I don’t know what she will be telling about me and my baby.” Another participant added, “I don’t like the way she touched my belly. She pressed so hard that I felt pain” (Afsana, 2005). There has been developing mistrust or discouragement in receiving ANC services for many reasons, such as waiting for hours, going through the same clinical procedures, particularly abdominal examination during each visit, the staff making more or less the same comments for all, babies being delivered well before or after the estimated date and emphasising institutional rather than home delivery (Afsana, 2005).

9.3. Traditional versus skilled birth attendants

Pregnant mothers usually need assistance from anyone trained, untrained or skilled during delivery, because certain changes occur in their physical and biological system at that time. Delivery without any assistance is highly risky for mothers; oftentimes it can prove fatal (Trevanthan 1987 in Afsana & Rashid, 2000: 25). As said in Chapter 2, the training of the TBAs, started in the 1980s, stalled one decade later this was blamed on the fact that trained TBAs were inefficient in containing the high MMR, although no robust data corroborates this claim and the Bangladesh government trained

24,000 TBAs in two phases (first, 1979-80, and second, 1980-81) (Hossain *et al.* 1989: 8). A new strategy therefore was adopted—encouraging the presence of SBAs at delivery time though there was confusion of their (the latter's) roles. Normally, doctors, midwives and nurses with training in delivery are considered as skilled in many societies[92]. The following section highlights reasons for mothers' preferences for any one particular attendant (either TBA or SBA).

9.3.1. Selection of birth attendants

Eighty two percent Bangladeshi mothers had their babies delivered without having any assistance from medically trained providers. However, the percentage of mothers receiving non-professional assistance decreased by around six percent between 2001 and 2007. Further, there has been an increasing trend of urban women using professional services compared to rural mothers (Koenig *et al.* 2003; NIPORT *et al.* 2005; NIPORT *et al.* 2009). This study (table 9.1) found that more than six in 10 deliveries were carried out by *dais* followed by doctors (less than one in five), nurses/midwives/paramedics (one in ten) and relatives (less than one in ten)[93]. Clearly, mothers preferred having their babies delivered by traditional dais than others. The availability of TBAs because of introducing TBA training in the 1980s could be one plausible reason for this preference.

[92] For instance, one study on Bangladesh defines skilled attendant in this way, " 'skilled attendant' refers exclusively to people with midwifery skills (for example, doctors, midwives, nurses) who have been trained to proficiency in the skills necessary to manage normal deliveries and diagnose, manage or refer complications" (Mannan, 2008).

[93] As said in Chapter 7, unqualified health care providers are readily available than qualified ones. The former are also popular because of their cordial behaviour and ability to understand and communicate with common people easily. They are called and known as doctors in some places. Like other cases, pregnant mother families are used to receiving services from them, particularly local *dais,* at delivery time. So doctors, mothers mentioned as birth attendants in this study, refer to either MBBS or non-MBBS. Similarly, *dais* refer to TBAs with or without training.

Table 9.1 Distribution of attendants during deliveries (multiple)

Types of attendants	Frequency	Percent
Dai	187	61.1
Nurse/Paramedics/Midwife	31	10.1
Doctor	58	19.0
Relatives	29	9.5
Friends	1	.3
Total	306	100.0
No response	3	

I also found the same trend in the selection of health personnel at the time of last delivery. As reported in table 9.2, the number of respondents preferring to have their babies delivered by TBAs is almost double (45.7%) than that by doctors (22.9%). Only 10.5 percent of respondents mentioned that they preferred SBAs[94]. Most probably, socio-cultural practices and taboos (see in Chapter 8) hinder mothers from seeking professional care. Thus, the TBA practice still has a vital influence on pregnant mothers' choices.

Table 9.2 Choice of health personnel in last delivery

Types of health personnel	Frequency	Percent
TBA	48	45.7
SBA	11	10.5
Local practitioner	3	2.9
Doctor	24	22.9
Nurse	10	9.5
Others (health worker)	9	8.6
Total	105	100.0
No response	56	

Furthermore, I found that the selection of health personnel varies across regions. Table 9.3 points to differences in respondents' choices of birth attendants in different areas. Most respondents in Bogra preferred either TBAs or doctors. On the other hand, the preference for doctors was higher than other forms in Rajshahi, while respondents in Shapahar overwhelmingly preferred the TBA service because of the non-availability of doctors there.

[94] As the concept of SBA is becoming popular, it could be possible for respondents to designate their attendants as SBAs. It is doubtful about their capacity to differentiate between SBAs and non-SBAs.

Table 9.3 Distribution of the health personnel choice in the study areas

Types of health personnel	Name of areas			Total
	Bogra	Rajshahi	Shapahar	
TBA	19	1	28	48
SBA	1	3	7	11
Local practitioner	1	0	2	3
Doctor	16	7	0	23
Nurse	6	3	1	10
Others (health worker)	4	4	0	8
Total	47	18	38	103

Different factors, such as mother's age and education, parity[95] and costs associated with attendance seem to influence people's decisions about their selections of birth attendants. For instance, the cost of engaging a *dai* is Taka 180 (equivalent to 2.5 US$) and a piece of cloth, while the cost of a nurse, as an SBA, is 1200 Taka. The cost of getting a doctor's assistance in hospital in complicated cases are exorbitant though the amount varies depending on the nature of the complication (Caldwell, 2002: 14).

The study found an associational relation of mothers' education to birth attendant selection; the more education mothers have, the more likely they would prefer delivery by professionals. A national data set indicates that mothers with primary and secondary levels of education use medically trained providers as birth attendants more than illiterate mothers (NIPORT *et al.* 2009). Similarly, the present study (Table 9.4) shows that illiterate mothers used the *dai* services more often than those with minimum education. The lack of awareness (caused by illiteracy) about dangerous signs of pregnancy, the adverse effects of the use of TBA services and traditional beliefs and practices are the main reasons for utilising TBA services.

Table 9.4 Relation between mother's education level and birth attendant choice

Education of mothers	Who attended during delivery				Total
	Dai	Nurse/Paramedics/Midwife	Doctor	Relatives	
Illiterate	40	4	10	7	61
Primary	27	3	9	5	44
Secondary	27	10	9	4	50
Higher-secondary	1	0	2	0	3
Total	95	17	30	16	158

[95] The order of pregnancy.

However, both positive and negative aspects of TBAs and SBAs also influence people's choices. The following section highlights both TBA and SBA strengths and weaknesses.

9.3.1.1. Positive sides of traditional birth attendants

Studies from different countries, including Bangladesh, where childbirth is perceived as a normal phenomenon, indicated various reasons for the high acceptance of TBAs services. TBAs are familiar in the community and have good interpersonal relations with patients (Afsana & Rashid, 2000; Leslie & Gupta, 1989; Saravanan *et al.* 2010; Sarwar, 1992) and their services are accessible, available, and reliable, as well as scientific (Afsana & Rashid, 2000; Amin & Khan, 1989; Hulton *et al.* 2000; Leslie & Gupta, 1989; Saravanan *et al.* 2010). For instance, mothers delivering babies with TBA assistance were reported as having more positive birth experiences. TBA support during labour helps pregnant mothers reduce labour time, recover quickly, facilitate easy bonding between mothers and children, and keeps mothers free from anxiety and depression during the six-week postpartum period (Hulton *et al.* 2000: 45). That means, TBA activities encourage pregnant mothers to be active that is opposite of the medicalisation process of pregnancy and childbirth (see in Chapter 2). In neighbouring India, a number of factors that encourage pregnant women to go for TBA services have been identified. These include socio-cultural traditions, community support, familiarity, inadequate trust of the medical system and the perception of birth as a normal phenomenon that does not need any institutional settings (Saravanan *et al.* 2010: 96).

One study claims that the rate of child delivery by trained *dais* in Bangladesh increased to 89 from eight percent between 1977 and 1991. Scientific services and interpersonal relations were the main causes of high acceptance of their services (Sarwar, 1992: 27). I found that among pregnant mothers (47) receiving assistance from TBAs during delivery, 13 indicated their (TBAs) cordial behaviour and 34 mentioned the adequacy of treatment they provided. The following comments, made by different

participants of two studies, depict reasons for which pregnant mothers prefer TBAs (here mentioned as *dhaitani*) to other services:

> *The dhaitani in our neighbourhood has been doing her job for many years and lives very close to my house. We informed her beforehand about my expected times of delivery. When my labor pain started, the dhaitani was called. She came in and checked me. She waited. Since my pain came on and off she went away. When she came back, I was about to give birth. She delivered the baby and cleaned me up (Afsana & Rashid, 2000: 24).*

> The *dais* deliver the babies in this area, and most women prefer them to doctors, they know what they are doing (Griffith & Stephenson, 2001: 349).

> I knew the lady who delivered my baby, she advised me to go to the doctor, but I asked her to do it, I felt safe with her (Griffith & Stephenson, 2001: 349).

> My mother had handled the deliveries of all my five sisters and knew what to do. She is much better than the doctor (Griffith & Stephenson, 2001: 349).

The above corroborates my findings.

9.3.1.2. Negative sides of traditional birth attendants

Some practices of TBAs are seen to have had detrimental effects on maternal health. These include the use of non sterile equipment during delivery, excessively vigorous abdominal massage, encouraging pregnant women to push at an early stage of labour, use of herbal medicine for augmenting labour pain, dietary restrictions on pregnant mothers and abstaining mothers from initiating post-delivery breast feeding (Amin & Khan, 1989: 121-24; Leslie & Gupta, 1989: 20; Saravanan *et al.* 2010: 101). However, giving training to TBAs does not mean that they can automatically change their beliefs and practices. What TBAs actually do is to incorporate their learning from past experiences. Actually, training failed to change their beliefs and practices. For instance, no impact of training on placenta delivery has been documented (Goodburn *et al.* 1995). The TBAs role in referring patients appears to be conflicting in Bangladesh; some encouraged seeking institutional help, while others opposed visits to facility services (Parkhurst *et al.* 2006: 441-42) A similar situation has been depicted in a study done in Senegal which reported higher MMRs in

areas where trained TBAs provided services compared to places where trained midwives were engaged (Bergstrom & Goodburn, 2001: 83-84). However, TBAs are able to do their jobs when everything goes well. Certainly, they lack competence to properly manage complicated cases (see in Chapter 2).

9.3.1.3. Positive sides of skilled birth attendants

As said earlier, the percentage of pregnant mothers in Bangladesh receiving assistance from SBAs during delivery has not been up to standard. As mentioned in Chapter 7, this situation forced the Bangladesh government in 2000 to create a new cadre namely, 'community-based skilled birth attendants' (CSBAs) who are assigned to conduct normal home deliveries and refer complicated cases to facility centres at the appropriate time (BRAC & UoA, 2001: 24; Haider, 2007: 1). On paper, SBAs are supposed to perform different activities, such as managing normal labour and delivery, identifying the onset of complications, performing essential interventions, starting treatment and supervising referral cases, etc (Graham *et al.* 2001: 99).

One study revealed that 83 percent of ANC and 42 percent of delivery care services were provided by CSBAs, reflecting high coverage of services by trained and skilled hands. Their acquired knowledge and skills were also considered satisfactory by the majority of clients (Haider, 2007: 20). Similarly, another study found that more than half (52%) CSBAs performed ANC check-ups, followed by post-natal check-ups (44%) and attended home deliveries (29%). A large percentage of service users (91% of 288) were fairly or fully satisfied with their services. Among researched women (49%) with the expectation of having another child, 60 percent expressed that they would select CSBAs as attendants for their next delivery (Ahmed & Jakaria, 2009: 48). I also found that 11 of 103 pregnant mothers delivered their last baby under the supervision of SBAs. Out of 11, eight indicated adequate treatment and the rest listed cordial behaviour of attendants as reasons.

9.3.1.4. Negative sides of skilled birth attendants

Most SBAs are young, urban-centred and provide services in communities with which they are not familiar. Consequently, their services are not well accepted at the community level. In addition, retaining them in rural areas may require higher salaries, housing, special allowances and work prospects for their spouses and educational opportunities for their children. Even if they fail to communicate with rural mothers due to lack of understanding local dialects and fail to respect their beliefs and practices relating to birthing, a small number of women are naturally willing to receive their services (Prata *et al.* 2011: 87; Walraven & Weeks, 1999: 527). So their workload is always low compared to other community-based health workers, particularly TBAs. The comment of one CSBA reflects the picture at field level:

> *I performed only one normal delivery after receiving SBA training. I have visited many pregnant mothers and tried to convince them to seek my support for delivery but they do not feel confident on me because I am newly trained and younger. They feel that the local TBA is more skilled, close to them, can give motherly affection and can attend any time of the day and night. Also they are not aware of the benefit of performing delivery by a skilled birth attendant (SIDA-Bangladesh, 2010: 63).*

It shows that the demand for CSBA services is not increasing.

9.4. Selection of birth place

Maternal age and education, parity (Afsana & Rashid, 2000), perception of labour and healthcare quality (Afsana & Rashid, 2000; Caldwell, 2002; Griffiths & Stephenson, 2001), socio-economic condition (Afsana & Rashid, 2000; Basu, 1990), availability of healthcare services (Griffiths & Stephenson, 2001; Stephenson & Tsui, 2002), child delivery procedure (Afsana & Rashid, 2000) and costs of services (Caldwell, 2002; Griffiths & Stephenson, 2001) appear to influence people's choice of birth place, be it home or hospital/clinic. One Bangladesh study revealed shyness in asking anyone for help and permitting outsiders, particularly male practitioners, to examine their genital condition, apprehension that facility centres would invariably carry out surgery even if for minimal

'complications', and the traditional giving of a higher value to birthing at home are important factors that encourage pregnant mothers to prefer having babies at home (Parkhurst J. & Rahman S., 2007: 394). It has also been claimed that younger women prefer delivering babies in hospitals (Afsana & Rashid, 2000). However, the study contradicts this claim. This study found that mothers aged between 13 and 22 preferred home delivery, whereas mothers belonging to the higher age group (28-32) support institutional delivery (table 9.5).

Table 9.5 Relation between mother's age and birth place selection

Place of birth	Age interval of pregnant mothers				Total
	13-17	18-22	23-27	28-32	
Home	49 (76)	109 (74)	46 (69)	15 (55)	219
Hospital	11 (17)	24 (16)	12 (18)	7 (26)	54
Clinic	4 (7)	13 (10)	8 (13)	5 (19)	30
Total	64 (100)	146 (100)	66 (100)	27 (100)	303

Note: percentage in parenthesis

A number of studies (Afsana & Rashid, 2000; Barbhuiya *et al.* 2001; Caldwell, 2002; Kunst & Houweling, 2001; Stephenson & Tsui, 2002) found an associational relationship between mothers' education and selection of birthing place; the more educated mothers are more likely to deliver babies in institutional settings (hospitals or clinics). It has been claimed that women in both highest and lowest quintiles use attendance care more in countries where the female literacy rate is higher (Kunst & Houweling, 2001: 299). it was found in Uttar Pradesh (India) where women with higher educational attainments show greater interest in utilising healthcare, particularly facility centre-based ANC and other services, compared to women with lower levels of education (Stephenson & Tsui, 2002: 317) which is similar as the study (table 9.6) found that mothers both illiterate and with primary schooling gave birth at home in larger numbers than mothers with higher educational backgrounds.

Table 9.6 Relation between educational level and last birthing place choice

Last birthing place	Educational qualification of the respondent				
	Illiterate	Primary	Secondary	Higher-secondary	Total
Home	43	29	25	0	97
Hospital	8	9	15	1	33
Clinic	10	5	10	2	27
Others	1	0	0	0	1
Total	62	43	50	3	158

An associational relation of female's autonomy to selection of birthing place was also found in the study. An Indian study claimed that South Indian women have more autonomy compared with women in the North. This autonomy creates opportunities for South Indian women to interact with the outside world that not only provides increased knowledge of the availability and efficiency of healthcare systems but also creates confidence in seeking healthcare services from outside and interacting with service providers (Basu, 1990: 285). The same findings were found in the study (table 9.7) which reported that pregnant mothers with greater autonomy gave birth outside of their homes (hospital or clinics). The percentage of mothers, controlling everything solely, with institutional delivery was 30, while the figure for husbands, controlling alone, was 20.

Table 9.7 Associational relation of female autonomy with choice of birth place

	Place of birth			
Who controls everything	Home	Hospital	Clinic	Total
Husband	46	9	3	58
Wife	42	12	6	60
Together	15	5	0	20
Mother/in-laws	6	5	1	12
Others	4	3	3	10
Total	113	34	13	160

9.4.1. Reasons for selecting home delivery

People's perception of need for institutional services, fear of hospital environment and birth procedure and costs associated with delivery influenced pregnant mothers opting for home deliveries. Mothers usually prefer home delivery unless an emergency situation occurs for which

institutional arrangements are required. For instance, 86.3 percent of 1,825 slum households in Dhaka (Bangladesh) mentioned that they did not feel the necessity for institutional delivery (Caldwell, 2002: 11). In another study, almost all births were reported to have occurred at home (Barkat *et al.* 2006). If labour is perceived to be normal, rural women in Bangladesh choose to remain at home. Otherwise, if a case seems complicated, mothers and their families prefer delivering babies in hospital. One participant said, "I delivered at home since there was no trouble, if there was a problem or something occurred then there is a doctor nearby." Another participant told, "The delivery of all my children took place at home, a hospital is only used when there is a problem, otherwise if everything is OK why go to a hospital?" (Griffiths & Stephenson, 2001: 349).

One of the reasons for avoiding institutional delivery is that hospitals are seen as unfriendly and strange places where patients cannot have the presence of their family members and friends. Another perception among mothers is that they do not find a homely environment which provides for modesty in hospitals. Mothers are also concerned with the gender of birth attendants—most doctors are males (Caldwell, 2002: 2). All these factors create unease among rural women about the hospital environment and procedures. Rural pregnant mothers in Bangladesh are used to squatting and kneeling when they deliver babies at home. When the same mothers go to hospital, they are forced to lie down which is uncomfortable for them (Afsana & Rashid, 2000). Another study found that middle class Bangladeshi women prefer to lie down on bed, while labour class women either sit completely or in a squatting position during delivery at home (Sultana & Islam, 2007: 37). The following comments made by different participants of different studies, including mine, reflect how mothers feel inside hospital.

> I feel empty, uneasy and restless inside (Afsana & Rashid, 2000: 32).
>
> Home is always home. How much can a health centre give you what you can get at your own home?(Afsana & Rashid, 2000: 32)
>
> I pray to God that my baby is not born at the health centre (Afsana & Rashid, 2000: 33).
>
> *As soon as I entered the labour room, I closed my eyes in fear. I was too scared to think of the glittering instruments. I heard them talking about scissors. I was waiting and thinking*

to myself-when will they cut my vagina. Thank goodness. They didn't hurt me. Later on I heard they needed scissors to cut the umbilical cord (Afsana & Rashid, 2000: 34).

It was safe in the house and the nurse was present to do the delivery. In government hospital, delivery room is not there. Toilet and water facilities are not there in public health centre properly. So I felt safe to give birth in house (Griffiths & Stephenson, 2001: 349).

Nurses and doctors in hospital behaved roughly. She did not know where operation theatre was. Sometimes they found difficulties to find the proper room in such a big building (one participant of the FGD).

Unnecessarily doctors used some instruments which created fear among pregnant mothers. We believe that doctors in hospital always use instrument to cut body parts (one participant of the FGD).

However, my study (in table 9.8) found three important reasons for selecting home as a safe place for delivery. These are cost-related, whether there are complications or not, fear and uncertainty about the hospital environment.

Table 9.8 Relationship between different factors and choice of place for delivering babies

Birth places	factors									Total
	I	II	III	IV	V	VI	VII	VIII	IX	
Home	4	33	22	27	1	2	1	6	1	97
Hospital	1	3	7	3	0	17	1	1	1	34
Clinic	0	1	6	3	0	15	0	0	2	27
Others	0	0	0	0	0	1	0	0	0	1
Total	5	37	35	33	1	35	2	7	1	159

(**Here**, I=Sudden onset of labour, II=Economic reason, III=Fear and uncertainty at hospital or home, IV=No complications developed, V=Proper position of the baby, VI=Delivery related problems arose, VII=Getting healthy baby, VIII=Choice of family members, IX=Others)

9.4.2. Reasons for selecting institutional delivery

Some of the factors that influence the selection of institutional facilities are: ensuring safe delivery, the nature and degree of complications during labour, availability of a doctor or modern facility, overdue delivery, Caesarean carried out in the preceding delivery, low parity and women with better education and wealth. Half of the respondents (51%) mentioned that they preferred facility centres only for delivery safely, while 38 percent would do so if faced with complications (Koenig *et al.* 2003:

53). As reported in table 9.8, the most important factor influencing choice of either hospital or clinic was delivery-related complications that arose during the final stage of the pregnancy.

Mothers from rich families prefer deliveries in hospitals, particularly private. High costs associated with hospital delivery discourage poor pregnant mothers from using institutional facilities. For instance, 28.4 percent slum households mentioned that they never dared to go to hospitals due to high costs (Caldwell, 2002: 11). One poor woman grumbled, "It is customary for elite women to have child delivery at a clinic or a sophisticated hospital" (Afsana & Rashid, 2000: 31). Some mothers have confidence in good quality care rendered by doctors in private hospitals. They always prefer checking their health conditions, including child delivery, privately. One participant said, "It is safe for Caesarean deliveries in the private hospital and I trusted him better than doctors in the other places" (Griffiths & Stephenson, 2001: 349). Another participant also said in the same tone, "I use the private doctor for childbirth, tests in pregnancy and giving birth, the private doctor has good medicines and brings a speedy recovery" (Griffith & Stephenson, 2001: 349).

9.5. Normal versus Caesarean delivery

It is not always true that doctors have total influence over pregnant mothers' choice of Caesarean delivery. The latter sometimes request health personnel for conducting a Caesarean delivery. There are many reasons, such as avoiding negligence claims, earning more money within a limited time frame, ease of decision making and exerting power in the medical, specially obstetric, field for which doctors generally prefer Caesarean to normal delivery (Bhuiya, 2009; Leone *et al.* 2008; Sultana & Islam, 2007; Wagner, 2000). Doctors use many phrases—"Caesarean is safe", "Upcoming baby can face difficulties if baby is normally delivered", and "Pelvic is not opening"—in true or false senses to persuade their patients to opt for Caesarean delivery (Sultana & Islam, 2007). Sometimes doctors even criticise women for not going for Caesarean and tease them as 'selfish', that is, mothers only think of their own health rather than the future of the upcoming baby (Wagner, 2000).

Bangladesh has the highest institutional Caesarean delivery rate compared to other countries (such as Colombia, Dominican Republic, Egypt, Morocco and Vietnam). One of the main reasons for this situation is that physicians, especially private ones, prefer to perform Caesarean delivery in private hospitals. They earn more money if that serves in private hospitals, which also provide them with other forms of financial incentives (Chong & kwek, 2010; Leone *et al.* 2008: 1239). For instance, one specialist doctor in Bangladesh said that he received a maximum 5,000 Taka for normal delivery which took either eight to nine hours or more, while he can earn 8,000 Taka or more for Caesarean delivery which takes not more than an hour. Specialist doctors prefer Caesarean because they can easily maintain their routine in their preferred way. In normal deliveries, they have to spend more time to observe the progress of the labour pain and keep close supervision for a longer period (Sultana & Islam, 2007). Wagner (2000: 1678) claims that the Caesarean takes 20 minutes and normal delivery takes ten hours or more of the doctor's time. Doctors and hospitals always earn more money from Caesarean than normal delivery.

Other reasons for the increasing Caesarean rate include doctors' fear of normal delivery, lack of confidence of doctors in taking decisions and the politics of obstetricians. One reason for promoting Caesarean, according to Wagner (2000: 1679), is to ensure the domination of obstetricians who always try to keep midwives as their subordinates. A midwife considers a breech delivery[96] as a variation of normal delivery, whereas doctors, particularly obstetricians, consider this condition as pathological. A study found that the trainee doctors in Bangladesh conducted most of the deliveries be they normal or Caesarean (43.6%), followed by medical officers (25.7%). These trainees doctors assisted deliveries more (54.4%) than interns (19.0%) and nurses (15.8%). It claimed that Caesarean delivery rate has been increasing. As the trainee doctors performed more deliveries, they are more

[96] Delivery of a foetus with the buttocks or feet appearing first.

than willing to take decisions quickly for Caesarean delivery rather than waiting for a normal delivery (Bhuiya, 2009).

The paternalistic decision making model seems to have been applied here. This model indicates that both doctors and patients share the same goal. As doctors are well informed and experienced about what should be done in what circumstances, patient's involvement here (either giving consent to treatment or not) is limited (Coulter & Fitzpatrick, 1999). As discovered, doctors always use their power to make the final decision regarding Caesarean. This power comes from their dominant position in society (in the Marxian sense) and their exclusive authority in the childbirth discourse (in the Weberian view) (this has been detailed in Chapter 2). But, before undertaking it, doctors need to know whether the family of a pregnant mother has enough money to bear the costs. The latter therefore becomes dependent on the doctor and medicine rather than on self-care which is what Illich (1976 in Morgan *et al.* 1985) calls iatrogenesis[97] that can happen at three different levels: clinical, social and structural. This also disempowers women and deprives them from having positive experiences of normal deliveries and this is why feminist sociologists argued against the bio-medical model (see in Chapter 2).

Rich and highly educated pregnant mothers sometimes request doctors for Caesarean delivery or 'elective Caesarean', due to the changing role and status of women in society, lack of physical fitness, avoiding tension and labour pain, high 'value' of the baby due to infrequent or no previous conception, and increasing access to ANC services hinting the development of congenial interactions between pregnant mothers and service providers (Leone *et al.* 2008; Pittrof *et al.* 2002; Sultana & Islam, 2007). For instance, Sultana and Islam (2000: 32) reported that, in Bangladesh, eight out of 10 middle class respondents aged between 24 and 38 had Caesarean delivery experience. As reported by Leone *et al.* (2008: 1237), talking to peer groups and family members about reproductive health

[97] It is a process by which the medical bureaucracy makes patients dependent on bio-medical practices.

issues, including pregnancy and its outcome, may have an impact on demand for a Caesarean delivery. For instance, women with good interaction with family members and peer groups during pregnancy are less likely to prefer Caesarean delivery. Two studies (NIPORT *et al.* 2005: 144; NIPORT *et al.* 2009: 119) (see in Chapter 7) reported that in Bangladesh economically solvent urban women with better education are more likely to go through Caesarean delivery.

Besides these, I found an associational relationship between mothers with education living in urban areas and higher likelihood of preferring Caesarean delivery. As shown in table 9.9, pregnant mothers living in metropolitan areas had more Caesarean delivery experience compared to their counterparts. Among urban pregnant mothers, Rajshahi mothers had more access to Caesarean delivery. Many reasons for urban mothers' preference for Caesarean delivery include the availability of services, accessibility to different sources of services (government, private and NGOs), higher awareness of consequences of complicated births and good communication facilities etc.

Table 9.9 Distribution of delivery mode in area wise

	Name of areas			
Mode of delivery	**Bogra**	**Rajshahi**	**Shapahar**	**Total**
Normal	53	48	40	141
Caesar	7	12	0	19
Total	60	60	40	160

As table 9.10 shows, respondents with more education opt for Caesarean delivery. Only one in 10 illiterate pregnant mothers had Caesarean, whereas this trend had been increasing in the case of pregnant women with higher educational level. One possible reason could be that education creates awareness of health consequences of dangerous conditions during delivery that might force educated women to choose the Caesarean mode.

Table 9.10 Relation between mother's education and birthing mode selection

	Mode of delivery		
Education of mothers	**Normal**	**Caesarean**	**Total**
Illiterate	56 (90)	6 (10)	62
Primary	38 (86)	6 (14)	44
Secondary	44 (88)	6 (12)	50
Higher-secondary	1 (33)	2 (66)	3
Total	139 (87)	20 (13)	159

Note: percentage in parenthesis.

The possible effects of Caesarean, be it elective or emergency, are anaesthesia accidents, damage to blood vessels, accidental extension of the uterine incision, damage to urinary bladder and other organs (Lumbiganon *et al.* 2010: 495; Parkhurst J. & Rahman S., 2007: 399; Wagner, 2000: 1677). It has been claimed that the MMR has increased in areas of Brazil due to increasing Caesarean rate (Wagner, 2000). It has also been claimed that a pregnant woman having an elective Caesarean has a 2.84-fold greater chance of dying compared to a woman with normal delivery. In another Bangladesh study, both immediate and late complications were reported to be considerably more in Caesarean than in normal delivery cases (Begum *et al.* 2009). On the bad consequence of Caesarean delivery, Wagner (2000: 1677) commented, "If a Caesarean section is done, the woman and her baby take the risks while if the Caesarean section is not done, the doctor takes the risk". All these facts indicate, in most Caesarean cases, clinical iatrogenesis can be noticed as pregnant mothers are not informed by doctors about the side effects of Caesarean.

High costs (mentioned in Chapter 8) and deaths associated with the Caesarean mode of delivery appear to have had a negative impact on pregnant mothers' choice of Caesarean. For these reasons and others, there has been growing mistrust in doctors' recommendation for Caesarean delivery and a developing perception that doctors conduct medically not-justified Caesarean deliveries for their own interests (Koehlmoos *et al.* 2011: 75; Parkhurst J. & Rahman S., 2007: 392; Penn-Kekana *et al.* 2007: 34). Avoiding this situation arising from the greed of medical personnel, the International Federation of Gynaecology and Obstetrics (FIGO) (2007 in Leone *et al.* 2008: 1254) correctly advised, "women should not be denied access to Caesarean delivery when needed, for want of funds or infrastructure; neither should they be placed under pressure to have a Caesarean birth because of a lack of professional care to support a normal labour and delivery."

9.6. Possible ways of solving this problem

As of 2004, the percentage of qualified health care providers (QHCPs) (including doctors, nurses and midwives) in Bangladesh was 29, whereas that of unqualified allopathic and traditional practitioners (including Unanic, Ayurvedic and homeopathic practitioners) was 27.5 and 43.5 respectively (Parkhurst J & Rahman A., 2007: 151). The dearth of QHCPs indicates that other cadres of health workers might need to be included in service provision to improve the coverage of maternal health care (MHC) services (Wilson *et al.* 2011: 4).

As Bangladesh has a dire shortage of health personnel and financial resources, one of the possible and feasible ways is to provide training to lower level health workers (LLHWs), including TBAs, on midwifery to easily conduct safe delivery in rural areas helping to avert the high MMR (Institute, 1989: 113) because, as said in Chapter 2, the overhead training costs of them is lower (Koblinsky *et al.* 2006) and, like Physicians, they can perform the same functions (Wirth, 2008). Since private unqualified practitioners appear to play a vital role in influencing decisions of pregnant mothers and their families about seeking healthcare, it would be worthwhile to engage them in healthcare improvements, including better childbirth. In addition, since TBAs are primary contact persons in rural areas for basic MHC services, they can be encouraged to refer complicated cases to facility centres. TBAs definitely cannot do this unless their training curriculum includes a topic on ways of dealing with complicated cases and the referral system is made simple and easier (Parkhurst J. & Rahman A., 2007: 151).

High quality obstetric care appears to have led to a significant decline in MMR in developed countries. Developing countries following the same principle have not been able to ensure the same results (Siddiqi *et al.* 2008: S52). In order to gain the expected result (reducing high MMR), the local context of developing countries should be taken into consideration. Complications would need to be

identified and treated before they become serious by rendering basic services at an early stage. For example, anaemia caused by malnutrition or malaria is one of the leading causes of MMR in developing countries. Around one in three women suffer from acute malnutrition (*Prothom-Alo*, July 16, 2012). Diagnosing them early and taking preventive measures is the possible way of getting rid of anaemia.

Trained TBAs can easily provide basic services and advice at the doorsteps of pregnant mothers (kruger, 2009: 68, 84; Thaddeus *et al.* 2004: 293). They can also administer 'Misoprostol'[98] drug to prevent excessive post partum haemorrhage (PPH) and retain the much needed blood in new mothers. It is worth mentioning here that, as of 2010, nearly one in three maternal deaths in Bangladesh occurred due to PPH, while indirect obstetric problems, including anaemia, causing death accounted for 35 percent[99] (USAID AUSAID *et al.* 2011). It should be noted here that the administration of Misoprostol by individuals at home delivery is medically accepted though international organisations have been engaging in debate whether individuals can administer it at community level. For instance, the FIGO and the International Confederation of Midwives (ICM) are in favour, while the WHO does not support it (Nasreen *et al.* 2011; Potts *et al.* 2010).

Trained TBAs can easily understand when mothers need to be sent to facility centres by measuring blood loss using indigenous technology. For instance, Tanzanian, Indian and Bangladeshi trained TBAs have used two soaked *kangas* (women's dress fabric which can absorb about 500 millilitres of blood), a calibrated drape and the ICDDRB developed delivery mat respectively for measuring blood loss (Koehlmoos *et al.* 2011: 67; Maine, 2007: 1381; Prata *et al.* 2011: 87). Another study depicted

[98] There has been growing evidence on effectiveness of Misoprostol in reducing the burden of PPH, the leading cause of maternal mortality in developing countries. The name of the drug 'Misoprostol' included in essential drug lists of the WHO and in many global and national clinical guidelines. It indicates that administering 'Misoprostol' for preventing PPH is a safe and effective option in resource poor settings where Oxytocin-the gold standard drug-is not available and its application is not feasible. (Starrs & Winikoff, 2012: 1) It is worth mentioning here that Oxytocin should be kept in the refrigerator and administered by the SBAs (Prata *et al.* 2009).

[99] Other medically-related direct causes include eclampsia (20%), obstructed or prolonged labour (7%), abortion (1%) and others (5%).

the positive impact of training on TBA performance in Bangladesh. Trained TBA performance in identifying dangerous signs, providing first aid EOC and referring complicated cases improved significantly (Barkat *et al.* 2010). Several studies confirmed the effectiveness of reducing MMR by measuring morbidity-related indicators, improving referral rates and imparting high levels of knowledge (Ray & Salihu, 2004). Similarly, Fleming (1994), Rodgers *et al. (*2004), Sibley and Sipe (2006) and Sibley *et al.(* 2007) found the effectiveness of TBA training in identifying mal-presentation and preterm labour, improving and retaining knowledge and increasing referral practice.

Reorienting TBA training programs and integrating them in formal health systems is now imperative what Chaudhury and Chowdhury (2008) and Sachs (2005) have suggested in Chapter 3. TBAs can play a vital role in reducing MMR associated with maternal haemorrhage and puerperal sepsis. It has been claimed that by following the principle of integration, it would be possible to reduce MMR by 30 percent though this claim is not statistically valid (kruger, 2009). The successful integration of TBAs into the health system requires certain measures, such as providing a supportive infrastructure in which transportation facilities for referral cases and essential reproductive health services are available and encouraging collaboration between TBAs and public health system in outreach medical services, back up, technical support and effective supervision of activities of TBAs by public health staff. Other measures include showing a mutual respect and team spirit (kruger, 2009: 74-75; Miller *et al.* 2012; Prata *et al.* 2011: 87) and also what was indicated in Chapters 2 and 3 which is that the differences in outcome in maternal health are independent of whoever attends the births but dependent on whether attendants are backed up by an enabling environment (Dogba & Fournier, 2009; Fauveau *et al.* 1991; Macclean, 2005; Okonoufa, 2008; Ronsmans & Graham, 2006; Rosenfield *et al.* 2007).

For this reason, Wilson *et al.* (2011: 4) state: “Use of traditional birth attendants without an appropriate package of training, support, linkage with healthcare institutions, and resource supply is unlikely to be effective.” In addition, five ways of how TBAs can be integrated have been proposed:

training and supervision of TBAs; collaboration skills for health workers; inclusion of TBAs in facility-based activities; developing communication between TBAs and SBAs; and defining the roles of TBAs and SBAs (Byrne & Morgan, 2011: 128).

There has been growing tension among international organisations about the integration process of TBAs. For instance, United Nations Population Fund Agency (UNFPA) argues that TBAs should have better links with healthcare systems, while the WHO faces difficulty finding proper ways of giving training to TBAs (Parkhurst J. & Rahman A., 2007: 151). However, there is no single readymade solution to the problem of integration. However, reconsidering the potential of TBAs in a specific context by different stakeholders, such as UN agencies, donors, reproductive health professional organisations, government, NGOs, and academics, is one possible way (kruger, 2009: 86).

In addition, with the specific objectives of addressing the shortage of skilled manpower in health sector and increasing the SBA rate in baby delivery, some countries, including Bangladesh, are adopting innovative interim strategies, i.e., engaging professional or non-professional health workers in specialised fields, such as anaesthesia and surgery. For instance, in Tanzania, CEOC and anaesthesia trainings were provided to assistant medical officers, nurse midwives and clinical officers (Nyamtema *et al.* 2011). Afghanistan, Bhutan and Nepal began to provide training on anaesthesia to nurses, medical assistants and technicians without medical degrees, whereas Bangladesh, India and Sri Lanka have been providing this training only to medical officers (MBBS) (Hussein *et al.* 2010; Mavalankar & Sriram, 2009). In addition, non-doctor personnel have long been trained in major surgery in Mozambique and Malawi where most of the surgeries were done successfully (Bergström, 2005).

Following the same trend, as discussed earlier, the Bangladesh government introduced training for LLHWs with the specific view of making CSBAs (Prata *et al.* 2011). At the micro level, the Lutheran Aid to Medicine in Bangladesh started providing MHC services from home to hospital in an

integrated and teamwork basis through three types of locally-based health workers, i.e. village health volunteers (VHVs), CHWs, and CSBAs. This model was reported to be effective in providing essential healthcare services to all which could help in achieving health-related MDGs target (Edwards & Saha, 2011). In Bangladesh, the effectiveness of the CSBAs in delivering satisfactory services is well documented (Ahmed & Jakaria, 2009; Haider, 2007).

The proposed interventions should be made popular at community level by involving local leaders in policy formulation and implementation, making people aware of positive outcomes of these interventions through print and electronic media as well as religious sermons. Like the USA where rich and middle class women are advocating the return to home delivery for three reasons[100], rich women in Bangladesh should come forward. Poor women in Bangladesh have one kind of reservation about the acceptability of the medicalisation process in childbirth. They believe that healthcare services are properly given and more effective in hospitals and this could call into question the efficacy of services provided by CHWs. Rural and poor women also have fear about hospitalisation and medicalisation. This mistrust and fear can be broken down by a massive scale campaign. If local political and other leaders as well as rich women accept these low cost interventions willingly rather than going to hospitals for the same services, their acceptability ultimately encourages poor mothers to adopt these interventions that can offset inequity at community level. In other words, unless the perceived fear about the medicalisation process, particularly hospitalisation, can be dispelled, it would not be possible to successfully implement community-based low cost safe motherhood interventions.

[100] 1. Some research suggests that over-medicalisation of pregnancy and childbirth has detrimental effects on the health of both mother and baby. 2. The supply of SBAs who are supposed to carry out these interventions is inadequate. 3. The obstetricians unnecessarily recommend medical or clinical interventions due to having their domination in childbirth discourse (Dr. Habib Zafarullah, pers.comm. May 3, 2012).

9.7. Summary

Bangladeshi pregnant women started to accept ANC services though cultural practices and inter-generational beliefs create hindrances. However, the effectiveness of ANC in preventing high MMR is questionable; there is no robust data claiming that it is able to reduce MMR. Sometimes, it fails to predict the possible outcomes of the pregnancy.

TBA services are still more preferable to Bangladeshi women due to their high local connection and minimum level of service charge. As SBAs have urban and higher educational backgrounds, problems are created about the acceptance of their services in rural areas. An associational relation of education and wealth with using SBA services has been found in this study. CSBA services have also been effective in some cases.

As found in the study, more mothers (six in 10) used TBA services. Rural mothers used more TBA services than urban mothers. The numbers of mothers used doctor and nurse services are more in urban areas than in rural. Illiterate mothers used more TBA services than mothers with primary and secondary levels of education.

Home delivery is still more acceptable than institutional delivery. Unfriendly hospital environment, higher costs associated with institutional delivery and perceived rude behaviour of formal health personnel are potential barriers to increasing institutional, particularly hospital, deliveries. In some cases, mothers are forcibly sent to hospitals for delivery when complications develop. Education, wealth, female age and autonomy, and residency are influencing people's decisions about selection of delivery place and mode. Urban rich and better educated women generally prefer Caesarean to normal delivery for various reasons; avoiding labour pain is an important one.

The main findings of the study suggest that the majority of mothers (six in 10) gave baby birth at home. Mothers with better education gave births at facility centres. Three-quarters young mothers preferred home deliveries. Mothers having self-autonomy preferred more institutional deliveries

than mothers dependent on others, including husband. Urban and better educated women had Caesarean experience, whereas rural mothers and less educated had no the same experience.

In some cases, doctors, particularly obstetricians, necessarily or without valid reasons go for clinical interventions i.e., Caesarean for making more money, avoiding their responsibilities and investing less time. This higher practice of Caesarean by physicians creates doubts and mistrust about their credentials.

Restarting and reorienting training of TBAs, successfully administering 'Misoprostol' and referring complicated cases, and integrating them with a formal health system and providing training on anaesthesia and surgery to LLHWs with or without medical background are not a panacea. No interventions can replace the need for strong basic health care systems that ensure safe delivery and supply essential drugs and equipment in emergencies. Rather, these strategies should be considered as interim solutions among many, albeit ones that can meet basic needs for MHC in resource poor countries, particularly rural areas in Bangladesh. For this reason, Prata *et al.* (2011: 90) state that countries with less than half of births attended by SBAs should make attempts to introduce short-term interventions with a specific objective of improving maternal health. It may take longer to bring a positive result if long-term strategies are taken. Moreover, Maine (2007: 1382) claims that Malaysia and Sri Lanka following a horizontal approach are able to cut high MMR by half every 7-10 years. Therefore, unless a strong integrated basic healthcare system through single delivery mechanism[101] is developed, a robust national health policy (NHP)—giving a future guideline about how to improve different sectors, including maternal health, through proper coordination, supervision and monitoring—is adopted and a behavioural change communication (BCC) program at community level is introduced, it will not be possible to increase the availability of and accessibility to primary, particularly maternal, healthcare services that ultimately help meet the target of the 5th MDG.

[101] The two wings of the Ministry of Health should be made single for avoiding duplication and internal competition or rivalry.

Based on the above discussion and some parts of Chapter 8, it is possible to apply the figure 3.1 with certain changes on the following page. Reiterating it, maternal mortality has been caused by both direct and indirect (social and health-related) factors. In order to address direct and indirect health-related causes, vertical interventions, such as training of TBAs and SBAs, ANC coverage, and B&CEmOC , have been proposed. The success of these interventions largely depends on an enabling environment and supportive policies.

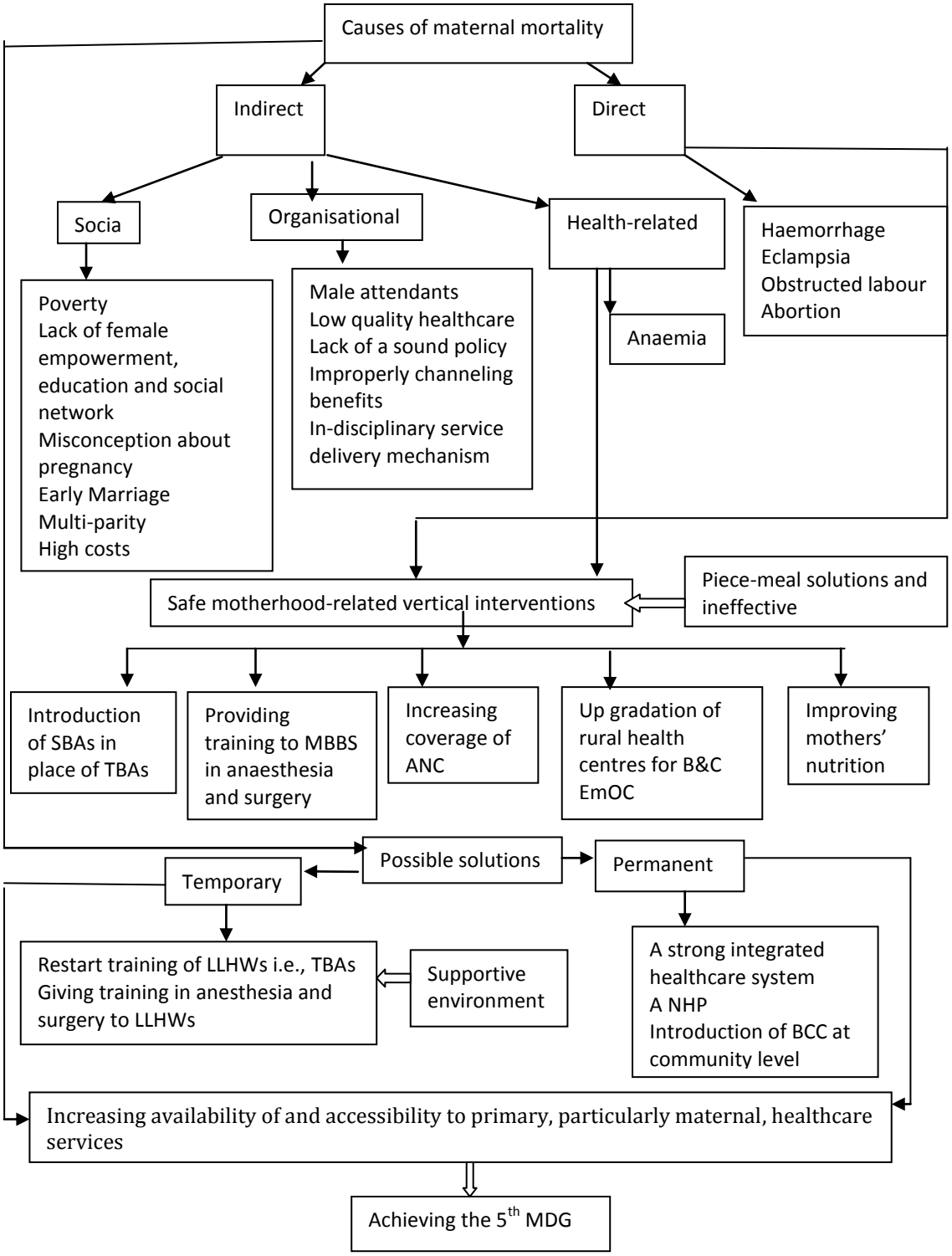

Figure 9.1 Partial application of figure 3.1

Figure 9.1 shows that medically related direct and indirect, organisational and social causes are responsible for the high MMR in Bangladesh. The Bangladesh government has taken various steps only for addressing both medically-related direct and indirect factors. These steps are piecemeal solutions and ineffective in curtailing high MMR. So the study proposes both short-term and permanent measures that may increase mother's access to primary, mainly maternal, healthcare services which ultimately helps to achieve the target of the 5th MDG.

This chapter has contributed to the development of the ideas that community-based low costs interventions are contextually appropriate for developing countries with resources constraints, help reduce class-based inequity and empower pregnant mothers. This chapter has provided answers to the 5th sub-research question (to what extent do contextual [social, political, economic and organisational] factors support the introduction of skilled in place of the traditional birth attendant [TBA] system? That is, whether the bio-social approach will be more productive than the bio-medical?) The socio-economic condition in Bangladesh still supports the involvement of LLHWs, particularly TBAs, in normal delivery cases and bio-social model is more appropriate for reaching the target of the 5th MDG.

The next chapter will explore the positive experience in maternal health which Nepal and Sri Lanka have already set. Lessons can be drawn by Bangladesh to achieve the MMR at a similar level since all three countries have similar socio-economic conditions.

Chapter Ten: Lessons from Other Developing Nations—Nepal and Sri Lanka

10.1. Introduction

Many countries have been able to reduce high maternal mortality rate (MMR) by using a variety of different models of care. For instance, the USA is providing hospital-based comprehensive maternal health care (MHC) services, while Denmark, Norway, Sweden and The Netherlands are providing domiciliary services. Bangladesh (albeit only in the Matlab region to a limited extent), Cuba, Egypt, India (only Tamil Nadu and Gujarat provinces), Iran, Jamaica, Malaysia, Nepal, Thailand and Sri Lanka have adopted different strategies, such as increasing the proportion of skilled birth attendants (SBAs) and upgrading education and training of local level health workers for achieving the target (Amery, 2009; de Bernis *et al.* 2003: 40; Hussein *et al.* 2011).

Bangladesh has achieved nationwide but slow progress in maternal health although the MMR in certain areas, such as Matlab and urban slums, dropped significantly due to community-based interventions. It has been asserted that achieving the 5th MDG for Bangladesh is a challenge, but not out of reach (Arman, 2010; *bdnews24*, January 29, 2011; Chowdhury *et al.* 2011; Koehlmoos *et al.* 2011; Moral, 2010; Moral, 2011a; Nasreen *et al.* 2011). Among South Asian countries, Nepal and Sri Lanka are have made better progress towards achieving this goal, while Bangladesh is lagging behind.

Many studies[102] considered different factors that reduced MMR in Sri Lanka, such as a well-executed family planning (FP) program, a substantial degree of female autonomy, the development of midwifery-based maternal health system supported by appropriate policies, the establishment of a

[102] Caldwell, 1986; Campbell, 2001; 2003; Centre-for-Global-Development, 2008; Danel & Rivera, 2003; Koblinsky & Campbell, 2003; Mavalankar *et al.* 2007; Rosenfield *et al.* 2007; Senanayake, 1998.

vital registration system and of an efficient coordination between all levels of care, government commitment to improving education and women's health, long-term planning (in some cases 20-50 years in length), and socialistic political (strong political support from health ministries and central government) and liberal religious (Buddhist) ideologies. Similarly, in the context of Nepal, a number of studies[103] identified factors that helped decrease MMR. These included administration of Misoprostol at the community level, continuous increasing of female education and health budget, expansion of MHC services through an integrated approach, improvement of conditions for women, inclusion of reproductive health as a human right in the interim constitution, legalisation of abortion, massive improvement in urban areas, migration of families from rural, hill, or mountainous to urban areas, reduction of the total fertility rate (TFR) and strong safe motherhood and SBA policies.

The main reason for selecting these two countries among other South Asian countries is that Sri Lanka is its way to reach the 5th MDG target whereas Nepal is expected to approximately reach the target. Still Bangladesh has high MMR compared with these two countries, though all these three countries—Bangladesh, Nepal and Sri Lanka—are situated in the South Asian region and they all have many similarities in terms of socio-economic indicators. Success stories of these two countries have led me to explore how these countries are able to obtain the target and why Bangladesh is lagging behind.

The main objective of this chapter is therefore to explore the factors that have worked behind the relative success in Sri Lanka and Nepal, compared to Bangladesh. The first two parts deal with the overall MHC systems in Sri Lanka and Nepal and in particular mothers' accessibility to services within them. The third part highlights a comparison between the three countries, which is followed by indicating lessons we can have from Sri Lanka and Nepal. The final part draws a summary.

[103] Bhandari *et al.* 2011; Dev *et al.* 2008; Dhakal, 2007; Hussein *et al.* 2011; NPC, 2010; Oxfam-Deutchland, 2011; Suwal, 2008.

10.2. SRI LANKA

10.2.1. Background of Sri Lanka

Sri Lanka is an island of 65,610 sq. km located off the southern coast of India. The population is 21.3 million with a growth rate of 0.9 percent. Most of the people live in rural areas where commercial and other non-substantial activities are always available. It is a multi-ethnic society: 74 percent are *Sinhalase* followed by *Tamils* (18%), Muslims (7%) and other ethnic groups (1%). In terms of religious groupings, Buddhists account for the majority (69%), while the rest are Hindus (15%), Christians (8%) and Muslims (7%). The country is administratively divided into eight provinces, 25 districts and 302 divisional secretary areas. Each province is headed by a governor nominated by the central government and the provincial council comprises of elected representatives. Politically, Sri Lanka has a semi-presidential democratic system. The president, a supreme executive authority, and the parliament members are directly elected by votes of people (Caldwell, 1986; Fernando, 2000: 14; United-States-State-Department, 2011). The GDP per person is about US$ 4243 and around 1.8 percent of GDP is spent on healthcare, of which, 0.23% is for maternal and child health (MCH). The adult literacy rate for females and males is 89.7 and 92.6 percent respectively (Senenayake *et al.* 2011: 78; UNDP, 2010).

Two major political parties i.e., the United National Party and Sri Lanka Freedom Party ruled the country alternately from 1948 to 2004. In January 2004, a coalition between the Sri Lanka Freedom Party and Janatha Vimukthi Peramuna (people's liberation front), known as the United People's Freedom Alliance was formed and it served as the ruling government party on many occasions. Thus, the country has been able to maintain political stability with some exceptions since independence.

Unlike the rest of the South Asian countries, the Sri Lankan political elites have ruled their people espousing democratic practices and modernisation strategies. Apparently, mutual understanding and prevailing political culture make politicians more accountable to people and ensuring people's participation in democracy has brought positive results in social development (United-States-State-Department, 2011; Wilson, 1974). All successive governments, influenced by socialistic principles to some extent, adopted the mantra of 'providing healthcare services' as a human right and prioritised healthcare provision (Campbell, 2001).

10.2.2. Expansion of female education

Sri Lanka has had a long history of significant social reforms in education. There were some temple-based schools which taught monks and some lay persons and whose pupils were mainly males. As Buddha advocated the female right to enlightenment and ordained some female monks during his lifetime, this idea appears to have had an important effect in the expansion of female education and improvement of women's position in society. By understanding and respecting people's inclination to education, all colonial rulers provided support for expanding educational facilities. For instance, the Portuguese built schools associated with churches; the Dutch established parish schools; and the British introduced both fee-paying English-medium and free vernacular schools. All colonial and subsequent governments have emphasised moral education and hygienic practices. A rural scheme of education, established in the 1930s, proposed local needs-based programs for students completing eight years schooling. Free education up to the university level for all was initiated in 1947 (Caldwell, 1986: 188-89; Senanayake, 1998: 114; Wilson, 1974). Gradually, the number of schools significantly increased everywhere, particularly in the remotest areas, making schools available at people's doorsteps (Alailima, 2000: 45). All these factors (Buddhist philosophy, colonial support to education expansion, the announcement of free education and making educational facilities available) created a conducive environment for girls' education. This has resulted in girls

outnumbering boys in schools. The ratio of girls to boys at primary, secondary and tertiary levels is 99, 105.7 and 187 respectively (DoC&S, 2009).

Growing female education has contributed to reducing TFR (from 5 in 1963 to 2.3 by 1993), increasing female marriage age (24.8 in 1987 while it was 18.3 years in 1901) abetting teenage pregnancies, providing more access to both print and electronic media that make women aware of their health, and increasing contraceptive prevalence rate (CPR, from 59.6 in 1986 to 65.5 in 1993) (Gunaserera & Wijesinghe, 1996: 769; Senenayake *et al.* 2011: 78). All these positive changes may have increased and improved healthcare services, eventually contributing to the reduction of MMR (Fernando *et al.* 2003: 94).

10.2.3. Increasing female autonomy

Women's position in society has been highly valued due to predominant Buddhist practices (Senanayake, 1998: 114). For this reason, males appear not to create any obstacle for females making contact with the outside world. This religious principle helps women take up education thereby creating awareness among them about seeking healthcare services during pregnancy and appropriate healthcare behaviour. This in-built awareness encourages mothers to use available MHC services as much as possible, which may ultimately reduce maternal mortality and morbidity (MMM) (Caldwell, 1986). It has been claimed that women in Sri Lanka have greater autonomy in making decisions about seeking healthcare services (Pieris & Caldwell, 1997: 180). According to the *Human Development Report* (HDR) of 2009, Sri Lanka's rank in gender-related development index and gender empowered measures was 83 among 155 countries and 98 among 109 respectively (UNDP, 2009). In 2010, around three-quarters of females were satisfied with their freedom of choice and 38 percent of females had formal employment (UNDP, 2010).

10.2.4. Origin and development of family planning

The Family Planning Association of Sri Lanka started providing FP services in certain limited areas of Colombo municipality from 1953 with the specific objective of ensuring family welfare by reducing maternal and infant mortality and malnutrition. At the beginning, the Association faced difficulties. However, realising the importance of FP, the government recognised their activities in 1958 and signed a bilateral agreement with the Royal Government of Sweden for conducting a pilot project whose aims were to investigate the attitude of people towards and prospects of FP. The project found a dramatic decline of birth rates and a positive attitude of people to FP. It also observed that the FP activities could be integrated with MCH services, already widely spread throughout the country. High population growth was reported in the ten-year plan of 1959 and a labour force survey of 1960. Based on this, the government adopted FP as a national policy in 1965 (Silva de & Wickramasuriya, 2001: 12-13). By 2009, more than 68 percent married women practised FP (Marie-Stopes-International, 2009; UNFPA-Asia, 2009).

10.2.5. Health policy and healthcare service delivery systems

10.2.5.1. Historical development

A rudimentary western medicine-based public health system was introduced for protecting the expatriate administrators from epidemic disease during the early period of the British rule (Bjorkman, 1985). The Colombo medical school was established in 1870. Charles De Soysa donated a home, known as 'DeSoysa Lying-in Home' for providing MHC services in 1879. At the same time a maternity hospital was established. The first training for midwives started in 1881. In 1887, an enactment passed which began forcing all midwives to be registered. In 1902, the Register General's Annual Report began to highlight maternal mortality and the Department of Public Health in the Colombo municipality was established. The first ante-natal clinic was built up in DeSoysa hospital in

1921. All these efforts laid the foundations for ensuring safe motherhood in the country (Mavalankar *et al.* 2007; Senanayake, 1998; Silva & Wickramasuriya, 2001). Meanwhile, the first health unit, comprising a physician, nurses, midwives and a sanitary inspector was established in 1926. It was thought that the unit placed more emphasis on preventive healthcare services. However, in reality, it covered curative or obstetric care. By the end of the 1930s, midwives became efficient in rendering effective MHC services under the supervision of a unit physician (Caldwell, 1986: 195). From 1931, special attention was given to healthcare services for the rural population. Accordingly, maternity homes, central dispensaries, rural and cottage hospitals started to be built up and training was given to medical, nursing and midwifery staff. Since 1906, midwives have been deployed for both domiciliary and institutional care (Koblinsky *et al.* 1999: 403). The participation of NGOs in this sector was encouraged from as early as the pre-independence era.

After independence, staff of both curative and preventive services initially provided MCH services through a new division namely 'MCH' within the health ministry. A special committee was also formed in 1960 for investigating maternal deaths. In the meantime, a full-time MCH medical officer was appointed in 1961 and seven years later a separate organisational structure—the Maternal and Child Health Bureau (later known as 'the Family Health Bureau')—was created for coordinating and monitoring MCH services (Senanayake, 1998: 115-6; Senenayake *et al.* 2011). Blood transfusion facilities were also made available from the 1950s. Training was given to public health midwives (PHMs) for the oral administration of Ergometrine (Fernando *et al.* 2003).

10.2.5.2. The current situation

Healthcare delivery systems for maternal, newborn and child health are organised at four different levels: central, provincial, district and divisional level. The director general of health services and deputy director general-public health services are responsible for providing family healthcare services at the central level. The provincial director of health services has total responsibility to

provide family health services at both field and institutional levels. The medical officer of MCH and the divisional director of health services or medical officer of health at district and divisional levels respectively supervise, monitor and evaluate services provided in an area with a population of 50,000 to 100,000. Among many categories of staff, the PHM is the key field level health worker who provides family health services for a population of approximately 3,000-4,000. The immediate supervising officers—the supervising public health midwives and public health nursing sister—usually monitor their activities (WHO, 2005: 73). A huge number of institutional facilities are available for providing pregnancy and delivery-related services[104].

No sanctioned posts for doctors and midwives in remotest areas remain vacant because of a rigorous systematic posting and transfer policy. The government also monitors whether the employees stay at their designated posts and deliver free services. Furthermore, the government ensures basic needs of staff and their families and provides opportunities for career advancement. There is strict supervision and monitoring systems at different levels for ensuring accountability and quality of work (Mavalankar *et al.* 2007: 11).

10.2.5.3. Midwifery services

Midwifery services have been available since 1906 (de Bernis *et al.* 2003: 41; Mavalankar *et al.* 2007). From 1928, training of the PHM, staying in community and providing ante-natal, natal and postnatal care began (Mavalankar *et al.* 2007: 10). At the beginning, the training period spanned 18 months with frequent changes to the training module. At the beginning of the scheme, trainees

[104] There are 510 government medical institutions throughout the country; 98 percent of which have facilities providing obstetric care services. There also are 45 hospitals with specialist obstetricians in which complicated patients are transferred by ambulance. In 1993, 254,754 of 298, 657 live births took place in government institutions. There were 78 obstetricians working as government employees and the ratio of per obstetrician was 3829 live births. One community midwife can serve approximately 3000-5000 people. The community midwives are able to register three-quarters of pregnancies; all complicated cases identified by them are referred to institutions with obstetricians for delivery (Gunaserera & Wijesinghe, 1996: 769; Koblinsky *et al.* 1999: 403).

spent the first year at the De Soysa Lying in home and the last six months at a health unit. At present, each trainee spends the first year in a nursing school and the next six months in a field training area. In order to qualify for final examination, trainees are supposed to observe 10 normal deliveries, conduct 20 normal deliveries under supervision and assist five abnormal deliveries. They also need to look after 25 normal and 10 sick babies to get qualified (Pathmanathan *et al.* 2003: 132).

The midwives are multi-faceted workers. They play a vital role in pre-pregnancy, pregnancy and post-pregnancy periods. All newly married couples are registered in the 'eligible couples register.' This compulsory registration system provides midwives opportunities to provide immunisation for rubella, assess nutrition status, screen for medical disorder and delay pregnancy if necessary. As of 2007, 97 percent newly married couples were registered. The same percentage of pregnant mothers had made visits for ante-natal care (ANC) services. The PHM generally provides the ANC services at clients' homes (Senenayake *et al.* 2011: 84).

The efficiency of midwives in delivering effective MHC services has been known since the inception of midwifery training. A World Bank Mission in 1952 observed,

> There are 113 maternity homes in the rural areas, sometimes located in out-of-the-way places. Practically everywhere one goes, be it a provincial, district, or rural hospital or maternity home, there are a large number of waiting maternity patients and like other hospital cases they are fed and treated free of charge (Pathmanathan *et al.* 2003: 115-16).

It also observed that mothers came to hospitals before the estimated date of delivery owing to either lack of transportation facilities or the difficulty of managing transports to reach facility centres at night (Pathmanathan, et al. 2003). Like this Mission, others noticed the same situation: most of the MHC workers are well trained but low cost midwives. They are highly dedicated to their work and are highly supervised by the nurse-midwife who receive support from a small group of medical doctors (Centre-for-Global-Development, 2008: 8; Mavalankar *et al.* 2007: 11).

10.2.5.4. Healthcare policy and plans

A nutrition policy, developed in 1986, preceded the formulation of a perspective plan for health development (1995-2004) in 1994 and the formation of an inter-sectoral task force for formulating a national population and reproductive health policy (henceforth Policy) and an action plan immediately after the International Conference on Population and Development (ICPD) held in Cairo the same year. A NHP was finally adopted in 1996. The main aim of the policy was to improve quality of life and increase life expectancy by reducing preventable causes of deaths. The Policy, adopted in 1997, set eight goals, including safe motherhood, to be achieved within 10 years. One health master plan (2007-16) with five strategic objectives[105]was also formulated. A national health promotion policy was drafted in 2009 that gave more emphasis to five areas[106] to be developed further. The nutrition policy is supposed to be updated in 2013 and revised in 2018 (De Silva *et al.* 2003; Hardee *et al.* 2004; Ministry of Health, 2009; Ministry of Healthcare and Nutrition, 2010; Samarage, 2006).

10.2.5.5. Increasing the availability of and accessibility to maternal healthcare services

All these efforts, such as the establishment of maternity care hospitals, expansion of midwifery training and services, and the continued commitment of both colonial and post-independent governments to improving maternal health, have contributed to the increase of mothers' accessibility to MHC services. For instance, a healthcare delivery unit and free government care delivery centre can be located within a 5 km radius from any home. In addition, 93 percent of people have easy access to primary health care (PHC) services (Gunasekera *et al.* 1996: 1162). The number of trained midwives increased significantly during the last six decades—from 347 in 1941 to 5000 in

[105] Empowering community for maintaining and promoting their health, improving comprehensive healthcare service delivery, strengthening stewardship and management, improving the management of human resources for health and improving finance mobilisation, allocation and utilisation.
[106] Building healthy public policies, creating supportive environments for health, strengthening community actions, developing personal skills and reorienting health services.

1989, while the figure for 2007 was 8,995. This increment resulted in high coverage of SBAs. The proportion of births assisted by SBAs reached 99.5 percent in 2007 from 40 percent in 1948. By 2006, one unit comprehensive emergency obstetric care (CEmOC) facility was available for 460,000 people which is over the recommendation of UNICEF, WHO and UNFPA[107] (one unit for 500,000) (Mavalankar *et al.* 2007; Pathmanathan *et al.* 2003: 31; Senenayake *et al.* 2011: 80). It has thus been claimed that all deliveries have taken place in institutional settings, particularly in tertiary hospitals (UNFPA-Asia, 2009; Womendeliver, n.d). Of these, 92 percent are in government hospitals (Thresia & Mohindra, 2011b: 10).

10.2.6. Other developmental efforts

The post-independence governments continued the initiatives taken just before independence, such as universal free education up to university level, food subsidies, and delivering healthcare services at grass roots level, that helped in gaining tremendous improvement in health, including maternal health (Herath, 2001: 5). The following section highlights these efforts.

10.2.6.1. Civil registration system

Sri Lanka has had an improved civil registration system since 1867. The system started recording maternal deaths from around 1900 (Centre-for-Global-Development, 2008: 3). Maternal deaths were reviewed for finding out preventable factors and suggesting possible measures at central and district levels quarterly and annually respectively in the 1980s. In the meantime, maternal death was declared a noticeable event in 1989 that has made the system more robust (Mavalankar *et al.* 2007: 10).

[107] United Nations International Children's Emergency Fund (UNICEF), World Health Organisation (WHO), and United Nations Fund for Population (UNFPA).

10.2.6.2. Food subsidies

The Food Commissioner's Department, established in 1942, took an initiative for providing 2.5 pounds of rice per week per person at subsidised rates. Though the scheme never targeted mothers and children, as has been argued, it helped fill-up nutrient deficiency of all family members, including females, to improve MCH status. However, the scheme has experienced many changes in subsequent decades and inputs have significantly minimised.

10.2.6.3. Food supplementation programs

The Food Commissioner's Department with assistance from the Department of Medical Services introduced a milk-feeding scheme in the mid 1940s whose main aim was to improve the nutritional status of pregnant women and pre-school children. During the past four decades, the scheme continued to provide a food supplement based on corn and soya to pregnant and lactating mothers.

10.2.6.4. Maternity benefit ordinance

Maternity benefit ordinance was enacted in 1939, which allowed all employed women except casual employees to enjoy maternity leaves with pay for six weeks. It was revised in 1946 and 1952 and allowed the above benefits to all employed women irrespective of their job status. Further revisions made in 1978 and 1986 included some benefits for the infant and young children (Fernando *et al.* 2003: 94).

Sri Lanka has better maternal health status because it has liberal political and religious (Buddhist) ideologies, long-term health policies and plans and has continued developmental efforts for long.

10.3. NEPAL

10.3.1. Background of Nepal

Nepal is a landlocked country covering 147,181 sq. km and has a population of 29.3 million people. It borders China and India. The whole geographic area is divided into three ecological zones: high mountains (35 percent of total area), mid-hill (42 percent) and the flat terrain plains (23 percent). The annual population growth rate is 1.9 percent. The Nepalese population consists of predominantly Hindus (81%), followed by Buddhists (11%), Muslims (4%) and others (4%). Nepal is divided into five development regions, 75 districts, 36 municipalities (16 percent of Nepalese live in urban areas) and 3,995 village development committees (VDCs), each committee has nine wards. GDP is US$ 1049 and the annual growth rate of real GDP is 4.7 percent. Nepal has few natural resources and only 12 percent of land is arable (WHO, 2007). The social structure, to some extent, is feudalistic; property and wealth are in the hands of a few people. The distribution of land, means of the main livelihood for the majority of Nepalese, is much skewed; a small number of people have most of the lands, while the rest have very minimal amounts.

Unlike other South Asian countries, Nepal always remained an independent country, even during the period of colonial expansion. However, it has gone through three distinctive phases: family autocracy for more than a century, the king-led partyless *Panchayat* system for over three decades, and currently, a multi-party democracy (Pyakuryal and Suvedi, 2000). The *Panchayat* system, which commenced in 1960, failed to bring any change in power structure relations. Like the Rana oligarchy--the previous ruling system, a few ruling and upper class people exploited the mass of people with the support of the king. This aristocratic *panchayat* system created opportunities for substantial landowners and aristocrats to hold important positions in the army and administration. By doing so, it developed a strong influence in state affairs and politics (Luitel, 2010: 204). In 1990, all political parties were united to create pressure on the then King to restore democracy.

The political situation became volatile in subsequent years, particularly during the period of the so-called 'People's War (1996-2006)' and thousands of people died. The main objective of the war was to abolish the monarchy and to re-establish democracy. It ended with the signing of a comprehensive peace deal between the Maoists and all political parties in 2006. The communist party of Nepal-Maoist won the constituent assembly elections held in 2008 and a former insurgent leader became the prime minister (Do & Lyer, 2010).

Now the country has a representative democratic government: the president is the head of state and the prime minister is the head of the government. Nepal has been one of the fastest movers in HDI rankings since 1970. In 2010 its rank was 138 out of 177 countries. Free primary education for all was introduced in 1971 and was extended to the secondary level in 2007 (UNDP, 2010; United-States-State-Department, 2010)

10.3.2. Position of women

Like other South Asian countries, social norms and values here are gender biased, especially towards boys/men/sons. Sons are regarded as a high value cash source, while daughters are devalued. This discriminatory social attitude engenders differential treatment for sons and daughters from birth to death; the former always enjoying more privileges in foods, clothing, toys/games, schooling/education, healthcare and in conducting rituals for dead parents, whereas the latter are deprived from all these privileges. Girls/women/daughters are thought of as a liability and someone else's property (Bhattachan, 2001: 93).

Nepalese women therefore have low status in society. Most of the girls are married off before reaching 20. The median age at first marriage among reproductive females is 17.2 in 2006, a moderate rise in five years—16.6 in 2001 (Macro-International-Inc, 2007). Over 40 percent of young married women aged 19 years either have children or are currently pregnant (Bhattarai, 2010). Women have no rights to property, which is attributed to socially determined inheritance rights and

religious rituals that send girls from one clan to another through marriage. Women's property and wealth rights are derived from the marital relationship; a married woman does not have a right to her ancestral property. This system deprives women of their access to productive assets, such as land, credit, and property (Thapaliya, 2001: 20-21). They do not have any opportunity to make decisions about seeking and spending money for healthcare; decisions usually come from men or older females. This lack of decision making power appears to be an important barrier for women in receiving MHC services at the proper time. The long tradition of serving men first with food is one of the reasons for women's malnourishment that contributes to maternal deaths. According to Nepalese cultural norms, "women have to cook and serve food to all other household members before eating themselves and then eat only whatever is left even during pregnancy" (Simkhada *et al.* 2006: 259).

This gender imbalance has serious adverse effects on the development of women as 'human beings'. However, the involvement of donors in development activities after political transformation began in 1950, created opportunities for women and their groups to fight for their rights and raise issues in public. Consequently, huge changes in societal structure have been taking place (Bhattachan, 2001: 87-88). For instance, the continuous improvement of women has been reflected in both HDRs of 2009 and 2010. According to HDR of 2009, Nepal's rank in gender-related development index and gender empowered measures is 119 (among 155 countries) and 83 (of 109) respectively (UNDP, 2009). As of HDR 2010, 57 percent of females were satisfied with their freedom of choice and 66 percent of females had formal employments (UNDP, 2010). Another report, showing the trend of increasing females' enrolments in schools at both primary and secondary levels, participation in formal job markets and in political issues, claims that conditions for women have been improving (NPC, 2010: 6).

10.3.3. Increasing female education

Upper class men had opportunities in receiving education for holding important positions in administration during the Rana regime (1846-1951). The first call for female education was made by Ms. D.D. Acharya Dixit, a Nepalese lady, in her book *Women's Education*, (published in 1914). Three years later, a Women's Committee was formed for bringing reform in the lives of women. However, the first female to pass the school leaving certificate exam was in 1947. At the same time, Nepal *Mahila Sangha* (female association) was founded which urged people of all sectors to come forward to support the advancement of female education. At the end of the Rana regime, there were 310 primary and middle schools, 11 high schools, two colleges, one normal and special school each. It took a long time for the extension of secondary education.

All these efforts have brought a positive change in literacy. The rate rose to 54 percent (2001) from 23 (1981) through 40 percent (1991). But the gender gap in literacy was quite striking in 1981 (male 34 percent and female 12) but improved in 2001 (male 65 percent and female 43). The female enrolment rate at primary, secondary and higher secondary levels in 2001 was 44, 42 and 41 percent respectively (Jha, 2007; Ministry of Education, 2011). The overall adult literacy rate in 2008 is estimated at 63.2 percent (male 74.7% and female 53.1%) (CBS, 2009).

10.3.4. Origin and development of family planning

In 1959, the Family Planning Association of Nepal (henceforth Association), an NGO, took the first step in disseminating information about FP and small family size. The Association, however, did not provide any clinical FP services. In 1965, the government adopted a FP policy to bring equilibrium between population and economic growth. Meanwhile, FP services were integrated with MCH services and, in 1968, a target was set for providing FP services in the Kathmandu valley on a trial basis. At the same time, the family planning and maternal-child health board, later known as the FP/MCH project, a semi-autonomous implementing agency under the Ministry of Health, began

providing national health services. The services were extended to 25 districts the following year. At the same time, the Association began to expand its activities, including opening clinics, engaging physicians for performing sterilisations and inserting IUDs, with the assistance of the International Planned Parenthood Federation though their activities were only in limited areas (CREHPA, 2010; David, 1969; Thapa, 1989).

In 1978, Nepal Contraceptive Retail Sale Company (thereafter Company), a non-profit social marketing organisation, was established to distribute condoms and pills at lower costs through pharmacies and shops. Emphasis on FP was also given in the safe motherhood policy (SMP, 1998) and second long term health plan (SLTHP, 1997-2017). The government adopted a free healthcare policy in 2006, which removed FP-related costs in public facilities and directed the Company to offer FP services for free (CREHPA, 2010). Four main agencies are currently providing FP services across the country[108] (Thapa, 1989). This expansion of FP services makes its methods available which ultimately encourages married couples to use them. The CPR therefore increased from 26 (1996) to 43 percent (2011) (USAID *et al.* 2011).

10.3.5. Health policies and healthcare service delivery systems

10.3.5.1. Health policy and planning

As said earlier, Nepal had an impressive achievement in health in the 1960s and 1970s due to serious importance accorded to the provision of healthcare services in the development plans. Both the First (1956-61) and Second (1962-65) Plans put emphasis on curative care. The Third (1965-70) and Fourth (1970-75) Plans gave more attention to preventive health care. Meanwhile, the first long-

[108] The FP/MCH covers the major part of the country through its 260 clinics and 2,500 *Panchayat*-based health workers. The Integrated Community Health Services Development Project, the second largest provider, renders services through 1,500 village health workers (VHWs) and 350 community leaders who in turn receive assistance from auxiliary health workers available in 745 health posts. The Association is providing services in various parts of the country through its 18 branches. Lastly, the Company distributes pills and condoms in all districts through over 9,000 pharmacies and shops.

term health plan (FLTHP, 1975-1990) was formulated. Its motto was to achieve integrated community health development through PHC. Accordingly, it set a target to reach rural people with comprehensive basic healthcare services. The three subsequent five-year plans[109] continued to give support to fulfilling the objective of the FLTHP. The FLTHP brought integration among some organisations at periphery level by 1987 and at central level by 1990 (WHO, 2007).

After the reinstatement of multi-party democracy in 1990 the government began articulating health issues on a priority basis. Basic and reproductive health issues were included as 'human rights' in the interim constitution (Bhandari *et al.* 2011; DFID, 2011). The government adopted a NHP in 1991 which has been used as a guiding principle in providing healthcare services in an integrated manner. The policy places emphasis on preventive, promotional and curative healthcare services. A National Health Strategy to implement the Policy had two functions—strengthening service delivery and developing institutional capacity and management. On the one hand, the Eighth Five Year Plan (1992-97) proposed activities for fulfilling the objectives set in the Policy. The organisational structure of the Health Ministry was also restructured and the SLTHP was formulated based on community participation and consultation, with the specific objective of improving the health status of disadvantaged groups, such as children, women, ethnic groups, etc. Other objectives include extending specialist services with basic essential care gradually on a cost-effective basis (Adhikari & Maskay, 2004; Malla *et al.* 2011; WHO, 2007).

10.3.5.1.1. Maternal health-related policy and planning

The government prioritised the safe motherhood program immediately after the Nairobi Conference on the safe motherhood in 1987 and institutionalised the PHC approach in 1991. The NHP considered safe motherhood as a major component of PHC and proposed the setting up of the program on a priority basis. Accordingly, the Safe Motherhood Plan of Action (1994-97) was

[109] The Fifth (1975-80), Sixth (1980-85), and Seventh Five Year Plan (1985-90).

declared. The Policy also declared the Nepal Red Cross Society, which started its journey in 1966, as a sole agent in organising blood transfusion-related activities. Two years later, the government approved a national policy on blood transfusion-related services. Social movements placed pressure on the government to adopt a policy[110].

To further strengthen maternity care, the SMP had set targets for expanding FP services and building better technical capacity for all MHC workers and strong referral systems for emergency obstetric care (EmOC). For implementing it properly, the national safe motherhood long term plan (2002-17), later known as the National Safe Motherhood and Newborn Health Long Term Plan (2006-17), was formulated. In 2006, the government formulated and adopted a National Policy on Skilled Birth Attendants supplementary to the SMP for addressing one indicator[111] of the 5th MDG and revised safe blood policy for improving EmOC. The principal objective of this policy is to make sufficient numbers of SBAs available at PHC centres (henceforth PHCCs) with the necessary support system. Short, medium and long-term strategies were developed for increasing the numbers of SBAs. Giving in-service training to doctors, nurses and auxiliary nurse midwives is a short-term measure. Restricting pre-service training of the Auxiliary Nurse Midwife course—midwifery for 18 months and general nursing for 6 months—is a mid-term strategy. The long-term measures include introducing a pre-service direct entry course for midwives (Malla *et al.* 2011; MoH&P, 2010; Society, n.d; SSMP, 2010; WHO, 2007).

In collaboration with the Institute of Medicine, the support to safe motherhood program (SSMP, 2005-10) developed an in-service SBA training strategy in 2009. All medical and nursing schools

[110] The government had initiated a national SMP in 1993. Three years later, it found that tension arose between government and other organizations about implementation of the SMP. A few numbers of organizations made a coalition for mobilizing local communities who could start the safe motherhood activities. In this regard, more than 50,000 women gathered on 8th March, 1996 to observe the International Women's Day, declared the 'National Clean Delivery Day.' Following the day, local political leaders and government officials began to advocate for clean delivery and the then prime minister's wife, a new mother, became the honorary president of the coalition. In addition to demonstration, many organizations introduced new services including 'Clean Home Delivery Kits' and maternity care. Many articles on this issue and press release were published in the daily newspapers. Following the impact of observance of international women's day at community level, the 1997 international Women's Day, observed in Nepal, raised the slogan, 'Safe Motherhood-It is a family responsibility' (Levitt & Russell, 1998).

[111] Increasing the proportion of childbirth with skilled birth attendance.

associated with the Institute of Medicine agreed to follow this strategy and ensured that all graduates from 2011 would be able to work as SBAs without having to undergo any further training (SSMP, 2010). The external development partners, such as WHO, UNFPA, UNICEF, USAID, and GTZ,[112] are continuously providing financial support for maternal health-related programs (WHO, 2005). In 2010, the Ministry of Health and Population drafted a Safe Motherhood Bill. It defines women's rights to quality reproductive, maternal and newborn healthcare and formulates a legal framework enabling them to exercise their rights (MoH&P, 2010).

10.3.5.1.1.1. Maternal health-related programs

The government introduced a nation-wide program called the Safe Delivery Incentive Program (SDIP) in 2005 for addressing geographical, cultural and financial 'demand-side' access barriers to safe delivery services. The program pays a cash incentive for pregnant mothers delivering their babies in the facility centres to offset transportation costs, though the amount of cash varies across regions; lower for the flatlands, a little higher for the hills and higher in the mountainous regions. The program also provides financial incentives to birth attendants irrespective of where baby births take place (home or facility centres). The government began implementing the Aama Surakchhya program under SDIP in 2009, which abolished fees for safe delivery in public and at some private facilities. It also determined a flat fee for public facilities dealing with complicated cases. An evaluation study conducted in six districts found there was a positive impact of this program; 44 percent deliveries occurred in facility centres and the poor were reported to have had a higher utilisation rate. In 2008, a collaborative safe blood program between the government and other donor agencies, particularly the Red Cross, was introduced for supplying blood to hospitals and

[112] The USA aid (USAID), German Assistance (GTZ)

PHCCs to support skilled staff in managing complicated cases (Bhandari *et al.* 2011: 27; Ensor *et al.* 2008: 6; Malla *et al.* 2011: 65; NPC, 2010; Simkhada *et al.* 2006: 261; Witter *et al.* 2011:ii85-86).

10.3.5.1.1.2. Safe abortion services

Realising the impact of unsafe abortion on MMM, the government legalised abortion in 2002. This legislation has been enforced in public health facilities since 2004. Termination of pregnancy is thus a legal act and a pregnant woman can make a decision for abortion in these circumstances: the gestation period is not over 12 weeks; the gestation period could be up to 18 weeks in case of rape and incest; women's voluntary consent is needed; and abortion is legal in case of a life threatening situation or the possibility of disabled child. However, sex selective abortion is illegal. Safe abortion services are available in all district hospitals and over 400, 000 women received benefits up to June 2010. In addition, comprehensive abortion care is now available in 331 listed sites which cover all districts (Bhandari *et al.* 2011: 27-28; Uprety, 2005: 139). It has been claimed that MMR has dropped by a half since the legalisation (Womendeliver, n.d).

10.3.5.2. Healthcare service delivery

Healthcare was mostly provided by family members and some traditional indigenous practitioners, such as herbalists, spiritualists, and so on, until the withdrawal of family autocratic rule. In 1951 when a revolution restored the monarchy and an international airport opened in Kathmandu, a number of Christian missions, foundations and trusts came with western medical services. A small number of missionary and government hospitals were established in the Kathmandu valley from 1951. Twelve Nepalese physicians with foreign training in allopathic medicine, and a small number of paramedical assistants for dispensing medication, shooting injections and dressing wounds were available at the same time. The first nursing school was set up in Bir hospital in 1954 with assistance

from the WHO. Until 1960, only 13 nurses had graduated. The Health Assistant Training School began its journey in 1955 for providing basic healthcare in rural areas. The auxiliary nurse midwives program started in 1962 with the establishment of a training school at Bharatpur. Indian and other foreign drug companies promoted allopathic medicine during the same period. India, the USA & USSR, China, and the WHO provided assistance to the Nepalese health sector in the 1960s and the country gained impressive results in healthcare by developing vertical programs—targeted at eradicating malaria, leprosy, tuberculosis and smallpox—and expanding hospital-based services in the following two decades (WHO, 2007).

At present, the Ministry of Health has the sole responsibility of providing healthcare services. It has three departments: Health Services, Drug Administration and *Ayurveda*. The former two provide allopathic and the latter provides traditional medications. The Department of Health Services is further divided into several divisions[113] and five centres[114] as well as basically provides healthcare services at five levels: sub-health post (SHP) or health post, PHCC, district hospital, zonal, sub-regional and regional hospital, and national hospital. The first two levels of health centres provide PHC services; district, zonal, sub-regional and regional hospitals are the secondary referral units; and national hospitals are tertiary centres (Bhattarai, 2010; Furuta & Salway, 2006; WHO, 2005).

There are five central hospitals, which basically render services at tertiary level and five regional health services directorates—regional hospital, training centre, laboratory, medical store and tuberculosis centre—which monitor and supervise healthcare services at the regional level. Each regional headquarter has one regional hospital. In addition, there are 11 zonal hospitals. Most central and regional hospitals have CEmOC centres and maternity departments (with Obstetrician/Gynaecologist positions, anaesthesia, and nurses). At the district level, the number of district public health offices, district hospitals and district health offices is 14, 74 and 61 respectively.

[113] Family health, child health, epidemiology and disease control.
[114] National Centre for AIDS and STD control, National Public Health Laboratory and National Health Education, Information and Communication.

The district hospitals serve as referral centres for complicated patients that health posts usually fail to handle. In that case, they refer it to either regional or zonal hospitals. Out of 74 district hospitals, 14 and 38 have basic and comprehensive EmOC services respectively. All district hospitals however provide ANC, delivery and post-natal care services. The NHP proposed to set up one SHP in each VDC and one PHCC in each electoral constituency. Among 205 electoral constituencies, there are 120 PHCCs, comprising one doctor, four nurses, and 15 beds, including three for maternity, and 17 health centres. In between electoral constituency and VDC levels, there are 747 health posts. The total number of SHP at VDC level is 3195. All health centres at primary level provide both ante- and post-natal services. Only 42 PHCCs and some health posts have BEmOC and baby delivery facilities. There is at least one PHC centre (SHP, health post or PHCC) in each village with a population of 3,000 to 20,000.

Female Community Health Volunteers (FCHVs)[115] is one of the main sources of receiving basic healthcare services at community level. Each health post has a sanctioned five staff, while PHCC has larger staff numbers. A female MCH worker, an auxiliary field worker (AFW) and a VHW run the SHP. The VHWs and FCHVs provide outreach services (Ailuogwemhe *et al.* 2005: 3; Dev *et al.* 2008: 14; Niraula, 1994: 152). The number of FCHVs, midwives, PHC outreach workers, registered nurses and doctors is 47,000, 14,000, 13,507, 15,127, and 3,944 respectively (Bhattarai, 2010: 320).

[115] The volunteer program started in 1988. With the support of USAID and other donors, such as UNFPA, UNICEF, the government has been training and supplying the volunteers on a regular basis. The policy has been set to make one volunteer in each village available. The mother's group (an active women's group) selects the dedicated women in the community as volunteers. Their training duration is 18 days. Their main functions are to disseminate educational information and to provide services at community level. They hold group meetings in each month in which critical health information on the significance of hand washing to prevent disease, how to prevent excessive bleedings during delivery, and what to do in an emergency is explained through flipcharts and demonstration. In between monthly meetings, villages can seek their services from their homes marked with a distinctive sign hanging over the door. They also make home calls. After introduction of the community-based maternal neonatal care program, their activities have been broadened to include providing ANC knowledge, promoting mothers for seeking care from an SBA, making pregnant mothers aware of the birth preparedness and complication readiness package initiative (Malla *et al.* 2011; USGHI, 2011).

10.2.5.3. Addressing health manpower shortage

Nepal has a shortage of health manpower; this shortage is acute in rural areas. For instance, in 2006, 0.1 pharmacists, 2 doctors, 2 nurses and 6.3 CHWs per 10,000 people were available. Emigration is one of the leading causes for this health personnel shortage. The recently introduced compulsory rural service (CRS) after graduation has been effective in retaining health manpower in remote and rural areas. A rural family practice residency was also introduced in 1982. However, both failed to be popular among medical graduates in the early stages. Following a massive campaign about the program, the number of residency program candidates rose to 12 in 1998. Currently, eight of 10 larger hospitals have residency training centres. The main criteria for being a fellow of the program are having a rural background and signing a bond for working at least three years in rural areas after graduation. The program also offers both financial and non-financial benefits (promotion at upper level after spending three years in rural areas) (Ailuogwemhe *et al.* 2005; Ghimire, 2009; Shankar, 2010).

A group of dedicated Nepalese physicians established a new health sciences university, Patan Academy of Health Sciences with a specific aim of training health professionals for services in the rural areas. Sixty students are admitted each year to the MBBS program. Applicants with rural background, socially disadvantaged groups and those with work experience for at least two years in rural areas as health assistants are given priority. Twenty and 40 percent of students receive full and partial scholarships respectively and the rest have to pay full fees. One fourth of the curriculum deals with community health sciences. Many medical schools associated with the Institute of Medicine have re-oriented their curriculum and training to equip students for rural practice (Shankar, 2010).

10.3.5.3. Increasing the availability of and accessibility to healthcare services

The SSMP has a long-term effect in expanding MHC services. For instance, the number of BEmOC and CEmOC increased from 18 and 34 to 105 and 94 respectively between 2004/5 and 2009/10. The area coverage also improved at 33 from 24 districts at the same said time. This improvement resulted in increasing mothers' access to the EmOC and Caesarean section by 2-3 and 2-9 percent each year respectively. In addition, between 2004/5 and 2009/10, the numbers of health posts and SHPs providing 24 hour maternity services, including delivery, rose up to over 400 and 137 respectively from almost zero. Since January 2007, about 1,300 doctors, nurses and auxiliary nurse midwives have received SBA training, 95 and 75 nurses got anaesthetics assistant and operation theatre techniques and management training correspondingly. Furthermore, the SSMP extended its assistance for expanding SBA training sites, urged for advanced training, and gave its opinion on introducing the Diploma in Gynaecology and Obstetrics course in 2010 (Bhandari *et al.* 2011: 27; SSMP, 2010).

This expansion of services resulted in increasing mothers' accessibility to services. The percentage of pregnant mothers having four ANC visits increased to 55 percent in 2008/09 from 39 percent in 2004/05. The institutional (facility centre) delivery rate also rose by 12 percent between those periods (SSMP, 2010). The percentage of rural women's accessibility to SBAs also increased at 28.8 in 2009 which could be the result of CRS, higher than the national average of 19 percent in 2005. It also reports that two percent of SHPs, 45 percent of health posts, seven percent of PHCCs and all district hospitals are providing healthcare services all time (24/7) (NPC, 2010: 48). The MMR decreased because of increasing availability of the FCHVs at community level (Malla *et al.* 2011: 64).

10.3.6. Other developments

The democratic government has been continuing with some policies and legislation which are still working as guidelines for monitoring the progress of social advancement and increasing local people's involvement in development. They are as follows:

10.3.6.1. Strong local participation in development

The Local Self Governance Act of 1999 has provided tremendous power to local authorities at village, municipality and district levels, in planning and coordinating all developmental activities within their territories. This Act appears to have had greater influence in bringing social justice and equality. It also ensures direct participation of all local groups in developmental activities.

10.3.6.2. Better civil registration system

The Village *Panchayat* Act of 1962 firstly forced village *panchayats* to keep record of vital events, such as birth and death, in their localities. Later, the Vital Registration Act was passed in 1976 which empowered local officials to provide birth, death and marriage certificates. Registration for vital events started in the following year. By 1990, this system was introduced in all districts. Even the Local Self Government Act (1999) inspired local bodies to keep records of vital events in their respective areas (WHO, 2007).

10.3.6.3. Strong monitoring system

The MMM Study (2008-09) reported that most of the deaths occurred in health facilities (42%) followed by at home (41%), during transit to facility (7%), between facilities (5%) and others (5%). This investigation helps make a proposal for evidence-based interventions for preventing further

maternal deaths. The audit report on maternal deaths, sent to the Department of Health Services from district hospitals, also helps identify the causes and the contributing factors of institutional maternal deaths (Malla *et al.* 2011: 63-66).

10.4. Similarities and differences among three countries

The table (next page) indicates similarities and differences among countries discussed, based on the above discussion and earlier chapters highlighting the Bangladesh scenario:

Table 10.1 Similarities and differences among three countries

Indicators	**Bangladesh**	**Nepal**	**Sri Lanka**
Geographic area	144,000 Sq Km	147,181	65,610
Total population	152.5 million	29.3	21.3
Population growth rate	1.07	1.9	0.9
Gross domestic product (GDP)	US$ 1241	US$ 1049	US$ 4243
Religion (majority)	Islam	Hindu	Buddhist
Position of women	Improving	Improving	Nearly equal
Mean age of female at marriage	20.31	17.2	24.8
Free educational facilities for females	Higher secondary level	Secondary level	University level
Female literacy	53.8%	53.1%	89.7%
Political system	Parliamentary democracy	Representative democracy	Semi-presidential democracy
Political ideology	Democratic	Socialistic	Socialistic
Colonial legacy	Yes	No	Yes
Health-related policies, Plans and programs			
Health Policy	No (fragmented)	Yes (integrated)	Yes (integrated)
Length of planning	Short-term	Long-term	Long-term
Maternal health policy	No	Yes	No
Institutional delivery	Increasing	Increasing	Mostly done
Blood transfusion facilities	Not up to standard	Improving	Very good
Inclusion of reproductive health in constitution	No	Yes	Yes
Legalisation of abortion	No	Yes	No
Massive midwifery based programs	No	Yes	Yes
Family planning program	Stalling	Improving	Improving
Community-based programs	Limited areas	Widely spread	Widely spread
Vital registration system	No	Yes	Yes
Localisation of policy	No	Yes	Yes

10.5. Lessons learned

Sri Lanka seems to be an egalitarian society due to liberal political and religious principles. Political leaders always show their interests in the improvement of women status and their health. Driven by human developmentalist perspectives (discussed in Chapter 1), they have given emphasis on human development along with economic prospect. For this reason, the health budget has always been increasing what Shiffman and Okonofua (2007) consider as an indication of good political will. Gender parity there is also higher compared with other South Asian countries, consequently, the female education rate is high and females enjoy tremendous freedom of speech and movement reflecting that they have easy access to both electronic and print media. All these facts make females more aware of seeking appropriate care from the proper centre at the appropriate time.

Maternity services began to be provided from the last quarter of the 19th century. Midwifery services have been available since the first decade of the 20th century. Special attention was given to services for rural people and blood transfusion facilities were available from the 1950s. Community midwives are the front-line health workers who usually register all pregnancies and are able to identify complicated pregnancies that need to be referred. There has been strong supervision of their services and they have full dedication to their services. No sanctioned posts were found vacant due to rigorous and efficient administration, which reflects that there is a strong monitoring system. There is also a strong monitoring system of maternal deaths through the civil registration system.

A NHP and other previous and subsequent health-related policies, adopted in a systematic way, have given more emphasis on providing healthcare, particularly MCH, services at people's doorsteps, consequently, there are more PHCCs and BEmOC centres than the international standard. The same percent of pregnant mothers are able to deliver babies in institutional settings which ensure the

safety and security of the expectant mothers and babies. That means the medicalisation of pregnancy and childbirth (MoP&C), what was detailed in Chapter 2, has taken place on a massive scale. Besides these, other social development initiatives, such as food subsidies and supplementation and maternity benefits, give ample opportunity for females, especially poor, to have sufficient food that may protect pregnant mothers from malnutrition that ultimately contributes to the reduction of MMM.

The lesson we gain from Sri Lanka is that the education, empowerment and autonomy of females, the provision of MHC services, including BEOC and blood transfusion facilities, in a convenient place resulting from different policies, strong political will and monitoring mechanisms, and social development appear to have made greater contributions to the achievement of the current MMR.

Nepal is a gender-based and feudalistic society. After restoring democracy and introducing various developmental activities, everything is seemingly changing. The provision of basic and reproductive healthcare services is enshrined as people's rights in the interim constitution reflecting that political leaders have good political will to bring improvement to women's lives. All five-year and other development plans put emphasis on healthcare provision. Moreover, the safe motherhood has been considered as an important component of PHC in the NHP which resulted in the creation of many short and long term plans for the safe motherhood. Specific policies relating to the safe motherhood were adopted based on common people's participation. Besides these, the SDIP was introduced for addressing access barriers. Lastly, abortion was legalised.

All these policies and programs are trying to make healthcare services available to the people. Consequently, each village has at least one PHCC and the numbers of health posts and SHPs with 24-hour maternity services have been increasing. Various strategies have been adopted for increasing the number of SBAs. Moreover, CRS has been introduced for retaining SBAs in rural and remotest

areas which has resulted in increasing rural mothers' access to institutional deliveries compared to their counterparts. All maternal deaths have begun to be scrutinised. Necessary actions or remedies have also been made based on the results of scrutiny.

The lesson we gain from Nepal is that it is possible to curtail the high MMR by adopting a NHP and other specific policies relating to safe motherhood, prioritising healthcare provision in all development plans and programs, legalising abortion, taking appropriate strategies to address the shortage of healthcare workforces in rural areas and lastly, monitoring causes of maternal deaths.

10.6. Summary

The Sri Lankan successful experience (MMR below 100) shows that most maternal deaths can be prevented without advanced technology. What is needed is a literate female population, access to health services, including FP, quality ante-and post-natal care, and the political will to succeed (Bergstrom & Goodburn, 2001: 83; Caldwell, 1986: 172; Gunaserera & Wijesinghe, 1996: 769; Meegama, 1969: 301). It also illuminates for us the fact that pregnant mothers prefer having their babies born in hospitals rather than at home if free transportation services for all and better quality care in institutions are available and awareness about the services is developed in the community (Koblinsky *et al.* 1999: 403-04).

In Nepal, the government has been formulating many plans for addressing maternal health issues. These include the SLTHP, three years health plan, safe motherhood program, the National Safe Motherhood Policy (2002-2017), and the neonatal health long term plan (2006-2017). Various strategies have been developed for implementing these plans and programs. Among them, the establishment of health posts, SHPs, PHCCs, providing both B&CEmOC facilities and 24/7 delivery services in all districts, birth preparedness package, introduction of financial incentives for

institutional delivery and legalisation of abortion are important ones. All these steps seem to have contributed to increasing the number of institutional deliveries which may bring high MMR to an acceptable level (Bhurtel, 2011; Satgainya, 2009). That indicates, the MoP&C seems to be occurring at a moderate level.

Bangladesh has begun to introduce MoP&C on a massive scale since the last two decades, consequently, MMR has been reducing slowly compared with the other two countries. That hints that speeding-up the MoP&C is the only way to achieve the expected reduction in MMR in Bangladesh. Bangladesh therefore needs to increase the supply of maternal health-related facilities as much as possible. In addition, the lesson other developing countries, including Bangladesh, can learn from the experience of both Nepal and Sri Lanka is that it would be possible to contain high MMR if maternal services are provided by midwives backed up by doctors and a good referral system and supported by moderate public expenditures, health policies with appropriate long-term plans and strategies are adopted, the government has good political will to prioritise health issues and continue the existing policy and plans of the predecessors with necessary amendments (Mavalankar *et al.* 2007: 18). This chapter has contributed to the development of ideas about how a developing country with resource constraints can ensure the availability of and accessibility to primary, mainly maternal, healthcare services. This has been in response to the 6th sub-research question (What lessons, in formulating best practice, can Bangladesh learn from other developing countries?).

How this study unfolded and what messages it has produced will be encapsulated in the final chapter. How the positive experiences of Nepal and Sri Lanka can be replicated in local context and the health-related policies and plans these two countries have adopted will also be highlighted.

Chapter Eleven: Conclusions

11.1. Introduction

Women and their health issues have for long been neglected in traditional and patriarchal societies. High maternal mortality rate (MMR) in these societies, including Bangladesh, indicates greater gender discrimination because societal and gender biased health seeking behaviours hardly pay attention to maternal health and decisions about seeking healthcare services mainly come from males. Many vertical medical interventions are available for addressing this issue, but gender issues have not been taken seriously into consideration when these have been proposed. So, exploring how high MMR can be reduced from sociological and public health perspectives can contribute to the development of a bio-social approach to improving maternal health. Many studies indicating how high MMR in developing countries can be reduced from mainstream development perspectives are available, whereas research dealing with the same issue from sociological and public health perspectives are rare.

Two groups of mainstream development theorists have for long been proposing two different strategies to reduce the burden of diseases around the world. On the one hand, economic growth-oriented theorists believe that sound economic growth creates more job opportunities that ultimately give people greater economic solvency to purchase healthcare services from the market. On the other hand, human developmentalists argue that the state should provide basic services, including healthcare, for strengthening people's capabilities. The former hardly give attention to gender and related health issues that are connected to economic growth, while the latter highlight these issues[116]. Gender and maternal health care (MHC) became the talking points at many

[116] See chapter 1 for details

international conferences[117] and developing countries were urged to take necessary steps to help women improve their health situation. However, evidence from developing countries reveals that expected progress has not happened there, the most important reasons being demographically driven health policies with the specific objective of lowering population growth and the lack of a target to be achieved within a particular time frame (Freedman *et al.* 2003; Maine & Rosenfield, 1999). Both developed and developing countries thus felt the urgent need to set a target to reduce MMR to be achieved by a particular time. Representatives of around 190 countries, including Bangladesh, attended the UN Millennium Summit in 2000 and agreed to meet the Millennium Development Goals (MDGs), of which, one (5th) is targeted at improving maternal health.

In Bangladesh, a developing country, multiple forms of healthcare services, such as homeopathic, allopathic and folk-medicine, are available and different organisations i.e., government, non-government and private, provide healthcare services. Initially, people generally go to unqualified health care providers (UHCPs) for treatment and later, after experiencing the ineffectiveness of treatment or medication provided by UHCPs, they seek attention from qualified health care providers (QHCPs), such as doctors and nurses. The same scenario is evident in pregnancy cases. Pregnant mothers first make contact with UHCPs, particularly traditional birth attendants (TBAs), who are available and easy to approach at any time. When labour pain is overdue or other complications like excessive bleeding in pregnant mothers occur, they are forced to seek care from QHCPs. The long gap between the decision for seeking comprehensive healthcare services and arriving at the proper facility centre appears to have contributed to increasing the possibility of the mother's death. To address this gap and reduce high MMR, the availability of skilled manpower and institutional facilities is imperative. Like other developing countries, MMR in Bangladesh is high and the Bangladesh government has constantly been making efforts to reach pregnant mothers with comprehensive delivery services. This study has thus made an attempt to investigate how far poor

[117] The most important are Human Rights Conference (Teheran, 1968), International Conference on Population and Development (ICPD, Mexico, 1984), Safe Motherhood Initiatives (SMIs, Nairobi, 1987), ICPD+10 (Cairo, 1994), the 4th World Conference on Women (Beijing, 1995), Cairo+5 (Cairo, 1999).

pregnant mothers can have access to primary, particularly maternal, healthcare services. Making the distinction between rural and urban areas in terms of availability of and accessibility to primary, mainly maternal, healthcare services and identifying the drawbacks of health-related policies have also been the other main objectives. By investigating these, it has been possible to sort out loopholes in health policies and the healthcare service delivery mechanism (HSDM) and to suggest possible solutions.

The study developed two analytical frameworks—one centres on the debate concerning different interventions and another is on health sector reform policy (HSRP) issues—based on the literature reviewed. Both primary and secondary sources of data were used to meet the objectives of this study. Triangulation of method (questionnaire interviews of service users and providers, focus group discussions [FGDs] and direct observations) was employed to collect primary data. From among the seven administrative divisions in the country, one division (Rajshahi) was selected due to its having moderately higher MMR and lower proportion of births attended by skilled birth attendants (SBAs). Within this division, three areas (Rajshahi, Bogra and Shapahar) were selected purposively to find out the differences in availability of and accessibility to services between rural and urban areas. Area and multi-stage sampling methods were also used for area and site selections respectively. Mothers who delivered at least one baby during the past ten years were interviewed. The total number of respondents was 160 [Bogra (60), Rajshahi (60) and Shapahar (40)]. Most of the interviewees were below 35 years of age (94.3%) and married below the age of 20 (90%). Forty-four percent and three-quarters live below the US$2 and multi-dimensionally defined poverty line respectively. Heads of the centres visited by most respondents for healthcare services were interviewed. Eight FGDs (two each in Bogra and Shapahar and four in Rajshahi), each comprising of on average five persons, were conducted. Many articles, reports (published & unpublished) and books were consulted in complementing and substantiating the arguments in the thesis.

This chapter begins with highlighting the trend in the availability of and accessibility to primary, mainly maternal, healthcare services, that is, to discern whether this has been increasing or not, while the second part discusses intervention-related policy debates in the local context. The third details a review of the research which has been undertaken to critically explore poor women's availability of and accessibility to MHC services in Bangladesh. It includes brief summaries of two analytical frameworks that have been developed to undertake the study. It then provides a summary of the empirical findings in each conceptual framework. The next part of this chapter suggests a number of policy recommendations which is followed by indicating the contributions the study has made in the academic field. The penultimate part acknowledges limitations of the study, whereas the final provides pointers to further research in this field and makes some final remarks.

11.2. Increasing the availability of and accessibility to primary (maternal) healthcare services

The availability of healthcare services has been measured by using the parameter (the density of physicians, nurses, and infrastructural facilities, such as bed and technology, per 10,000 populations) for many decades. This study measures it by using three indicators, such as healthcare services, health infrastructure and healthcare providers. In addition, this part highlights accessibility to services and its barriers.

11.2.1. Healthcare services

The government has been increasing the number of hospitals each year since independence. Yet this has not been enough and thus hospital numbers in the private sector have been increasing more than in the public sector since the last decade. This incremental growth in both sectors has resulted in an overall increase in the number of hospital beds per population. However, essential healthcare services are available more in the private (including NGOs) sector and urban locations than in the public sector and rural areas. Private sector hospitals/clinics can easily recruit QHCPs who are likely

to live in urban areas where the scope for career advancement is wider and other facilities for them and their family members are readily available. NGOs prefer urban to rural areas to easily reach targeted disadvantaged segments with necessary services. A good communication system facilitates NGO activities.

There has also been some debate regarding the availability of MHC services, whether there has been any increase or not. Some have claimed that there has been an increase, while others inform that the increment has been marginal (Dewan, nd; Islam *et al.* 2005; Mridha *et al.* 2009; *Daily-Star*, March 1, 2012). Comprehensive MHC services in the public sector are also available at upazila and upper levels. More than half of government and three-quarters of private specialised hospitals are available in urban areas (Chowdhury, 2004 in Rahman *et al.* 2005). Similarly, this study found that basic healthcare facilities like immunisation for mother and child and advice for family planning (FP) were available in rural areas, whereas along with these, ultrasound, operation, X-ray and all types of tests relating to pregnancy were available in urban areas.

11.2.2. Health Infrastructure

Technology, technicians, electricity and water supply are not available in rural areas. Two important factors seem to have contributed to this dismal condition. One is that most health-related policies fail to address local problems. The other is that the government has given less attention to rural health infrastructural development. A very poor communication systems and lack of ambulatory facilities create potential barriers to referring complicated cases from lower to upper levels. The healthcare infrastructure is so poor that it discourages people from going to rural health centres for treatment unless an emergency occurs. On the contrary, all facilities are readily available in urban areas due to urban-centric and top-down health policies which focus on urban problems and encourage non-state organisations to set up healthcare centres there. Here, complicated cases can easily be transferred from one local hospital or clinic to bigger and/or specialised hospitals due to good road communication and ambulatory services. Healthcare infrastructure in the private and

NGO sector is much more attractive, vis-a-vis government sector because policy makers have little understanding of the requirements of public hospitals.

11.2.3. Health personnel

The number of QHCPs in the public sector has increased, yet the country has a huge shortage of qualified health personnel. This shortage creates a huge demand for services from the private sector or public-private joint ventures. Beside these, there are other factors, such as locality and fee payment options which make them more popular in rural areas.

Bangladesh is one of the few countries where doctors outnumber nurses. The social structure (perception about nursing being 'a female-oriented low level profession'), social stigma (associating nursing with prostitution), and religious principles and beliefs dissuade middle and higher income class parents from letting their female children adopt this profession. Poor women, the destitute and the widowed are forced to take up this profession. All these factors may have led to the gradual increase in the number of nurses or midwives. The failure of the government to fill vacant posts caused by complicated and much time consuming recruitment procedures and migration of skilled nurses to overseas and urban destinations are the main causes of not meeting growing demands for healthcare services in all regions, particularly rural areas. Furthermore, the lack of a comprehensive national health policy (NHP) has been a key deterrent to proving directions for increasing health personnel, including the filling of vacant positions.

MHC services are also jeopardised by the shortage of specialised doctors in gynaecology and obstetrics. The government did take some steps like providing training to physicians (MBBS)[118] on obstetrics and to lower level health workers (LLHWs) on safe and clean delivery which have contributed to the improvement of the coverage of MHC services, but despite a gradual increase in the numbers of specialised doctors, the government has failed to develop enough QHCPs and deploy

[118] Bachelor of Medicine and Bachelor of Surgery.

them in remote areas (Mridha *et al.* 2009). Nonetheless, urban mothers received services from doctors, while rural mothers from LLHWs.

QHCPs are serving urban people more than rural ones. Government staff in urban areas are generally sincere and doing work under tight supervison. On the other hand, supervising officers, living in urban areas, face difficulties in monitoring the activities of rural health workers who often remain absent. In some cases, doctors serving in rural areas manage their transfers to urban centres by using their political connections.

11.2.4. Accessibility to services

People's access to primary, particularly maternal, healthcare services has been increasing since 1990. The study has shown that a large percentage of mothers have been to their nearest centres at least once for seeking MHC services during their last pregnancy. This indicates that accessibility has been increasing. Like prenatal services, mothers' access to facility centres for delivering their babies and for professional care during the delivery period increased.

On the other hand, despite this increasing accessibility to ANC, the availability of drugs and essential injections has not increased much. Different health-related and behavioural change communication (BCC) programs, the presence of one-stop centres, increasing women's education and empowerment are the main causes for improved ANC (Hossain, A. H. M. K. 2010), while non-availability of tetanus injections at government hospitals and the perceived idea that injected pregnant mothers do not need them again are reasons for its low utilisation rate.

Urban mothers have more access to MHC services. The availability of different organisations which provided healthcare services, of QHCPs, of good road and telephone communications, and of information regarding where, when, and why pregnant mothers should seek care, and of better quality services appear to be main causes for increasing accessibility of urban mothers. The urban Primary Health Care Project (UPHCP) has been successful in taking healthcare services to people's

doorsteps and in rendering better quality care, ensuring the good behaviour of staff, better infrastructure and good practices, compared to the government sector that actually benefits urban people, particularly mothers, by increasing their access to these services. Comprehensive MHC services for rural mothers with complications depend on good transportation facilities, the availability of money required for treatment, presence of relatives in towns and of knowledge of clinics. Obviously, more affluent and better educated mothers have more access to MHC services compared to poor women with little or no education. Extra-official fees in government hospitals dissuade poor pregnant women from going there in emergency situations. The data from this study has indicated that, out of 60 mothers delivering babies at facility centres, almost all (92%) are from urban areas, 19 of whom delivered their babies through the Caesarean mode. No rural mothers had Caesarean delivery.

11.2.5. Barriers to access

The study found that as a substantial number of mothers interviewed have healthcare centres within their reach and no more than four children, physical distance to healthcare centre and gender parity seem to have played no vital role in the utilisation of primary, particularly maternal, healthcare services. However, mothers still face many barriers, which are classified into four sections (Chapter 3).

- **Socio-cultural:** The perception about pregnancy and childbirth, socio-cultural interpretations, practices, prescriptions and taboos and gender-based life style practices.
- **Organisational:** Disorganised healthcare systems, harsh behaviour of health staff, low quality of care and in/exclusion errors.
- **Financial:** Higher costs and unofficial fees.
- **Physical:** Inadequate health infrastructure and bad road communication.

All these barriers are explained as follows.

11.2.5.1. Explanation

The perception that pregnancy and childbirth are normal events in the female life cycle and provide dignity to women and the supposed notion that healthcare services are not needed unless an emergency arises, dissuade people from seeking medical care. Socio-cultural prescriptions and interpretation play vital roles in identifying the condition of pregnant women—wrong diagnoses place pregnant mothers' lives at greater risks. Also, socio-cultural practices and taboos, such as discouraging females from going to schools reflecting low level female literacy, economic dependence, inability to talk about health-related problems with other family members, lack of power to make decisions on seeking care, restriction to go outside of homes, limited diet, observing seclusion, going to natal homes, using bamboo reeds for cutting the umbilical cord, and having males as service providers, appear to be barriers to seeking healthcare services from outside. Besides these, disorganised healthcare systems due to lack of comprehensive policies, community participation in health policy formulation, and government commitments to implement whatever policies exist resulting of no strong political will, conflicting administrative functions within the Health Ministry, segmented, contradictory and overlapping policies or programs, and policy discontinuity[119] create confusion about the efficiency of public healthcare provision. This discourages people from approaching government hospitals for treatment.

However, the long travel time to government and limited NGOs services, prolonged waiting time for treatment owing to unusual hours of health centres, higher fees for service, associated costs, inadequate health infrastructure, harsh behaviour of government staff and unhygienic practices appear to delay rural mothers deciding on seeking and receiving care at the right time. This affects the normal progression of pregnancy. Only gender parity, resulting from increased developmental activities of women, wide media coverage of gender equality, higher female enrolment rate in

[119] See Chapter 6 for details.

schools, involvement of women in decision making and strong social bonds in rural areas can be useful in improving the access problem in the health sector. On the other hand, urban mothers are not always fully affected by all these barriers but, nonetheless since most of them live in slums and have rural backgrounds, these factors can have some relevance for the accessibility of MHC services to them.

11.2.6. Snapshot of the whole discussion

In sum, the availability of and accessibility to primary, particularly maternal, healthcare services has been improving. But this improvement varies from rural to urban areas and between rich and poor classes. Rural, poor and uneducated women are deprived of essential services making their lives difficult compared to urban, the wealthy and better educated women. NGOs penetration in service delivery is higher in urban than rural areas (chapter 7) and better quality services are available in urban and NGO sectors compared to rural and public sectors (chapter 8). Physical, socio-economic and organisational factors contribute to this deprivation. That means, the present existing healthcare systems do not appear to be conducive to the improvement of maternal health (answer to the first sub-research question). All mothers face organisational, physical and socio-economic access barriers but these vary across class and region (responses to the second, third and fourth sub-research questions).

Bangladesh does not follow any economic thought[120] strictly. Sometimes, it gives more emphasis to either economic growth or human development or both. Also, it depends on different factors, such as political vision and mission, influence of different policy sub-systems, developing issues in different forums, and so on as to which approach between economic prosperity and increasing human capabilities gets more attention. The influence of external forces, such as donor agencies and

[120] The whole range of economic thought is broadly divided into four sections: classical (role of the state in development is less), Keynesian (the government should play a vital role in development), neo-liberal (the market should be the focal point of all developments) and welfare (the government should provide essential services, including healthcare, for increasing human capabilities). See Chapter 1 for details.

different international forums, in setting health policy agenda has been considerable (Chapter 6). In this regard, the adoption of the FP program for attracting donor's funds and again stalling it due to the diversion of the donors' attention from FP to other issues are good examples. As a result, population numbers have been increasing, rather than decreasing, which may bring adverse effects on economic growth and the improvement of human lives.

However, the UPHCP, a donor aid dependent project, is able to provide better quality, albeit limited, free healthcare services compared to what the government sector provides. Comprehensive MHC services are costlier in Bangladesh, sometimes dissuading poor women from receiving treatment. The success of joint state-NGO sector efforts reflects that services can be made effective and efficient if they are treated as commodities, as neo-liberal thinkers have long argued. In this regard, the role of the private sector, booming since the 1990s, in rendering expensive and quality services in urban areas is immense. The failure of the state in meeting huge demands for services and providing quality services due to political, financial and other reasons has created huge demands for private healthcare services. Only rich and middle class women are probably able to use private MHC services that help improve their health.

By contrast, poor women in urban areas fully depend on either government or NGOs provision of limited free healthcare services. If the project (UPHCP) stops in future for either lack of donor funds or for failing to increase its revenue, how will poor women's demands for MHC services be met? Most probably, this will place the poor women in a more vulnerable position by driving them towards markets for the same services—this could be a hidden agenda behind donor's support—compared to the non-poor women because the latter have other options. Unless the government brings the project into revenue, the increasing accessibility of urban women, particularly poor, to MHC services will be affected. So it is imperative to strengthen the public healthcare system to meet the growing demands of urban poor women for MHC.

The availability of healthcare providers in rural areas has not increased as the government discontinued measures taken earlier, such as the *Palli Chikitshaks* scheme, which was resisted by QHCPs. Additionally, the government has procrastinated in giving due attention to rural health issues. Although a recent policy on tightening monitoring of the activities of government healthcare providers has been drafted (*Prothom-Alo*, June 22, 2012), no financial incentives and other benefits have been announced to retain QHCPs in rural areas. All these factors deprive rural women from receiving better quality services. Nepal has been able to increase rural women's accessibility to SBA services by forcing QHCPs to serve rural areas for a certain period through compulsory rural service (CRS) scheme (chapter 10). It is thus not possible to increase mother's access to primary (particularly maternal) healthcare services in rural as well as urban areas without addressing financial and organisational problems. Chowdhury *et al.* (2006) have rightly indicated that cultural and community barriers can be overcome once services are made free and physically accessible.

Political leaders, policy makers and the bureaucrats should be generous about increasing the health budget for enhancing service quality in the public sector and should show their willingness to take up services from there. Their acceptance of government healthcare services will make healthcare providers more attentive to patients and will encourage them to run the centres efficiently. Even in some cases, when they are deprived of due services, they can create pressure on the government to make essential drugs and equipment available in government hospitals. All these efforts will help enhance the quality of care in the public sector. This will ultimately contribute to the improvement of maternal health of rural and poor women. It will also offset regional- and class-based inequity in the availability of and accessibility to primary, particularly maternal, healthcare services. Strong political will is therefore imperative to boost funding, augment the number of semi-skilled healthcare providers in rural areas, adopt a NHP, formulate maternal health-related policies and programs in an integrated way, and implement monitoring mechanisms to stop corruption in drug management, counter the culture of claiming unofficial fees, and obviate private practice by government doctors as Nepal and Sri Lanka have shown us.

Sri Lankan political leaders, driven by human developmental perspectives, always place more emphasis on increasing human capabilities along with economic prosperity. They try to consistently increase the health budget in what Shiffman and Okonofua (2007) consider an indicator of good political will. They have also shown their sincerity to adopt a NHP and strong monitoring mechanism, formulate and implement maternal health-related policies and programs in a cohesive way, to make MHC services, including basic emergency obstetric care (BEmOC) and blood transfusion facilities, available in a convenient place, and take on social policies, such as food subsidies and maternity benefits, that encourage pregnant mothers to up take maternity services. All these efforts help Sri Lanka in going below 100 MMR. The Nepalese government has also shown strong political will to formulate a robust NHP, enshrine healthcare service provision as a human right in the interim constitution, adopt many long and short term plans in an integrated way for implementing all safe motherhood-related policies and legalise abortion. All these endeavours have resulted in increasing mothers' access to MHC services which ultimately helps in approximately reaching the target set by the 5th MDG[121].

11.3. Limited effectiveness of different medical interventions

In Bangladesh, the medicalisation of pregnancy and childbirth (MoP&C) began two decades back. However, this process has penetrated more into urban-based highly educated middle- and upper-income families rather than to the entire population. Poor women have thus largely been deprived of advantages emerging from different interventions, such as ante-natal care (ANC), SBAs, institutional, and Caesarean delivery. Social norms, taboos, and religious beliefs and practices deter poor women from seeking institutional and professional care. How far these interventions are accepted at the community level and how effective these have been are discussed here.

[121] See Chapter 10 for details

11.3.1. Ante-natal care

Expectant mothers' use of ANC services is considered as a matter of routine to confirm pregnancy and the stage it is in, consult about procedures to be followed, discover the position of the baby and the estimated date of delivery. Certainly there are regional and generational differences in accepting and actually obtaining ANC services. Rich, urban and young women are more likely to secure these services, while poor, little educated and rural people would have fewer opportunities to do so. Ignorance, socio-cultural practices and taboos, the perception that ANC is curative not preventive, unwillingness to use medical services and familial complexities have led to this difference in attitude. Pregnant mothers and their families with access to ANC are encouraged to take the right steps to ensure the safe delivery of each child, such as bringing mothers to referral centres at the proper time. However, these services are not effective in identifying complicated cases and creating awareness of the dangers of pregnancy. Long waiting periods, undergoing the same clinical procedures more than once, listening to general rather than specific advice relating to each pregnancy and the prioritisation of institutional as opposed to home delivery appear to have created mistrust among patients and their families about the efficacy of these services.

11.3.2. Traditional versus skilled birth attendants

There has been a growing trend in accepting professional care at delivery time due to greater awareness caused by the improving position of women in society. As a result, medically trained providers are being used more frequently. Mothers' age, education, gender parity and costs are influencing people's selection of birth attendants. This study found that mothers still prefer TBAs due to improved hygienic practices, adequate treatment and cordial behaviour. However, TBA role in referrals is questionable. Some of their practices have had detrimental effects on maternal health. Urban mothers use SBAs services because of their wide availability. The skilful treatment they provide and friendly behaviour make SBAs popular at the community level in urban centres. On the

other hand, their urban background, use of western-based practices and high overhead costs in employing them in remote and rural areas are potential barriers. Bangladesh introduced SBAs in the last decade. Women's preference for TBAs in the rural areas is significant and this indicates that the training of TBAs has had greater impact in service provisioning though it was stalled in the 1990s. Like the positive effects of TBA training, we might need to wait further to find out the positive impact of the SBA strategy on maternal health.

11.3.3. Home versus facility centre-based delivery

Pregnant mothers still have greater preference for home, rather than institutional delivery. Socio-cultural prescriptions (shyness in asking anyone for help, presence of male doctors who are not culturally allowed to examine the private parts of females, apprehension about the institutional environment and uneasy birthing procedures), low level of education, poor economic condition, long home–hospital distances, poor quality of care at facility centres, including discourteous attitudes of health personnel, inadequate hospital facilities and drug and blood supplies, and higher costs deter pregnant women from seeking institutional delivery unless delivery-related complications arise. Urban women with better education and autonomy are more likely to seek institutional delivery facilities.

11.3.4. Caesarean versus normal delivery

An increasing rise in Caesarean delivery in Bangladesh is noticeable. Doctors sometimes prefer Caesarean to offset negligence claims, to earn more money within a limited time, to avoid risks in vaginal delivery resulting from a lack of their confidence in taking proper decisions and in order to retain sole authority to make decisions in a paternalistic way. In some cases, urban, rich and better educated mothers request Caesarean due to the continuously changing role and status of women in society, lack of physical fitness, avoiding tensions about labour pain and increased accessibility to ANC services. The politics of doctors, particularly obstetricians, and some women's preferences for

Caesarean, make some mothers dependent on medicine and technology in what Illich calls clinical aitrogenesis[122] and disempowerment in the childbirth domain (Chapter 2). I found a relationship between residency and educational background for those opting for the Caesarean mode of delivery. Urban mothers have more access to this mode due to the availability of and accessibility to different organisations provided services, high awareness about the consequences of complicated birth and good communication facilities. By contrast, rural women usually never think of going for Caesarean due to high costs and unless an emergency situation develops. Moreover, only 10 percent of illiterate mothers have opted for Caesarean, while the trend among educated mothers in favour of Caesarean is very high. One plausible reason could be that building awareness of health consequences of complicated cases through education influences them to choose the Caesarean mode. However, it should be noted that the increasing Caesarean trend can be a cause for more morbidity and mortality.

11.3.5. Snapshot of the whole discussion

In sum, pregnant mothers still prefer normal delivery at home with a single intervention—the presence of TBAs. However, no particular intervention can be said to be more effective in directly reducing the prevailing high MMR in Bangladesh, as no robust data signifying their effectiveness was available. All these interventions seem to be the reflection of medical ideologies. In other words, bio-medical approach and MoP&C have the greatest influence in adopting these interventions. These interventions are donor driven and based on scientific calculation. So if there is any wrong speculation, pregnant mothers bear the grave consequences. Over-medicalisation of childbirth (higher Caesarean and institutional deliveries) brings substantial effects in some women's lives (chapter 9). These interventions basically make pregnant women passive and used, in some cases, as guineapigs for advancing medical sciences and pharmacology. Their success also depends on infrastructure facilities that require huge amounts of money from both government and individuals.

[122] See Chapter 9 for details

These interventions which have been proposed for all developing countries by following the principle of 'one size fits for all' do not always deliver unless the local contexts are taken into consideration. I have therefore argued that such interventions can successfully be implemented by LLHWs at low costs. In this regard, Bangladesh can adapt lessons not only from Sri Lanka and Nepal but also from other countries, such as Canada, Cuba, Italy, Sweden and the Netherlands. For instance, the Dutch government encourages mothers to deliver babies at home with the support of midwives who are authorised to make decisions about when and whether pregnant mothers should be sent to either hospitals for a short stay or to specialised hospitals (Afsana, 2005; Burcher & Ho, 2002; De Brouwere *et al.*1998). Sri Lanka has introduced midwifery services at mass level and Nepal has started providing training on anaesthesia to LLHWs (chapter 10). This does not mean that Bangladesh has to replicate these exactly for achieving a better result in service delivery system. The good aspects of these lessons and contextually appropriate can be replicated. In this regard, renowned economist and Noble Laureate, Amartya Sen said, "There is much to learn the European experience of delivering medical service with kindness, not for cash" (*Daily-Star*, Februray 21, 2012).

The possible ways to save mother's life and to achieve the target of the 5th MDG are discussed below.

- **Engaging lower level health workers and task shifting**

As Bangladesh has a dire shortage of skilled health personnel and scant financial resources, involving unqualified private practitioners—playing a vital role in people's selection of institutional and professional care—in mainstream healthcare system, providing training to LLHWs on safe and clean delivery, reorienting TBAs training programs and integrating them in formal healthcare systems and task-shifting (engaging non-professional healthcare providers in specialised fields, such as anaesthesia and surgery) are proposed as short-term solutions.

- **Making these interventions popular at community level**

As the poor and the less educated have doubts about the efficacy of services provided by community people, the acceptance of the services of health workers by local political and other leaders and rich women encourages them to go for these services. This could help reduce inequity. Some internationally recognised organisations, such as WHO, oppose low cost interventions though valid reasons for their position are not visible. Although the effects of these interventions are not visible at macro level, some micro studies[123] (Costello, et al. 2006; Mwangi & Warren, 2008) have highlighted their effectiveness.

The community-based low cost interventions do not make pregnant women passive rather these encourage pregnant women to be active during the whole span of pregnancy. These interventions can help mothers deliver babies safely and cleanly, which ultimately protects them from maternal morbidity and mortality. Like the advanced countries, particularly in the USA, where middle class women are advocating midwifery services by considering local constraints of the SBA policy[124], engaging community-based health workers in service delivery is urgent here. However, no interventions are compromised by developing a strong HSDM—ensuring safe delivery and supply of essential drugs, blood, and equipment in emergency—with comprehensive policy back-up, it is possible to achieve a sustainable improvement in primary, particularly maternal, healthcare services. This will make services available at people's doorsteps and increase people's access to ultimately improve maternal health. Experiences from Nepal and Sri Lanka suggest that high MMR can be contained if MHC services are provided by midwives backed up by doctors and a strong referral system (chapter 10). This indicates that Bangladesh still needs well-trained LLHWs, particularly TBAs, and should give emphasis on bio-social approach to improve maternal health (response to the 5th sub-research question). The same lesson Bangladesh can gain from Sri Lanka and Nepal (answer to the 6th sub-research question).

[123] See Chapter 3 for details.
[124] See Chapter 2 for details.

11.4. Review of the study

In Chapter 3, the causes of maternal deaths have been discussed. The causes are of two types—direct[125] and indirect. The latter causes can be either medically-related or societal. Different interventions, such as ANC, Caesarean section in place of vaginal delivery, the presence of SBAs at child delivery, and basic and comprehensive emergency obstetric care (B&CEmOC) have been proposed in different national and international forums for addressing medically-related direct and indirect causes. These interventions were developed in industrialised countries, particularly in the USA and UK, with the growth of the MoP&C generated by patriarchy, capitalism, supremacy of technology over nature, rapid advancements in medicine and pharmaceuticals and obstetrician politics. However, the effectiveness of these vertical interventions depends on back-up services, such as a good referral system and availability of drugs and blood. It has also been argued that no intervention can be effective unless supported by other dependent factors. Robust data corroborates this claim.

Most policy makers favour vertical (specific disease-oriented) interventions as their implementations are easy and results of their implementation can freely be obtained within a short period of time. Very few policy makers address social causes of maternal deaths. Most countries are able to manage high maternal deaths by introducing and implementing public health measures at the macro level. That means, if a country has strong HSDMs, it ensures the availability of skilled health personnel, essential drugs and equipment, and supply of drugs in emergency situations. Also, governmental commitment to keep the health budget continuously robust, reflecting strong political will, means that there is no need to follow piecemeal solutions, which may ultimately weaken the healthcare systems. Europe, North-America and some countries of Asia (e.g., certain parts of Bangladesh [Matlab and Savar], Malaysia, Nepal, Thailand and Sri Lanka) with strong public health systems have

[125] Completely medical-related.

been able to reduce MMR to an acceptable level[126]. Some developing and transitional countries have adopted innovative strategies to solve the acute shortage of SBAs. Congo, Egypt, Honduras, India, Malaysia, Malawi, Mozambique, Nepal, Sri Lanka, Tanzania and Thailand have taken steps for enhancing the skills of LLHWs with proper training and delegating tasks to transferring them from one cadre to another. These strategies are effective as they can easily be applied in the remotest areas and the cost of training nurses and midwives is much lower than that of physicians (Writh, 2008). A team comprising of one midwife and two assistant midwives working together is able to handle sufficient numbers of normal births in any locality (Kobilinsky *et al.* 2006). Midwifery services with a strong HSDM at mass level have been found to be effective in reducing MMR that helps improve maternal health.

I have found that all interventions of the Bangladesh government address both medically-related direct and indirect causes (chapters 8 and 9). Social and organisational reasons (barriers of access to these interventions) have been neglected. No interventions have been effective in reducing MMR independently. By considering the local context, I therefore proposed both short-term (training of LLHWs and task-delegation) and permanent (building a strong integrated healthcare system, adopting a NHP and introducing BCC activities on a massive scale) measures that could help bring better maternal health.

The government has also introduced public private partnership (PPP) as a part of HSRP in both the 2000 and newly proposed (2011) NHP (Chapter 6). However, tension has been developing about the effectiveness of PPPs. Some have argued that accountability, accessibility, efficiency and managerial capacity can be improved, while others have claimed that equity and service quality may deteriorate. Health financing options, such as user fees, fee waiver for the poor, and demand side financing for maternal care, have been introduced. To make these options work, a targeting mechanism needs to be developed for defining the poor eligible for free services. Two types of

[126] See Chapter 3 for details.

errors are likely to occur: the narrow coverage excludes the poor from the benefits of the project which the non-poor can take advantage of. Under coverage leads to exclusion errors, while leakage causes inclusion errors in any project targeting the dispensation of services to the poor free of cost. The imposition of user fees can also cause delay among the poor in making decisions to seek quality care and in creating barrier for them to access MHC services. All these factors (leakage, under-coverage, delay in seeking care and creating inaccessibility for the poor) jeopardise MHC services that may cause MMR to go up.

A PPP venture, like the UPHCP, has been able to increase mothers' access to healthcare by providing better quality services in certain urban areas. They have set up universal, easily accessible and user-friendly centres compared to the government sector (Chapter 8). However, as far as the poorest of the poor is concerned, it has failed to provide due services because of the exclusion syndromes. With the introduction of user fees for comprehensive MHC services, it discourages poor women from going there for treatment. High informal fees, poor quality services and delays in providing care characterise the public sector. Also, higher costs in both public and NGO hospitals associated with Caesarean delivery create huge problems for families with pregnant mothers that need to either borrow money or use up their savings. They also need to work hard or cut down on essential goods to repay borrowed money. All these factors (inclusion error, user and unofficial fees and bad quality services) jeopardise MHC service delivery mechanism and place poor women at great health risk.

11.5. Policy recommendations

This study brings forth certain possible ways for addressing different barriers pregnant mothers face when using healthcare services. These may help improve maternal health and achieve the target of the 5th MDG. All these proposed measures are grouped into four parts; each addressing one type of barrier as mentioned in Chapter 3. These are as follows.

- **Addressing socio-cultural barriers**

1. Socio-cultural practices and taboos create barriers for accessing essential healthcare services and for accepting newly recommended interventions. Unless these restrictions and taboos are broken down by BCC programs at the community level, the degree of acceptability of these interventions does not increase.

2. More social development activities—encouraging females to get married at a later age and to accept FP consequently less pregnancies and deaths—should be introduced in communities.

3. Research suggests that altering social norms could be one of the possible ways to bring about sustained social behaviour patterns. Diffusing the health message through different channels, such as mass media, interpersonal channels, and direct intervention, has been found effective in BCC research.

4. Women should be encouraged to adopt nursing and midwifery professions through different organisational activities.

5. Both state and non-state sectors should come forward with BCC activities at community level so that women and their families become aware about the complications of pregnancy and childbirth and are motivated to seek services at the appropriate time without any delay (Khanum P. *et al.* 2000: 20).

- **Addressing organisational barriers**

1. Bangladesh needs a sound and robust NHP as a guide for a better future.

2. It is imperative to merge two wings within the Health ministry into one strong organisationally-sound body and formulate all programs and projects within its fold.

3. The government should increase blood bank facilities.

4. Only government and limited private training institutes are available for producing health technologists and nurses. They fail to serve demands. The government should set up more training institutes to meet the growing demand for their services.

5. A new cadre 'Health and Family Planning' can be created in the Bangladesh Civil Service for monitoring and managing hospital administration so that many doctors, working as administrators, can easily devote their precious time to clinical services (BHW, 2007).

6. The 'community norm' about MHC should be taken into consideration during maternal health-related policy formulation stages and an intervention is needed to replace the traditional norm 'service not needed' with professional healthcare use (Gayen & Raeside, 2007).

7. Since poor and rural women are highly deprived of due services, the government and other non-state organisations should give special attention to the improvement of health of poor and rural areas.

8. A robust and reliable data management system should be developed. Anybody can easily understand whether the MMR at regional or national level has been reducing or not.

9. At least one improved modern basic healthcare centre should be available at the district level.

- **Addressing financial barriers**

1. The government should increase the coverage of demand side financing scheme so that all women, particularly the poor, can have equal opportunity.

- **Addressing physical barriers**

1. Road communication facilities in rural areas should be improved so that ambulatory services can easily be reachable.

2. As Bangladesh has a good telecommunication network, telemedicine and teleadvice could be useful for minor problems. Though we have costlier telemedicine in a limited extent, it should be made free and available everywhere so that the number of patients with minor ailments can be reduced. This helps service providers to provide better quality healthcare services.

11.6. Contributions of this study

This study has made a contribution to the knowledge on public health, health sociology, development and public policy in the contexts of developing countries, particularly Bangladesh. In terms of the literature on public health, health sociology and development, the study has found that most of the countries having low level MMR give emphasis not only to medical reasons but also on social factors of MMR, including the availability and access problems (Beaglehole & Bonita, 1997; Campbell, 2003; Koblinsky & Campbell, 2003; Loudon, 2000; Maclean, 2005; Mavalankar & Rosenfield, 2005; McAlister & Baskett, 2006). It has also found that many developing countries are lagging behind in the achievement of the targets of the health-related MDGs partly for the failure to address social causes (Ahmed & Cleeve, 2004; Anderson, 2010; Clemens *et al.* 2007; Hainess & Cassels, 2004; Moss, 2010; Sachs, 2005; Vandemoortele, 2002). As found in this study, social and organisational factors are partially responsible for the prevailing high MMR in Bangladesh. As asserted in the study, addressing the bio-medical reasons for high MMR is a limited solution. The complete solution lies on addressing medical, organisational and social causes of high MMR. This study therefore develops a bio-social approach to the improvement of maternal health which is new and important regarding childbirth rhetoric.

A large body of literature on Bangladesh health-related policies is evident in the academic field. However, they discuss and analyse policies in a segmented way. This study synthesised all these and analysed policies and procedures in the light of the standard policy formulation cycle, explained in

the public policy literature. Therefore, alone it is a valuable resource for future research which may be undertaken in the public policy domain.

Many vertical (specific disease-oriented) interventions have been proposed in medical discourse for the reduction of high MMR. These interventions have limited effectiveness in Bangladesh. Exploring different cultural and societal solutions, the study has found that community-based low costs interventions can be useful for Bangladesh on a temporary basis. Because the interventions proposed in this study may be cost effective and may not create further inequities, these have the potential to reduce the gap between the richest and the poorest segments of society in terms of access to MHC services. It has also identified that a disorganised healthcare system resulting from the lack of a coherent NHP is a potential barrier to access to primary, mainly maternal, healthcare services. This study therefore advocates for making healthcare systems stronger by adopting a widely accepted NHP. The would-be strong healthcare service delivery system—ensuring the supply of essential drugs, equipment and blood transfusion facilities—is better for not only maternal health but also other casualties (road accident is a prime one). This study has shown the way how high MMR problem can temporarily or enduringly be reduced.

Lastly, this study contributes to the understanding of local problems as well as national ones. Finding many problems in rural areas and appealing to policy makers to provide due attention to rural problems adds a new perspective in the Bangladesh public health policy domain. Besides these, this study has identified that the PPP model is better in increasing the availability of and accessibility to healthcare services than the state-based model though this achievement is not sustainable for a long duration.

The present study attempted to combine social and bio-medical components as a bio-social approach. The development of a focused bio-social approach towards the improvement of maternal health is therefore a new addition to the literature although many issues or ideas of this approach are sporadic. Analysing Bangladesh health policy in the light of standard policy formulation processes is completely a new endeavour in academic discourse. Regarding health policy in

Bangladesh, no studies have yet attempted to examine the issue in the way it has been dealt with in this study.

11.7. Limitations of the study

This study would have been substantiated if the same numbers of respondents from both urban and rural areas have been interviewed. The findings of this study reflect more the urban scenario compared to the rural one. I only interviewed mothers delivering at least one baby over the last ten years. The study would be more rigorous if it had interviewed mothers who either delivered babies or got admission for delivering them in institutional settings i.e., hospitals. How mothers were treated in hospitals and what types of behaviours pregnant mothers experienced could be observed deeply and could illuminate the real situation of healthcare seeking patients inside hospitals. In addition, different birth conditions are not touched here. A mother needs medical intervention to deliver a premature baby. How mothers react to the stillborn baby is an important aspect and how this traumatised mother recovers physically and mentally has not been focused upon here. The study inadvertently missed interviewing the head of Chelopara health centre, Bogra, and arranging FGDs at Kazla, Rajshahi. The study also failed to confirm whether doctors and TBAs have medical background and training respectively.

The questionnaire used for interviewing mothers did not ask any questions about ante-and post-natal care which have greater links with the use of professional birth assistance and experience of maternal mortality and morbidity. It also failed to ask any questions about the adoption of FP program which is linked to slowing population growth that may ultimately reduce the chance of mothers dying. Finally, it failed to explore health resources, particularly human resources, which are deeply connected with increasing the proportion of SBAs.

Lastly, a highly sophisticated statistical analysis could have been useful for finding out statistically sound causal relationship between different variables. Unfortunately, it was not done due to time constraint and lack of appropriate skill. So the conclusion this study has drawn may seem somewhat tentative or hypothetical.

11.8. Future direction

The study has obviously opened up many vistas in this field that can be researched in future. These are:

1. The clinical side of different interventions can be explored in future to identify their effectiveness.

2. By using figure 6.1, health policy formulation in different countries can be explored and analysed to explore how far these policies are user friendly.

3. All aspects of pregnancy (pre- during and post- delivery) can be researched in future because all these are equally important for reducing high MMR.

4. If Bangladesh is able to achieve the 5^{th} MDG, it would be possible to make comparisons with other countries, such as Nepal and Sri Lanka. This positive experience can be the foundation for further research.

5. Whether trained TBAs are still effective in rendering services can be explored to find out the efficacy of their services in the community.

6. The hypothetically drawn conclusion could be the bench mark for future research which may use advanced statistical techniques to test causal relationship between variables.

7. The performance of different community-based interventions, this study has proposed, particularly CSBA[127], can be further analysed to make sure whether these can be adopted at the macro level.

8. Future studies can make robust comparisons if the same numbers of people from rural and urban areas are interviewed. This will bring out substantial differences between rural and urban areas in terms of accessibility and availability.

9. Being a male, the researcher encountered many problems. Respondents and FGD female participants felt shy in talking about reproductive health and respondents' husbands, in some cases, did not permit their wives to talk privately. Female researchers can undertake the same kind of study without any problems and go the more accurate and in-depth information.

Final Remarks

Addressing bio-medical reasons for high MMR by making the availability of MHC services at people's doorsteps is a partial solution to the entire problem. Culturally and socially embedded root causes of high fertility among poor and certain middle class families, such as early marriage, low educational rate, patriarchal and traditional beliefs and practices, are equally crucial as they are indirectly related to high MMR. The use of the available medical interventions by pregnant women is also a societal and cultural issue. As males in poor families are influential in making decisions on seeking healthcare services due to traditional and patriarchal norms, they sometimes prefer home-based low cost interventions for pregnant mothers in an emergency situation due to various reasons—inability to bear the expenses of visits to government or private hospitals and not being serious about women's lives or health are offcourse prime ones. Building awareness about bad consequences of early and multiple pregnancies through education, BCC activities, print and electronic media is imperative in addressing these causes. Unless we give more emphasis on a bio-social rather than a bio-medical

[127] Community-based skilled birth attendant

approach to improving maternal health by addressing historical, cultural, structural and critical factors, we will not be able to achieve the 5th MDG.

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The New Nation, English daily published from Dhaka.

The Telegraph Weekly, English weekly published from Kathmandu.

Appendices

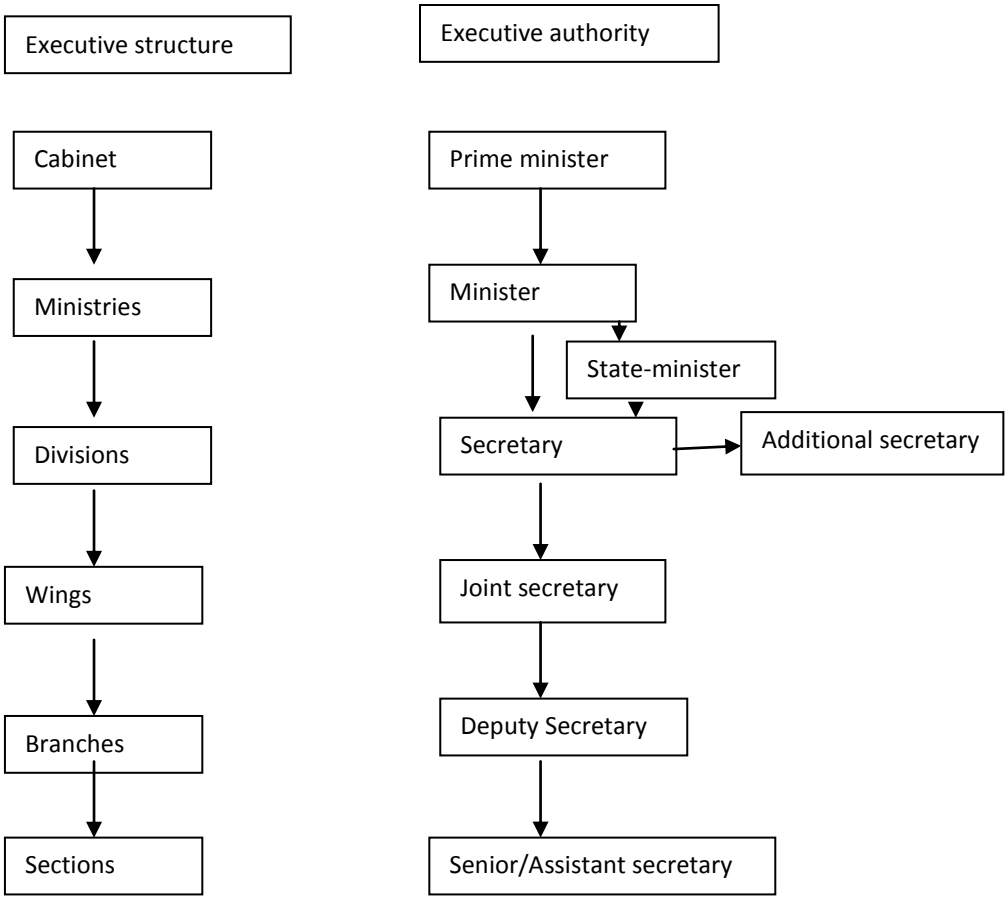
Appendix 1

The following table shows when and where most research has been conducted, who has done the research, what their disciplinary background was, and what methods have been used in order to provide a brief grasp of the reviewed literature.

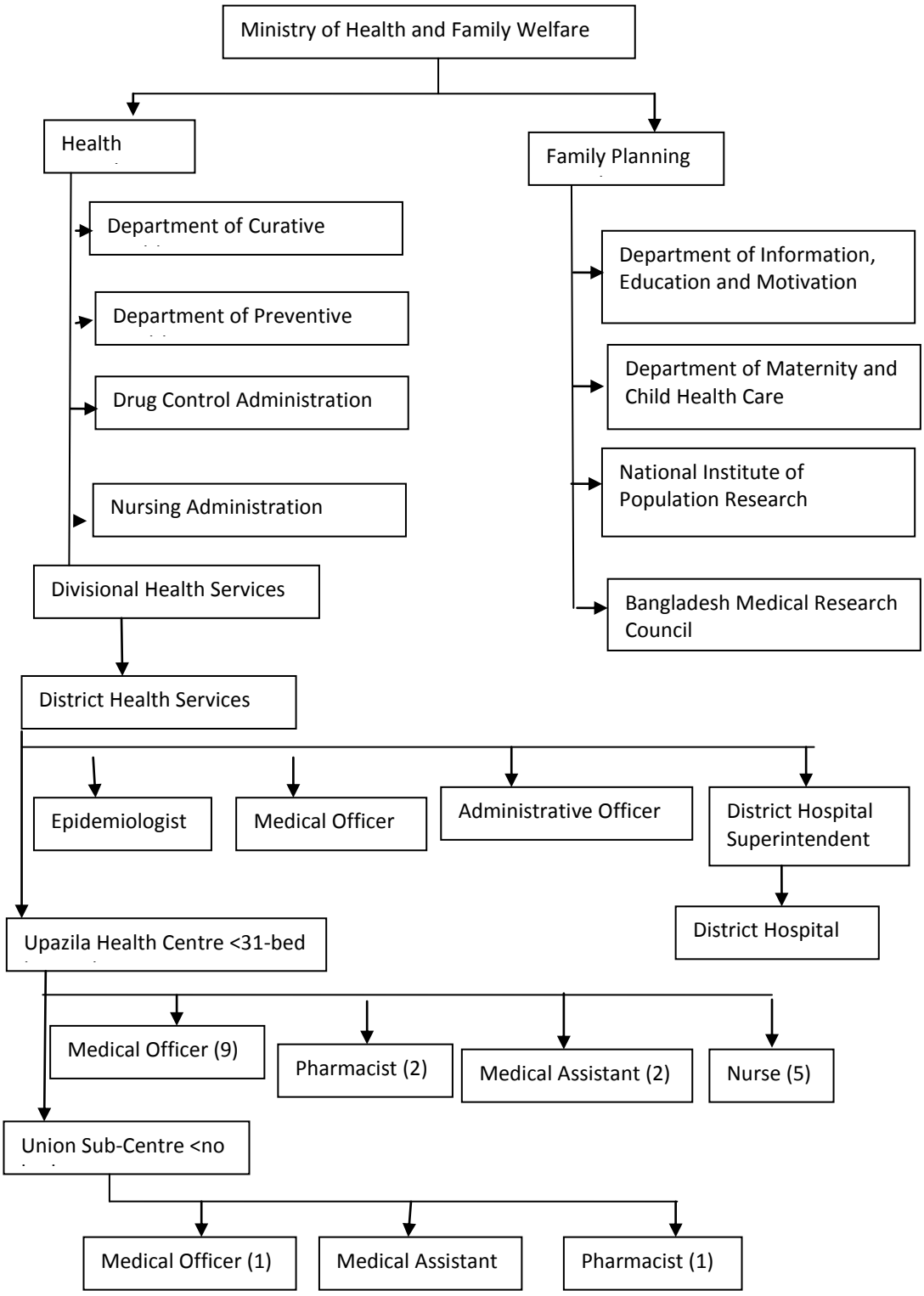
Time frame	Research place	Researcher	Disciplinary background	Methods followed
1947-2002 1976-2005 1982-2001 1985-2001 1986-2002 1987-2001 1987-97 1992-98 1992-99 1993-97 1993-2001 1995-97 1996 1997-2002 1999-2000 1999-2001 1999-2002 2000-01 2001-02 2001-06 2003 (3) 2003-04 2004 2004-07	Afghanistan Bangladesh (10) Benin Developing countries European countries Ghana Guatemala Honduras Indonesia (4) Iran Kenya Malawi Nepal (6) Nigeria (2) Russia South Africa Tanzania Turkey Uganda USA Whole world (12)	Assistant Professor Assistant Representative Associate Professor (4) Coordinator DrPH FRCSC Freelance Consultant (24) Lecturer MBBS (3) MD (8) Medical Anthropologist MPH (4) MSc (1) PhD (13) Program Associate Project Statistician (2) Project Director (4) Professor (10) Professor Emeritus Research Investigator Reader (2)	Anaesthesia and intensive care (3) Bio-chemistry & Molecular Biology (2) Biology Community Health/Medicine (4) Diabetics Economics (2) Epidemiology and Population/ Reproductive Health/Social Sciences (11) Family medicine (2) Geography ICDDRB (4) Initiative for maternal mortality program assessment (8) International Health (10) Medical sciences (2) Medicine Management Mathematics Mother & Child Health (12) Nutrition Obstetrics & Gynaecology (28) Policy Management (2) Public Administration (3) Public Health and Policy (46) Sociology Statistics (2)	Assessment method (2) Case-study (2) Cohort Analysis (1) Cross-sectional study (1) FGD (1) Interview (6) Observation (1) Pilot evaluation (3) Process-tracing (1) Regression analysis (1) Reviewing data set/published literature/medical records (12) Survey (4)

Note: () indicates numbers. Without parenthesis means a single time.

Appendix 2


Executive structure
Executive authority
Cabinet
Ministries
Divisions
Wings
Branches
Sections
Prime minister
Minister
State-minister
Secretary
Additional secretary
Joint secretary
Deputy Secretary
Senior/Assistant secretary

Appendix 3



Source: Ruhul *et al.* 1999: 7

Appendix 4

Guideline for Unstructured or Semi-structured questionnaire-interviews with mothers, who delivered babies in the last ten years

1. **Women's autonomy**

(Now I will ask you few questions about your position in the family)

1.1. Who usually has control over resources particularly finance?

1.2. Could you describe how decisions are made in your household? Why are decisions made in this way?.....

……

……

……

……

1.3. Do you have freedom to move about on your own? Yes ☐ No ☐

1.4. If not, with whom do you go to the health centre?

1.5. a. Do you have the opportunity to lodge complaints about misbehavior or wrong treatment by health personnel on your own ? Yes ☐ No ☐

b. If no, do you need to seek help to make complaints? Yes ☐ No ☐

c. If yes, Please specify who accompanied you when you went to lodge a complaint.

2. **Information about the past pregnancy**

(Now I will ask you some questions related to past pregnancies)

2.1. Could you please tell me about your past history of pregnancy?

No of pregnancy	Age of mothers	Place of birth	Mode of delivery	Who attended	Outcome (live birth, still birth, abortion, death)	Complications (if any)

2.2. Could you please provide information about your perception regarding pregnancy and its aftermath (after pregnancy with whom should mothers consult, restriction of foods and household chores).

……

……

……

……

……

……

……

2.3. How, where, and when did you receive maternity health care and who provided these services?.....

.....

.....

2.4. How did they (service providers) identify normal labour? pulse reading ☐ blood pressure ☐ respiration temperature ☐ Other (specify) ☐

2.5. Did they refer you to a comprehensive hospital? Yes ☐ No ☐

2.6. How long they took to refer you?

2.7. Among health personnel (TBA, SBA, Local healer, other doctor), who was the best and could you explain why he or she was the best……..

……

……

……

…….

3. Access to primary health care (maternity care)

(I will ask you some questions relating to access to health care services. I will also ask you few questions about where you went for services and consultancy after the last pregnancy)

3.1. Have you ever heard of health centre/clinic/hospital available in your area?
Yes ☐ No ☐

If yes, what is the name----Union sub-health centre/ Maternity centre/ UPHCP centre/NGO centre/other?

3.2. Have you ever visited the health centre available in your locality?
Yes ☐ No ☐

3.3. If not, where did you go and why?

3.4. How far is the nearest centre?

3.5. How do you reach there?

3.6. Do center representatives come to you? Yes ☐ No ☐

3.7. How often did you visit there?

3.8. Could you please elaborate about facilities available there?

Name of facilities	Yes	No	Don't know
Clinical reproductive health services			
Immunisation services for children and pregnant mothers			
Counseling on RHS and FP			
Ultrasound			
Operation			
X-rays			
Pregnancy test			
Blood test			
Urine test			
Others			

4. **Availability of health care services**

(Now, I will request you to tell me where you gave birth to your child, what mode of delivery was used and who attended. I will ask you more about reasons for why you chose one instead of another)

4.1. Where did you give birth the last time? Home ☐ Hospital/clinic ☐ Other (specify)

4.2. Could you please let me know what factors led you to give birth there? ……..

……..

4.3. What was the mode of delivery last time? Normal ☐ Caesarean ☐

Other (specify)

4.4. Did you prefer it? Or was it dictated by circumstances?.....

……

4.5. Who attended during last delivery? TBA ☐ SBA ☐ Friend ☐ Relatives ☐

Other (specify)

4.6. Could you explain why he or she attended.....

……

5. Other issues

(In this section, I will request the interviewee to express her important views)

5.1. If you need extra money for treatment, how and from whom did you manage?.....

……

5.2. How long did you take to arrange money?

5.3. How did you make repayments? ……

5.4. What type of facilities related with pregnancy do you obtain for living in rural or urban areas?.....
.....
.....

5.5 What types of constraints connected with pregnancy do you face for living in rural or urban areas?.....
.....
.....

5.6. Is there anything that we have not discussed that you would like to tell me more about?.....
.....
.....

5.7 Is there any advice you would like to give to other women who are in the same situation as you?.....
.....
.....

6. Personal Information

(Now I will ask you some questions about you and your family)

6. 1. Age: 15-20 ☐ 21-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 41-45 ☐

6. 2. Present Address: Vill/Mahalla:

Ward No: Thana:

6. 3. Marital Status: Married ☐ Widow ☐ Separated ☐

6.4. Age at marriage:

6.5. Educational Qualification: Illiterate ☐ Primary ☐

Secondary ☐ Higher Secondary ☐

6.6. Occupation:

6. 7. Income (monthly household):

6.8. Religion:

6. 9. Family information:

No of family member	Educational qualification	Relation with the respondent	Income	Expenditure

6.10. Residential pattern: Kutcha[128] ☐ Pucca[129] ☐ Semi-Pucca[130] ☐ Others [131] ☐

6.11. Household furniture

6. 12. Other consumer goods

[128] The walls and/or roof of house are made of materials such as un-burnt bricks, bamboos, mud, grass, tin etc.
[129] The walls of house are made of burnt bricks and roof is made of cement and iron.
[130] The walls of house are made of burnt bricks and roof is made of tin.
[131] The houses are made of materials not mentioned above.

Appendix 5

Guideline for Structured interviews with service providers in different hospitals

1. Background information

(The following are questions about your involvement with this organisation)

1.1. What is the highest educational level you have attained?
1.2. What position do you hold in this organisation?
1.3. How long have you been here?
1.4. Before this job, where did you serve?
1.5. Could you please let me know the reasons for switching organisations/jobs (if you don't like, you can choose not to answer this question)?
.....

……

1.6. Please elaborate the composition of this centre (equipment, drugs, health staff, room, waiting and toilet facilities)……
……
……

1.7. What types of services do you provide from your centre? In particular, what facilities are available for ante-natal, delivery and post-natal care?.....

……

……

1.8. Who are involved in providing service (staff, gender, age)?.....

……

1.9. Among them, how many are directly involved with providing mother and child health services…….

……

……

2. Pre and post pregnancy care

(Please provide important information related to pre and post pregnancy care provided by your centre)

2.1. Do you have staff (including yourself) who have training on birthing skills?

Yes ☐ No ☐

2.2. If yes, how long is this training?

2.3. Do you have any ideas on how to determine dangerous conditions of pregnant women?

Yes ☐ No ☐

2.4. If yes, could you please explain?

2.5. How do you understand that attention should be given to pregnant women?

2.6. Do they have opportunity to refer complicated cases to comprehensive hospitals?
Yes ☐ No ☐

2.7. If yes, could you please tell me referral procedures in details?

2.8. Do you know any book or kit that helps understand pregnancy complications and solutions? Yes ☐ No ☐

2.9. If yes, Please let me know the name……
……

3. Quality of care

(The following is about procedures by which you determine good quality care)

3.1. How do you gather information about the patient's condition?

Interviews ☐ dialogue ☐ observation ☐ clinical examination ☐ others ☐

3.2 Do you identify signs and symptoms of serious and/or life-threatening conditions?

Yes ☐ No ☐

3.3. Do you take decision about what is relevant to the situations? Yes ☐ No ☐

3.4. What do you generally do next, like developing a plan of care, continuous monitoring on patients' conditions.....

3.5. Do you evaluate the effectiveness of actions taken? Yes ☐ No ☐

3.6. If you found that actions taken are not appropriate, do you modify actions or adopt new plan for care? Yes ☐ No ☐

3.7. Do your staff (including yourself) use the following procedures to keep you and others free from infection?

Types of procedures	Yes	No	Don't know
Hand washing before touching body or organ			
Wear gloves			
Use barriers (protective goggles, face mask or aprons)			
not recapping or bending needles			
proper instrument procedure			
disposal of medical waste			

4. Fees and fee exemption

(The following relate to fees against different services are set up and how poor women can have either free or less expensive services)

4.1. Could you please tell me how and for what (treatment, diagnoses or consultancy) you charge fees?.....

4.2. What amount of money against each service do you charge?

4.3. How does the fee level and exemption scheme decide (involvement of government, project management, direct service providers or people)?.....

.....

4.4. Do you have any provision to provide poor women free services? Yes ☐ No ☐

4.5. If yes, what are they?.....

4.6. If yes in Question 4.4, how do you identify the poor?.....

5. Community involvement

(Now I would like to know from you about community's involvement in the whole health care system)

5.1. Do you invite members of the community to be part of the health development committee? Yes ☐ No ☐

5.2. Do you identify key persons in the community and invite them to the facility to learn about its potential functions and constraints or limitations? Yes ☐ No ☐

5.3. Do you provide any facility for the community members to view the inside of the health facility centre? Yes ☐ No ☐

5.4. Do they have opportunity to make complain against administrative set up or misbehaviour or wrong treatment received from the centre? Yes ☐ No ☐

6. **Shortage of health personnel and other issues**

(As we know, Bangladesh does not have enough health personnel who can easily provide good health care services for pregnant mothers, please tell me how we can overcome this problem. Moreover, I need your comments or opinion on how we can reduce maternal mortality rate in Bangladesh)

6.1. How do you address the shortage of health care personnel particularly skilled birth attendants?.....
.....

6.2. How does the Bangladesh government fulfill this shortage (in details)……

6.3. Do you think, TBAs can be strengthened to address the shortage of SBAs? Yes ☐ No ☐

6.4. If yes, could you please suggest?

6.5. Is there anything that we have not discussed that you would like to tell me more about?

Appendix 6

Guideline for Focus Group Discussion with mothers and fathers having babies in the last ten years

(N.B: I will record this session by using digital recorder. Then I will transcribe them from Bengali to English)

Name of the place:……

Name of moderator:……

Name of note taker:……

Date :……

Starting time :……

Ending time :……

Composition of the group

(I would like to know first who you are)

Name of the participants[132]	Age	Gender	Occupation	Educational background	No of children	Income(if any)

[132] I will ask the participants names to identify them and ask their comments by mentioning their names. Asking name or age is not sensitive in Bangladesh society when people get together in any discussion.

1. Access to and availability of health care services

(I would like to discuss with you which health centre you usually visit, and what facilities and fees against each services they provide and charge respectively)

1.1. Could you please tell me where and how you get health care services when you face physical troubles?

1.2. What constraints do you face in accessing to and availability of these services?[133]

2. Debate between TBAs and SBAs

(You are requested to discuss about mode and place of delivery and who was attended during the last delivery in details)

2.1. Could you please tell me where, how, with type of attendance, you/ your wife gave birth to your baby?

2.2. Can you tell me reasons for choosing one instead of another?

2.3. What impact private providers and media have on selection of mode and place of

delivery and who attended during delivery?

3. Complications and reference

(In this stage, we will discuss what types of complications you or your wife faced in the last pregnancy and how they could be removed. We will also talk about referral systems)

3.1. If complications developed, what did you do?

3.2. Did your attendants refer you or your wife to a good hospital?

Yes ☐ No ☐

3.3. Who took decision about you or your wife's movement to hospital?

3.4. Who were with her during her trip to hospitals?

3.5. After reaching hospital, what facilities did you receive?

3.6. What constraints did you face when you went for hospital services? (please tell in detail)

[133] I have an intension to make the above issue clearer by asking many questions like Do you have a health centre nearby, or how far is this centre, what facilities they usually provide you, if you face any health troubles, where do you usually visit? How often do you go for treatment, if not, what do you do? Why do you not use your nearby centre? If you need extra money for treatments, how do you manage and repay? How long does it usually take to manage and repay money? What mechanisms relating to cost should be available in future?

3.7. What types of facilities and constraints do you have for living in rural or urban areas during delivery time? (please tell in detail)

3.8. Have you ever made any complains about administrative access, misbehaviour or wrong treatments of service providers? Yes ☐ No ☐

3.9. What mechanisms did you follow?

3.10. What outcomes did you receive?

Appendix 7

Table: Training and education of various types of maternal health care providers in 2006

Types of HCPs	Annual intake	Total no	Entry requirement	Education & training	Types of services
Specialist in Gynaecology and Obstetrics (G&O)	143	1070	MBBS	Minimum 4 years of training and education for MS and FCPS degrees Two years of training and education for diploma	BEOC, CEOC, and ANC
Anaesthesiologist	152	860	MBBS	Minimum 4 years of training and education for MS and FCPS degrees Two years of training and education for diploma	Anaesthesia
General physicians	3200 (1,475 in public)	44,632	12 years of schooling	5 years of training in medicine, surgery, G & O One year internship in medicine, surgery, G & O wards	ANC, BEOC, PNC, MR, AC, and FPS
Nurses/Midwives	1500 (1020 in public)	40,040	10 years of schooling	Training in nursing for 3 years and midwifery training for 1 year	ANC, BEOC, PNC, MR, AC, and FPS
Medical assistants	240	4,348	10 years of schooling	3 years of training in treatment of common disorders	ANC, BEOC, PNC, and FP
Family welfare visitor	None since 1995	4,286	10 years of schooling	18 months of training in MCH, FP, and contraception and 6 month midwifery training for some	ANC, BEOC, PNC, MR, AC, and FPS
Family welfare assistants	None since 1995	23,500	10 years of schooling	30 days of training on FP	ANC, PNC, and FPS
Community based SBAs	1000	1,500	FWA or Female HA	6 months of training in BEOC and ENC and at least 9 months supervised work experience	ANC, BEOC, PNC and FPS
Health assistant	None since 2004	21,000	10 years of schooling	3 months of training in limited preventive and curative care, and immunisation	Tetanus toxoid

Note: AC=Abortion care, BEOC= Basic Essential Obstetric Care, CEOC=Comprehensive Essential Obstetric Care, ENC=Essential Newborn Care, FCPS=Fellow of College of Physicians and Surgeons, FPS=Family planning services, MBBS=Bachelor of Medicine, Bachelor of Surgery, MD=Doctor of Medicine, MR=Menstrual regulation, MS=Masters of Surgery, and PNC=Post natal care. The last four categories predominantly provide services at upazila level and below Source: (Minca, 2011).