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Beyond Maternal Mortality: Maternal Health Care Seeking Behavior for Post-Partum Morbidity for Urban Mothers

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Abstract:
Maternal morbidities, in most cases are preventable and treatable. Since the entire human rights agenda has human dignity as its core value, women with short or long lasting maternal morbidity suffer loss of human dignity in their society. Thus, to improve maternal health, in addition to targeted reduction of maternal morality ratio, maternal morbidities in developing countries must also be reduced substantially. Against this backdrop, this paper justifies the need of studying the health care seeking behaviour of women suffering from post-partum maternal morbidity in the urban context of Bangladesh with a particular attention. In urban Bangladesh, aided by the proliferation of privately owned corporate modern maternal health care facilities, the richer section of the society is increasingly leaning towards the medicalized process of childbirth, whereas the mothers from the poorer section of the society are still staying away from such facilities, even for life saving obstetric care. In order to develop policies, strategies and programs aimed at improving the maternal health of Bangladeshi women, it is very important to understand the underlying causes of why women do not get treated for their maternal health complications, and if they do get treated, what motivates them to do so. This question is especially relevant in the context of urban areas where maternal health facilities are fairly easily accessible in terms of distance and transportation, yet many women do not avail of these facilities.

1. Background of the Problem

Improved maternal health is a longed for goal in developing countries. In order to achieve this goal, over the last four decades, a number of initiatives have been taken globally and locally with a particular target to reduce both maternal mortality and maternal morbidity. International bodies such as the World Health Organization (WHO), the United Nations Population Fund (UNFPA), and the United Nations Development Programs (UNDP), feminist scholars (Sen and Östlin, 2008; Sen, Ostlin and George 2007), and women activists have put their efforts into bringing women's health issues to the forefront of global affairs. This is evident in the Safe Motherhood Initiatives (safemotherhood 2010), International Conference on Population and Development (ICPD) 1994 (Roseman and Reichenbach 2010), UN Millennium Development Goals (MDG) (UN 2011, p. 29), the Beijing Platform for Action (Declaration B 1995), and the Convention of Elimination of all Forms of Discrimination against Women (CEDAW).[1] As a developing country, Bangladesh, which is a signatory to all of these initiatives, has made remarkable progress in recent years in reducing its maternal mortality ratio (MMR). For example, Bangladesh Maternal Mortality and Health Care Survey (BMMS), 2010 shows that the MMR in Bangladesh has been reduced from 322 per 100,000 live births in 2001 to 194 per 100,000 live births in 2010, implying a 5.6% decline per year over the period 2001-2010 (NIPORT et al. 2012, p. xx).

However, a reduction in the maternal mortality ratio does not necessarily tell the whole story of maternal health in Bangladesh. Rather, maternal mortality is often regarded as the "tip of the ice berg" (Christian 2002, S59; Firoz et al. 2013, p. 794; Hounton et al. 2008, p. 315; Koblinsky 1995, p. S21; Filippi 2006, p. 1,536). For every woman who dies of pregnancy-related causes, 20 or 30 others experience acute or chronic morbidity, often with permanent sequelae that can affect women's physical, mental or sexual health, productive and reproductive capability (Firoz et al. 2013, p. 794). According to Filippi et al. (2006, p. 1,536) "maternal health is more than survival". Without addressing maternal morbidity, achievements towards improved health status of mothers will remain unaccomplished. Lewis (2003, p. 28) claims that "MMRs cannot be used to determine the estimates of pregnancy related complications which the women have survived but have resulted in long-term severe disabilities".

To improve maternal health, a deeper understanding of how maternal morbidity happens, and how treatment is sought is needed rather than only estimating the maternal mortality ratio. Against this backdrop, this paper justifies the need of studying with a particular attention the health care seeking behaviour of women suffering from post-partum maternal morbidity in the context of Bangladesh.

[1]Article 12.2 of the CEDAW states "Parties shall ensure to women appropriate services in connection with pregnancy, confinement and the post-natal period, granting free services where necessary, as well as adequate nutrition during pregnancy and lactation" (UN women 2000).

2. Maternal Morbidity: An Issue Yet to Be Focused

Maternal morbidity (also known as "non-fatal maternal childbirth injury") is defined as "any illness or injury caused by, aggravated by, or associated with pregnancy or childbirth. It is a part of reproductive morbidity, which includes maternal (or obstetric) morbidity, gynaecologic morbidity, and contraceptive morbidity" (Reed, Koblinsky and Mosley 2000, p. 3). However, unlike maternal mortality, no timeframe for maternal morbidity can be set, as it can occur and continue throughout a woman's lifespan (Bhatia and Cleland 1996, p. 1,508). Moreover, there are different types of maternal morbidity induced by pregnancy, ranging from the acute and short-term to the chronic and long-term (Ashford 2002, p. 1; Liskin 1992, p. 79). Depending on the timing of its occurrence, a woman can suffer from maternal morbidity in the ante-natal, intra-natal or the post-partum period. Whatever the type, the duration and causes of maternal morbidity are, if left untreated, it can become a major source of physical, emotional, and social suffering (e.g. social isolation or stigmatisation) for the woman throughout her life. The list of morbidities from maternal complications provides a range of conditions from fever to psychosis which require diverse care responses. The Tenth Revision of the International Classification of Diseases (ICD-10, Version 2015) of the World Health Organization includes a wide range of illnesses in the category of maternal morbidity, e.g., maternal infectious and parasitic diseases complicating pregnancy, childbirth, and the puerperium (as mentioned in section 094-098 of ICD-10), including tuberculosis, syphilis, gonorrhoea, other sexually transmitted infections, viral hepatitis, anaemia, diabetes, malnutrition, postnatal depression etc. For those women who have had a near-miss[2] in childbirth, recovery from organ failure, uterine rupture, fistulae, and other severe complications can be long and painful, and can leave long-lasting after-effects. Some of these problems are temporary but others become chronic (McCarthy and Maine 1992, p. 23). These include urinary incontinence, uterine prolapse, pain following poor repair of episiotomy and perineal tears, nutritional deficiencies, depression and puerperal psychosis, and mastitis. The severity and consequences of maternal complications often vary according to the treatment facilities available nearby and the access of mothers to those facilities.

Table 1 presents the type, aetiology and consequences of maternal morbidities that are caused by pregnancy complication and/or by lack of post-partum care and that are common in developing countries like Bangladesh.

Complications	Incidents as % of live birth	Maternal disability that may result	Physical consequences	Social and economic consequences
Severe bleeding (haemorrhage)	11	Severe anaemia	Pituitary gland failure, Fatigue, Infertility	Dramatic reduction of the productive and quality of life
Infection during or disease after labour (sepsis) pain	10	Pelvic inflammatory disease, Damage to reproductive organs	Infertility, Chronic pelvic pain	Emotional pain caused by infertility, Loss of productivity, Abandonment or abuse by husband
Obstructed or prolonged labour	6	Incontinence, Fistula, Genital prolapse, Uterine rupture, Nerve damage	Chronic backache urinary problems, Pain during, sexual intercourse, Complications in future pregnancies	Difficulties in doing household chores, Stigma and isolation, Abandonment or abuse by husband, Loss of productivity resulting into economic hardship
Pregnancy induced hypertension (Preeclampsia and eclampsia)	6	Chronic hypertension Kidney failure Nervous system disorders	Chronic hypertension Kidney failure Nervous system disorders	Uncomfortability resulting in loss of physical and mental strength

Table 1: Complications and consequences during childbirth and post-partum period
Source: Adapted from Ashford (2002, pp. 2-4)

The sufferings of mothers who develop these morbidities are intense and severe, not only for the mothers themselves, but also for their children, families and overall, for the whole country. Filippi et al. (2006, p. 1,537) broadly categorize the consequences of maternal death and near-miss into economic (lack of capital, no savings, debts and poverty), physical (no living child, damaged pelvic structure, anaemia, impaired functionality, infertility), social (marital disharmony, household dissolution, migration, social isolation, stigmatisation) and psychological consequences (suicide, depression). The wide range of consequences of maternal morbidity indicates how maternal illnesses can put the suffering mothers and their families in a vulnerable situation as a consequence of illnesses which can be prevented or treated. Since most maternal health programs are aimed at reducing the number of maternal deaths, the maternal morbidity aspect of maternal health has often been ignored (Lewis 2003, p. 30; Glazener et al. 1995, p. 282).

The treatment seeking behaviour and the suffering experience of women who survive maternal complications have remained largely unaddressed. For example, in many developing countries such as Bangladesh, China, Egypt, Malaysia, Romania, Sri Lanka, and Thailand, MMR has been reduced within a short period of time. However, in none of these countries are there any detailed data or discussion about maternal morbidity, which has remained a widely neglected area in academia and among health workers and activists (Shah and Say, 2007; p. 18).

[2]When a woman survives a life-threatening complication during child delivery, the outcome of this survival is called a near-miss.

Women suffering from maternal morbidity are not only not included adequately in discussions in research, policy and programs, they are also left out of routine health care activities, particularly in developing countries. Ashford (2002, p. 1) states that approximately half of the nearly 120 million women who give birth each year experience some kind of complication during their pregnancy. Of those women suffering from maternal complications, 50% do not receive any treatment; almost all come from developing countries in Asia and Africa (Ashford 2002, p. 2). The same is true for Bangladesh. In spite of a remarkable decline in the MMR in Bangladesh over the last decade, it is reported that as many as 76.6% of mothers still deliver their babies at home, and only 4.4% receive professional health care during delivery (NIPORT et al. 2012, p. 7). Moreover, in contrast to the attention given to ante-natal and delivery care, much less attention is given to post-partum care in the developing world (Fort, Kothari and Abderrahim 2006, p. 18). Again, the same is true for Bangladesh, as evidenced from NIPORT et al. 2012, p. 4, which revealed that while maternal mortality during pregnancy and child delivery declined by 50% between 2001 and 2010, maternal mortality during the post-partum period (i.e., within 42 days after delivery) was reduced by only a third. In Bangladesh, post-partum maternal deaths now account for a higher proportion of maternal deaths, which is 73% in 2010 compared to 67% in 2001 (NIPORT et al. 2012, p. 11).

Since ante-natal care and the attendance of skilled birth attendants during childbirth are considered to be the most effective interventions to reduce maternal mortality during pregnancy and childbirth, not much attention has been paid to the health conditions of the mother after the birth of a child. As a result, many mothers, who experience complications while giving birth and survive, remain untreated sometimes throughout their entire lives. The reasons for this are many, however one of the main reasons is probably the fact that any attention given to pregnant women by themselves, their family, by the society, and/or by health carers lasts only as long as the time of birth of the child. After their babies are born, the women are generally left without attention, care and the ability to exercise their rights. As Lewis (2003, p. 29) states,

Some women are denied access to care because of cultural beliefs and practices, seclusion or because responsibility for decision making falls to her husband or other family members. In many cases, the failure of support for pregnant women by families, partners and their government reflects the social value placed on women's lives.

Given this situation, in order to ensure a holistic approach to the improvement of women's health, it is important to bring into focus those factors that influence health seeking behaviour of women during childbirth and post-partum period in a developing country such as Bangladesh. Although it has been mentioned before that morbidity can happen at any stage of pregnancy and childbirth, an added attention is needed on complications and morbidity occurring during childbirth and the post-partum period. The reason for this is that, childbirth and post-partum maternal health care has been far less focused on in studies of pregnancy (ante-natal) care. Also, Bangladesh has achieved much improvement in terms of ante-natal care coverage of the entire population compared with that of childbirth and post-partum care.

The specific areas that can draw the concern of researchers and policy makers in identifying the problems of maternal health care seeking behavior of mothers with post-partum maternal morbidity are as follows:

3. The Gap in Maternal Health Care between Rich and Poor Women

Having been considered a megacity[3] since 2001 (Hossain 2008, p. 1), Dhaka has a population of 11,875,000 , with an area of 1,464 square km and a population density of 8,111 per square km. (BBS 2011, p. 18). As the main politico-administrative centre of Bangladesh(Hossain 2007, p. 1), Dhaka has a concentration of domestic and foreign investment and massive rural-urban migration but with dramatically rising poverty and prolific growth of slums and squatters. In Dhaka, in 2009, there were 4,966 slums with a total population of 3,420,521, which is 37.4 % of the city's population (Angeles et al. 2009, p. 40). In the Dhaka City Corporation (DCC) area 60% of households are described as being in the low income category, 37% middle income and only 3% are considered high income households (UN 2010, p 4).

Due to the intensity of poverty which also results in a low level of nutrition and inadequate education, it is very likely that maternal morbidity will be very high in Dhaka's slums (Uzma et al. 1999, p. 314). Fronczak et al. (2005, p. 273) listed in their study some of the self-reported post-partum morbidity in the urban slums of Dhaka. These are fistula, uterine prolapse, perineal tears, pelvic infection, fever or foul vaginal discharge, urinary tract infection, vaginal tract infection, secondary postpartum bleeding and leg neuropathy. Regarding health care seeking, Fronczak et al. (2005, p. 275) also reported that in spite of the close proximity of health centres within Dhaka city, 82% of deliveries occurred at home and 76% of them were attended by untrained traditional birth attendants. This health care scenario is no better than that of a rural area of Bangladesh, where 89.9 % of child delivery occurs at home (NIPORT et al. 2012, p. 58).

In contrast to the poorer sections of women, the better-off urban women receive high quality health care from the increasing number of private clinics in Dhaka, which provide maternal health care services at a very high cost. Moreover, an overuse of health services in private health clinics is now creating another concern among the better-off women, among health care providers and researchers. This overuse is related to the noticeable over-treatment, i.e., unnecessary clinical diagnosis and treatment during pregnancy and childbirth. According to existing literature in Bangladesh, one example of this over-treatment of richer mothers during delivery is that of resorting to caesarean sections (or CS)[4] well above the limit of between 5 and 15% prescribed by the World Health Organization (WHO) in terms of emergency obstetric care (EmOC) (Wardlaw and Maine 1999, p 26). For the poorer section of the population, the

[3] The term 'megacity' is frequently used as a synonym for words such as super-city, giant city, conurbation, and megalopolis. Megacities are defined as cities that were expected to have at least ten million inhabitants by the year 2000 (World Bank 1993).

[4] Caesarean section is one of the components of Emergency Obstetric Care (EOC) and often considered as a proxy indicator of women's access to health care for complicated delivery (NIPORT et al. 2009, p. 118)

CS rate remains far below the prescribed limit, indicating their inadequate access to EmOC. Thus, there is a remarkable difference between the poorest and richest classes of women in terms of CS. In 2001 the rate of CS performed among the richest sections of the society was 11% compared with only 0.4% among the poorest wealth quintile (NIPORT et al. 2001, p. 56). Moreover, the prevalence of caesarean section has increased among the richest wealth quintile at a much higher rate (25.7%) than among the poorest wealth quintile, for whom it is only 1.8% (NIPORT et al. 2009, p. 188).

Many studies suggest that for the poor and illiterate women, treatment for maternal complications and maternal morbidity is often an unknown, fearful and difficult matter (Afsana and Rashid 2001; Wall 2012; Grimes et al. 2011). On the other hand, in many instances the urban, well-off women seek obstetric treatment such as CS to avoid labour pains or simply to be seen as modern in their use of healthcare, rather than for medical reasons (NIPORT et al. 2010, p.7). Further, the women in the richest wealth quintile in Bangladesh are three times more likely to seek medical care for complications compared with those in the poorest wealth quintile (NIPORT et al. 2012, p. 93). Thus, in Bangladesh the quantity and quality of maternal health care is highly contextualized in terms of socio-economic status of women in society. It is a right for all women regardless of their socio-economic status to have access to maternal health care according health needs, (AbouZahr 2003, p. 18) but in many cases, many women cannot exercise this right.

Socio-economic status of a woman affects her chances of accessing and receiving maternal health care, particularly in developing countries where an equitable health care system is yet to be set up. Socio-economically disadvantaged women have a disproportionate burden of maternal deaths and disabilities (Kunst and Houweling 2000, p. 297). The economic status of the woman, solely or in association with her education and empowerment status, acts as an influencing factor in her health care seeking behaviour. In addition, economic status plays a key role in determining how the health service providers respond to the expectations and needs of women seeking maternal health care (De Brouwere and Van Lerberghe 2001, p. 3). Economic status is one of the determinants of health care utilisation (Ahmed, Hossain and Khan 2010, p. 3), but poor economic status, along with low level of education and scientific knowledge often reinforces the cultural beliefs and practices that hinder the seeking of maternal health care.

According to the 2010 Bangladesh Maternal Mortality and Health Care Survey (NIPORT et al. 2012, p. 51), 31.2% of the women from the poorest wealth quintile receive ante-natal care from a medically trained provider,[5] compared with 81.9% of women from the richest wealth quintile. In that survey, the complications that were typically reported by the mothers were symptoms of pre-eclampsia, excessive bleeding, high fever with smelly discharge, convulsion/fits, obstructed/prolonged labour, and retained placenta (NIPORT et al.2012). A distinct variation is apparent between the mothers of the poorer and richer wealth quintiles in terms of their experience of complications and treatment sought. In this regard, Table 2 presents a comparative picture of seeking treatment of for obstetric complication according to the wealth and education level of the mothers. It indicates that the richer and educated mothers seek treatment for complication at a much higher rate that their poorer and less educated counterparts.

Mothers	Poorest wealth quintile	Richest wealth quintile	No education	Secondary school +
Number of mothers who had complications[6]	1,953	1,778	2,041	932
Percentage of mothers who sought treatment[7] for complications	60.5	76.5	59.2	81.9

Table 2: Percentage of mothers with complications and seeking treatment for complications according to economic and educational background

Source: NIPORT et al. 2012, p. 85

Thus, it is apparent that those who are being monitored regularly during pregnancy will be able to readily identify any risk of maternal morbidity and take necessary precautions to treat or mitigate those risks. However, as mentioned before, the poorer mothers tend to suffer undiagnosed from long term maternal morbidity such as obstetric fistula, uterine prolapse and anaemia. These conditions are more likely to have occurred because of a combination of a lack of skilled birth and timely emergency obstetric care (EOC).

Houweling et al. (2007, p. 746) showed that wealth and maternal health care are linked in the wealth hierarchy across many developing countries, with each progressively poorer group receiving progressively less care. Professional delivery care among the poor is below 30%, but it is 80% or more on average for the richest wealth quintiles. Similarly, large gaps have been observed in Zambia, where 90% of the richest women receive medical assistance at birth, but only 20% of the poorest women receive such care (Kunst and Houweling 2000, p. 296). In Peru, this gap is six-fold between the richest and the poorest wealth quintiles (Filippi et al. 2006, p. 1,535).

The uptake of maternal health care varies even within the same socio-economic group. For example, in places where maternal health care is freely available in health facilities nearby, the poor mothers are more inclined to receive health care for children, family planning and also for ante-natal check-ups, than mothers who have farther to travel to receive care. However, where childbirth is

[5]Medially trained provider includes qualified doctor, nurse, midwife, paramedic, family welfare assistance, Community Skilled Birth attendant (NIPORT et al., 2012, p. 51).

[6] The complications that have been reported by the mothers participating in the BMMS survey are symptoms of preeclampsia, excessive bleeding, high fever with smelly discharge, convulsion/fits, obstructed/prolonged labour, retained placenta (NIPORT et al. 2012, p. 84).

[7]Includes those who brought medicine to treat the complication.(NIPORT et al. 2012, p. 85).

concerned, poorer mothers are largely found to be hesitant about receiving delivery care from health facilities. One reason for this could be the cultural connotation of childbirth, which is discussed in detail the latter part of this chapter. Kunst and Houweling (2000, p. 296) maintained that cultural dynamics, along with economic factors, may be more important determinants of the uptake of maternal health care than any other form of care.

A large inequality in maternal health care between the rich and the poor in Bangladesh has been reported in a number of studies. Matthews et al. (2010, p. 2) have shown that urban inequality in the use of health care services has increased in Bangladesh since 1993. While by 2007, rural people started to benefit from increased access to health services, there has been hardly any progress in minimizing the poor-rich gap in cities with many slum settlements. However, it is pleasing to see that the percentage of births attended by skilled birth attendants, which is considered as the "gold standard for diagnosis of maternal morbidity" (Koblinsky et al. 2012, p. 126), has been increasing in Bangladesh (NIPORT et al. 2013, p. 132).

Most of the studies on inequality in maternal health care have particularly focused on urban-rural differences, presumably because poor people are seen to live in rural areas and have low levels of education, lack of convenient transport and accessible health services nearby. There are only a very limited number of studies (Uzma 1999; Fronczak et al. 2005; Fronczak et al. 2007; Hossain and Hoque 2005; Moran et al. 2009) on maternal morbidity and health care in urban slums, such as those in Dhaka. Economic inequality in urban areas can be deeper and more severe than that found in rural areas (Zaman and Akita 2011, p. 21).c

4. Health Care Seeking Behaviour of Mothers for Post-Partum Morbidity

Health care seeking behaviour is a complex issue involving a wide range of aspects of human lives. They range from very personal traits to societal and state level policy, which interplays between need and supply of health care. The existing literature endeavours to understand the determinants of health care seeking behaviour of mothers in urban and rural areas of developing countries. Among the well documented factors that are incorporated in the most health care seeking behaviour approaches or models are: demographic, socio-cultural and economic characteristics of people and communities, most particularly income and education (Anwar et al. 2008, p. 256); enabling factors like availability, accessibility and cost of services involved; infrastructure development, transport and communication (Shaikh and Hatcher 2005, pp. 50-51); geographical location of the residence of treatment requiring women (Sharma, Sawangdee and Sirirassamee 2007, p. 687); perception, beliefs and attitudes towards illness and treatment; and nature and extent of illness (Goodburn, Gazi and Chowdhury 1995, p 29).

However, these complexities of maternal health care seeking behaviour have mostly focused on the context of rural areas and poverty. Moreover, the complexities of health care seeking behaviour in an urban context, where low cost maternal health care facilities are located close to most people's residences, have not been adequately addressed either (Afsana and Wahid 2013, p. 2050).It is mentioned before that the overuse of modern maternal health care by the richer sections of society, as manifested in the higher rate of caesarean section among them, is becoming a concern in the maternal health research, policy and implications (Ronsmans, Holtz and Stanton 2006; Koblinsky et al. 2006). Therefore, it is important to explore the perception, experience and practice of the mothers of upper socio-economic households that lead them towards an overuse of modern maternal health care and the concerns related with that.

5. Conclusion and Recommendation for Research

It has been stated before that there is a lack of information on the perception, experience and care seeking behaviour of women for maternal morbidity. It has also been recognized in different studies that not enough efforts have been made to act upon maternal morbidity in order to free women from the burden of maternal illnesses. Improving maternal health is not only about reducing MMR, it is also about the overall improvement of maternal health before, during and after childbirth.

In spite of having low cost or free maternal health care facilities in close proximity of their residences, the poorer women of Dhaka are lagging far behind the richer women in terms of utilization of maternal health care services, including those for severe obstetric complications. As a result, a high concentration of post-partum maternal morbidity is evident among the urban poor mothers of Bangladesh (Ferdous et al. 2012, p. 155). Maternal morbidities, in most cases are preventable and treatable. Since the entire human rights agenda has human dignity as its core value (Freedman 2003, p. 53), women with short or long lasting maternal morbidity suffer loss of human dignity in their society (Cook, Dickens and Syed 2004, p. 73). Thus, to improve maternal health, maternal morbidities in developing countries must be reduced. Moreover, as mentioned before, the poor-rich gap in maternal health care utilization is also wide. Aided by the proliferation of privately owned corporate modern maternal health care facilities, the richer section of the society is increasingly leaning towards the medicalized process of childbirth, whereas the mothers from the poorer section of the society are still staying away from such facilities, even for life saving obstetric care.

In order to develop policies, strategies and programs aimed at improving the maternal health of Bangladeshi women, it is very important to understand the underlying causes of why women do not get treated for their maternal health complications, and if they do get treated, what motivates them to do so. This question is especially relevant in the context of urban areas where maternal health facilities are fairly easily accessible in terms of distance and transportation, yet many women do not avail of these facilities.

Therefore, research should be on to identify the differences and similarities in the health care seeking behaviour of the mothers from upper socio-economic and lower socio-economic households of Dhaka in terms of health care for childbirth and post-partum morbidity. It is also equally important to understand the socio-economic situation of mothers in which their maternal health care seeking behaviour post-partum illness is shaped. Analysis of the perceptions and experience of mothers regarding childbirth and maternal health care of urban mothers is also required.

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