



Skilled Attendance At Delivery In Bangladesh: An Ethnographic Study

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Glossary

ANC	Antenatal Care
<i>Ada</i>	Ginger
<i>Apa</i>	Elder sister
APH	Antepartum Haemorrhage
<i>Aya</i>	Attendant
<i>Bari</i>	Household
BAMS	Birth Attendants with Midwifery Skills
<i>Bangla Dai</i>	Untrained Traditional Birth Attendant
BAVS	Bangladesh Association for Voluntary Sterilisation
BDHS	Bangladesh Demographic and Health Survey
<i>Bhalo</i>	Better off
<i>Bou</i>	Village bride
BRCS	Bangladesh Red Crescent Society
CFR	Case Fertility Rate
<i>Dai</i>	Traditional birth attendant
D&E	Decidual and Evacuation
DH	District Hospital
<i>Dhoni</i>	Rich
<i>Din Cholena</i>	Poor
<i>Doshi</i>	Possessed by an evil spirit
EsOC	Essential Obstetric Care
EmOC	Emergency Obstetric Care
ESP	Essential Services Package
FGD	Focus Group Discussion
FWA	Family Welfare Assistant
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
GOB	Government Of Bangladesh
<i>Gorib</i>	Poor
HA	Health Assistant
<i>Haat</i>	Local market held once in a week
<i>Haspatal</i>	Hospital
HFWC	Health and Family Welfare Centre
HPSP	Health and Population Sector Plan
ICDDR,B	International Centre for Diarrhoeal Disease, Bangladesh
ICMH	Institute of Child and Mother Health
IGA	Income Generating Activates
<i>Imam</i>	Muslim priest
IUD	Intra Uterine Death
<i>Kabiraj</i>	Traditional healers
<i>Kaida Koishol</i>	Techniques
MA	Medical Assistant
<i>Madrasha</i>	Religious school

<i>Magreb</i>	Evening prayer time
<i>Matri Mongol</i>	Maternal and Child Welfare Centre
MC&H	Medical College and Hospital
MCH	Mother and Child Health
MCHTI	Maternal Child Health Training Institute
MCWC	Maternal and Child welfare Centre
MO	Medical Officer
<i>Moddhyam</i>	Middle
MOHFW	Ministry Of Health and Family Welfare
MR	Menstrual Regulation
NGO	Nongovernmental Organisation
NIPORT	National Institute for Population Research and Training
<i>Pani Bhangga</i>	Leak in the membrane
<i>Palli</i>	Village
PC	Private Clinic
PET	Pre Eclamptic Toxaemia
PNC	Postnatal Care
RDRS	Rangpur Dinajpur Rural Service
SES	Socio-economic Status
SAC	Satellite Antenatal Clinic
TB	Tuberculosis
TBA	Traditional Birth Attendant
<i>Tejpata</i>	Cassia Leaf
TFR	Total Fertility Rate
TT	Tetanus Toxoid
UHC	Upazila Health Complex
UHFPO	Upazila Health and Family Planning Officer
<i>Union Parishad</i>	The Local Government
<i>Upazilla</i>	Breech presentation
WFHI	Women Friendly Hospital Initiative
WHO	World Health Organisation
WRA	Women of Reproductive Age
WR	Wealth Ranking

INTRODUCTION

One of the most daunting challenges facing the world today in the field of health is the issue of maternal mortality. Over the previous few decades remarkable progress has been made in almost every sector of development. More children now survive in developing countries than ever before and more of them now go to school. Unfortunately the situation in terms of maternal mortality has not changed much for many developing countries. It is estimated that 585,000 maternal deaths occur annually worldwide, 99 percent of this in developing countries (WHO 1996). The world has utterly failed to do much in this respect. This has been rightly called 'scandal of the century' (Graham 1998). It is not that there is nothing that can be done. All developed countries and some in the developing world have been able to bring the maternal mortality rate down significantly. But for a vast majority of the poor countries it is a 'neglected tragedy' for effective interventions are available to deal with this persistent crisis (Rosenfield and Maine 1985).

In 1987, the Safe Motherhood Initiative was launched. In his address to its first-meeting in Nairobi, Halfdan Mahler, the then Director General of the World Health Organization (WHO), had declared, "We face a tragedy of multiple causes and we must confront the challenge with a multiple strategy..... we must stop believing as if there were a single magic bullet that could slay this dragon" (Weil and Fernandez 1999). Ten years later in Colombo, the world discovered that although the tragedy is multi-causal but to effectively address it requires resorting to a magic bullet and that is 'essential obstetric care'. While all other strategies as enunciated by the Safe Motherhood Initiative including family planning, antenatal care, clean/safe delivery, essential obstetric care, basic maternity care, primary health care, and equity for women (WHO 1993) are important determinants of maternal deaths, it is the 'essential obstetric care (EsOC)' services which has the most potential of having a significant impact (Papiernik 1995). It has been shown that maternal mortality is effectively addressed only by institutionally-based medical interventions (Maine and Rosenfield 1999).

It is now accepted internationally that to reduce maternal mortality significantly it is necessary to make EsOC available (WHO 1991)¹. But the challenge is how to do it. Governments and non-governmental organizations (NGOs) in developing countries trained tens of thousands of TBAs in the 1980's and 1990's. But just training TBAs hardly makes any difference (Donnay 2000). Most complications occur at childbirth which is frequently unpredictable and unpreventable (Chowdhury & Chowdhury 1998); addressing these require prompt medical intervention. Unfortunately no studies could convincingly show a positive impact of such training alone in reducing maternal mortality (Weil and Fernandez 1999). Home birth is preferred and often the only option available in many developing countries (Walraven and Weeks 1999). Priority has now shifted to providing high quality care by skilled attendants (WHO 1999) and attendance for all deliveries. Thus there are several reasons why skilled attendance at delivery is recommended as a way of ensuring EsOC (Dugald Baird Centre 1999):

1. Historical evidence both from industrialised countries, (such as Sweden and the United Kingdom) and transitional countries, (such as Sri-Lanka and Malaysia) indicate the essential role played by the improvement of delivery care in the reduction of maternal mortality.
2. It is now known that about two-thirds of deaths occur around the time of delivery and the vast majority of cases could not be predicted as complicated according to commonly used antepartum risk factors.
3. The effectiveness of training projects for TBAs as mentioned above, is now openly questioned. There is a lack of evidence of any population relying heavily on TBAs lowering its maternal mortality.
4. There is strong evidence, both historically and contemporary for the impact of skilled attendance at delivery on reducing perinatal mortality. Thus this intervention has the potential to relieve a double health burden-maternal and perinatal death - in developing countries.

¹ There are non-obstetric care interventions, which have also been found effective in reducing maternal mortality. For example, a study in Nepal has found that a regular supplementation of vitamin A in a vitamin A-deficient population can reduce maternal mortality by up to 49 percent (West et al. 1999). We hold this discussion until later, however.

An issue that is largely unresolved is what constitutes 'skilled attendance'. According to some, skilled attendants or 'professionally qualified birth attendants' include midwives, doctors and practitioners who have received at least 18 months of midwifery training and attend on average, 5-10 deliveries per month (Donnay 2000). With this definition the proportion of births in developing countries attended by skilled attendants is 58 percent with a range from 2 to 97 percent (WHO 1997). In countries which are on the lower range, the role of family members and trained and untrained TBAs is enormous, and the challenge is how the transition to skilled attendance is expedited. Some have suggested creation or identification of an intermediate group of 'birth attendants with midwifery skills' or BAMS (Walraven and Weeks 1999) and/or following an approach of moving in a phased manner from the present home-delivery by non-professional TBA-based care to a comprehensive obstetric care facilities (Koblinsky et al 1999).

Increasing the net of deliveries by skilled attendants is thus the latest thrust in the international safe motherhood movement. The present goal is to ensure that 80 percent of deliveries is assisted by a skilled attendant by 2005. It has been reckoned that no other countries than those in Latin America and the Caribbean will be able to reach this goal (AbouZahr and Wardlaw 2001).

But for a vast majority of other countries the challenge will continue to exist. There will be a host of barriers and hurdles to overcome. Those include, from the supply side of the equation, training and posting of skilled attendants, resource allocation, functioning referrals, new roles and responsibilities of medical, midwifery and nursing professions, supervision and monitoring of the new provision, and adequacy of appropriate supplies and equipment. Since the provision of skilled attendance does not necessarily guarantee their use by the women and the communities, community preferences along with cultural, physical, and economic barrier, that women face in utilizing these services need to be neutralized. The question of equity is also important, as the problems faced in seeking care by poorest women in poor countries are different from those of non-poor women. It is quite possible that if adequate 'safety nets' are not provided, the existing inequities in skilled attendance at delivery would widen (Dugald Baird Centre 2000).

The project, "Strategies to improve the proportion of deliveries with skilled attendants in developing countries" purports to generate useful information to improve maternal and perinatal outcomes of childbirth, particularly for the poorest women. The project being carried out in several countries and coordinated by the Dugald Baird Centre for Research on Women's Health, University of Aberdeen, UK, seeks to carry out a number of independent but related activities. These include (a) development of a new strategy tool for programme planners to increase the proportion of deliveries with skilled attendance, (b) generation of new knowledge on access to skilled attendants at delivery among the poorest women, (c) improved understanding of the trends in the proportion of deliveries with skilled attendants, (d) improved ability to monitor proportion of deliveries with skilled attendants through a 'rapid assessment package', and (e) application of the strategy development tool in developing countries (Dugald Baird Centre 2000). Bangladesh has been included in this project and this report is based on a study on (b) above. Here in this study we examine the delivery care practices with particular emphasis on the barriers and opportunities in seeking skilled attendance by the poorest sections of the community. In defining skilled attendance for Bangladesh, problem was encountered as to who and which sense would be considered 'skilled'. Following consultation with representatives from Dugald Baird Centre, any institutionalised facility providing birthing care was treated as skilled attendance for the purpose of the study.

MATERNAL MORTALITY AND DELIVERY CARE IN BANGLADESH

In Bangladesh like other developing countries, the health services are extremely inadequate. Maternal and neonatal health are serious public health concerns. According to the government statistics, maternal mortality rate stands between 4.2-5.0 per 1000 live births or approximately 28,000 deaths per year (UNICEF 1999). A most recent survey based on a large national sample estimated the maternal mortality to be in the vicinity of 320 to 400 (NIPORT 2002). According to the estimate almost 50 mothers die each day during delivery, orphaning a large number of children at least as large as this. Of the children born to mothers who die in childbirth in Bangladesh, 95% die within one year of life and the survival of their siblings becomes also at stake (Kay et al 1991; MOHFW 1997).

Most deliveries in Bangladesh take place at home by traditional birth attendants (TBAs) or by family members. Untrained/medically non-competent birth attendants conduct about 85% of all deliveries (Barkat et al 1998). Studies, which have explored traditional birth practices by TBAs in Bangladesh and elsewhere, have often found potentially harmful procedures increasing frequent vaginal examinations, pressure on the fundus, exhortations to push during the first stage of labour, pulling and manipulation of the infant and forced delivery of the placenta (Goodburn et al. 2000). Malnutrition, infections and high fertility put women at high risk during pregnancy and childbirth.

A large number of the deaths can be attributed to unhygienic and dangerous delivery practices and inadequate pre and postnatal care. Most deaths result from complications of induced abortion (21%), eclampsia (16%), antepartum and postpartum haemorrhage (26%), infection (11%) and complications of delivery such as ruptured uterus, obstructed (8%) and prolonged labour and other conditions (18%) related to pregnancy and child bearing. For every woman who dies of pregnancy and child birth related causes, at least 15 other women experience severe infertility all of which result in serious social and marital as well as physical complications and 100 others suffer various morbidities (Goodburn et al 1994). Seventy percent of maternal deaths are due to direct obstetric

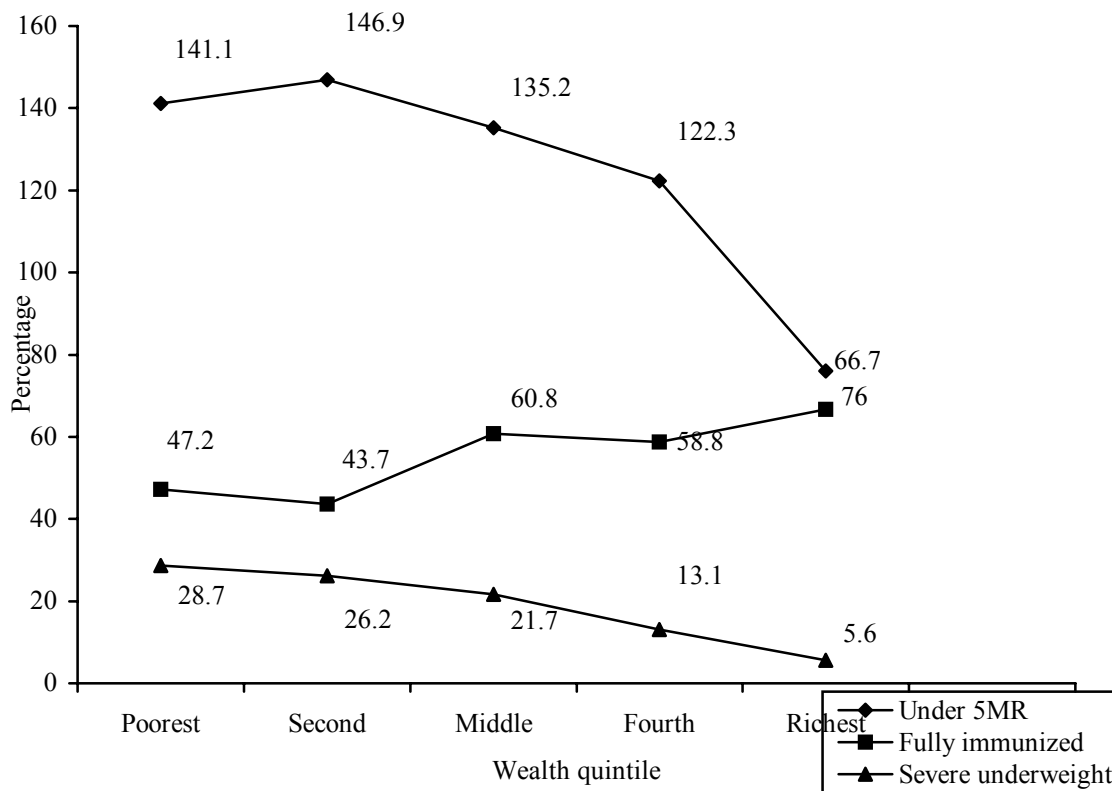
causes and less than 5% of women with complications have access to EOC services (UNICEF 1999).

A study in Matlab found that the use of health facilities during childbirth contributes in reducing the incidence of maternal mortality (Maine et al 1996). Due to poor quality of formal health care services most people are unwilling to seek childbirth care from the hospital (World Bank 1999). At present only about 12 percent seek delivery care at institutions. The challenge is how to increase the access of the women to skilled attendance at birth. This is a daunting challenge given the large population size, high population density (130 million with a density of 900 persons per sq. km.) and resource constraints.

An overview of the existing literature indicated that demographic, educational status, status of the women in society, economic and cultural constraints and situation in formal delivery care services are profoundly interrelated in many ways with the situation of pregnancy and delivery in the country. Generally in Bangladesh women's health is utterly miserable and particularly the state of pregnant and nursing mother is deplorable by virtually any standard.

Nearly 80 percent of Bangladesh is rural. About half of Bangladesh's population are poor and nearly a third are considered 'extremely poor' (World Bank 1999). Among the many correlates of poverty, poor health status and its contribution to 'income erosion' are important reasons for pauperisation and destitution (BRAC 2001). The health indicators are affected by the economic status of households. Figure 1 shows the poor-rich divide by various health and health care parameters. It shows how the under 5 mortality and severe under-nutrition reduce and immunization status improve with the rise in economic status (proxied by wealth quintiles).

Fig 1: Under 5 mortality rate, severe under nutrition and immunization coverage by wealth quintiles.



Gender differences in health or the lack of health overwhelmingly reflect the low socio-cultural status of women in the society (Aziz and Maloney 1985). There are 25 million women of reproductive age in Bangladesh. Among them 60 percent are between the ages of 15 and 29, and most women (78%) in their reproductive age are married. The mean age at marriage is about 18 years (BDHS 1997). The median age at first birth for women aged 20-49 is 17.4 years and almost 60 percent begin childbearing by age 20. (BDHS 1997). The Total Fertility Rate (TFR) has plateaued at 3.3 for the last five years (BDHS 2001).

Figure 1 shows that the poorest group in Bangladesh is disadvantage in terms of infant mortality, nutritional status or child immunization. The same type of inequity also occurs in maternal health and health care. Figure 2 shows the proportion of women who visited

different providers for antenatal care (ANC) by economic status. It shows that a higher proportion of well-to-do women seek ANC compared to poorest groups.

In respect of delivery care, more of the well-to-do women seek skilled attendants than the poorest. While a medically trained person conducts nearly 30 percent of the deliveries for the well-to-do women, this is less than two percent for the poorest women.

Similarly, proportion of deliveries done at a facility is highly inequitable. Whereas the proportion of well-to-do women delivering in a (private or public) facility is 17.3 percent, it is less than one percent for the poorest women. In other words, proportion delivering at home increased with increase in poverty level.

In Bangladeshi rural society the pregnant women are discouraged to their natural mobility outside home thus restricting her chances of seeking health care independently. She always has to depend on the family members to accompany her or needs prior permission or consent from husband or in-laws to seek care. Antepartum and postpartum care are not usually encouraged and supported by the family members as any .. morbidity is considered as normal consequences of pregnancy (Blanchet 1999). It is so much ingrained in the culture that often the women do not feel the necessity of attending ANC, as they think that they had no problem with the pregnancy (Goodburn et al 1994).

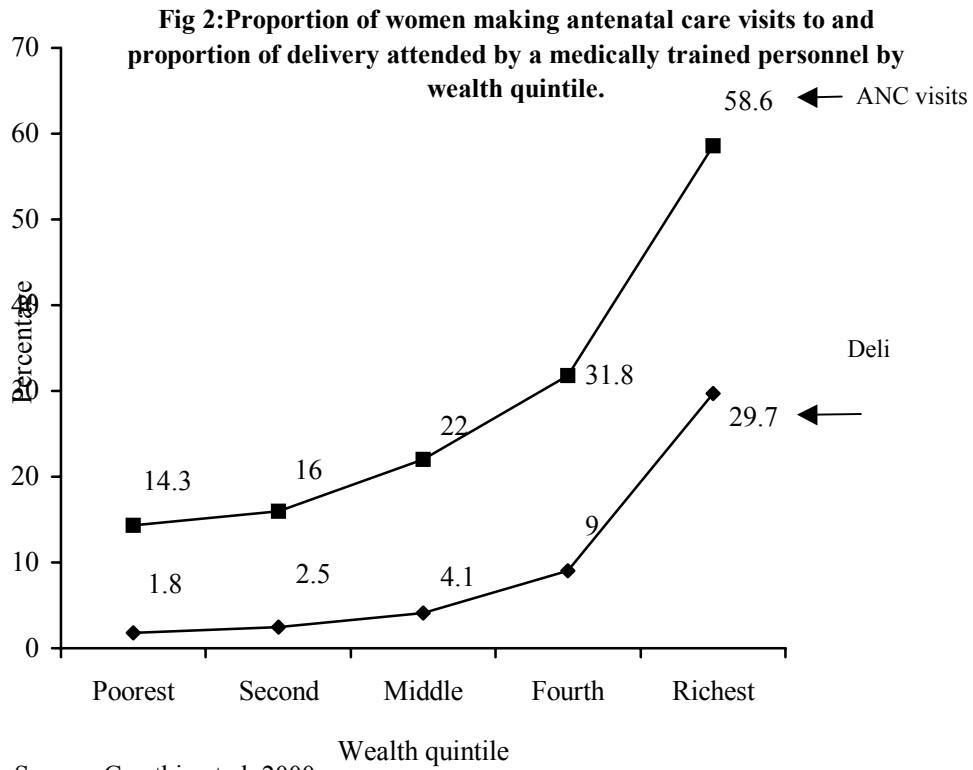
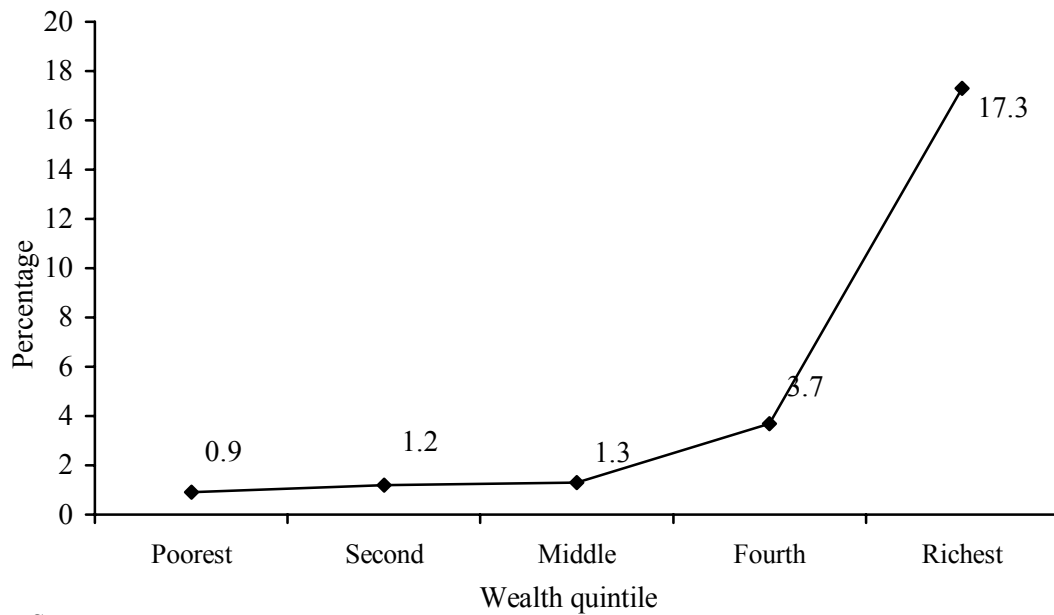


Fig 3: Proportion of women delivering in a facility by wealth quintile.



In addition, food restrictions put a woman into a state of malnourishment. In a poor rural household, the mother eats last and naturally she gets what is left over. The proper diet of mother is crucial for a successful delivery, which she is often deprived of (Bhatia 1981). The women are usually encouraged to eat less so the baby would remain small to facilitate an easy delivery.

Home delivery is almost universal in rural areas of Bangladesh. The role of women in decision-making is minimal. It was found that only in 20 percent of cases that the women take decision about who should deliver their baby. In 30 percent of cases the husband and in 27 percent of cases the family decides. Outside family members are involved in rest of the cases (Akhter et al 1995). Women are dependent on male guardians (sometimes mothers-in-law in the extended family) in case of a complicated delivery, to decide whether outside (medical) assistance would be required or not.

In a 1995 study on the community perspective of EmOC services it was found that accessibility and quality of care are crucial factors influencing the decision to seek care (Barkat et al 1995). The husband and the mother-in-law who are usually the major decision makers in the family were the least knowledgeable about the concept of EmOC. Availability of trained medical personnel, cost of services, social prejudices and poor knowledge were key factors influencing the decision to seek care for obstetric problems. Role of the community leaders like *Imam* is also important as people often seek advice or suggestion from them in case of complications. Many people in rural and urban areas believe that evil spirits orchestrates delivery complications. Therefore, they ask the religious leaders whether the mother needs an amulet and sanctified water or should be sent to a health care centre in that situation (Blanchet 1984). The tendency of seeking help from spiritual healers often causes delay in proper health care needs and sometimes result in fatal consequences.

While the delivery pain occurs at night in most cases the decision to take the mother to a faraway facility requires money and transportation means. They also have to consider travelling during night, which is often not hazardous.

Due to poor infrastructure access to formal health care services is hindered. Roads do not provide access to many remote villages. During the rainy season, transportation and services become even more difficult. Many women never manage to get to a doctor or hospital even in emergencies. A study showed that in spite of the existence of five health facilities in the area, 75 percent of women dying in childbirth did not see a doctor before their death and 89 percent did not go to a modern health facility (Caldwell 1992).

The commonest types of patients referred to different facilities include pregnancy with malpresentation, prolonged labour, PET/eclampsia, APH/placenta previa (Table 1). Essential obstetric functions including caesarean section are provided at hospitals and medical college hospitals. District hospitals are over crowded and unable to provide necessary services due to a lack of adequate supplies, equipment or appropriately trained personnel. Many doctors at most Upazila levels (sub district) do not have specialised Ob/Gyn training, limiting the services they are able to provide (Gill 1993).

In Bangladesh only 12 percent (Table 2) of births are assisted by doctors or trained nurses or midwives. Medically assisted deliveries are more common for urban births and births to highly educated mothers than rural births (35 vs. 6%) (Barkat et al. 1995). The proportion of births with medical assistance during delivery has increased since 1996-97 (from 8 percent to 12 percent). Table 2 shows that 81 percent of the mothers received at least one tetanus toxoid injection during pregnancy. It also shows that ANC coverage is 33.3 percent, an increase of two percentage points since 1996-97 (BDHS 2001). Table 2 also shows the various inequities in terms of access to reproductive healthcare services. Those who are particularly disadvantaged are women of rural areas, illiterate and older and higher birth orders.

There are five major causes of maternal mortality at Table 2 shows the effectiveness of different interventions for each. It shows that it is only the appropriate management for each case of delivery that can save lives.

Table 1: Commonest type of patients referred to various facilities

Commonest type of patient referred	Type of facility			
	DH (57) %	MCWC (55) %	THC (610) %	FWC (50) %
PET/eclampsia	7.0	20.0	14.8	26.0
Prolonged labour	14.0	30.9	9.8	14.0
Pregnancy with malpresentation	31.6	32.7	44.3	34.0
APH/placenta praevia	14.0	10.9	23.0	2.0
PPH/retained placenta	3.5	1.8	1.6	-
Abortion	-	1.8	1.6	10.0

Source: BIRPERHT: 1995

Table 2. Influence of various interventions in prevention of maternal death

Cause of death	Influence of intervention			
	Family planning	ANC	Trained birth attendant	Case management
Haemorrhage	_____	Advocative	Advocative	Life saving
Induced abortion	Preventive	_____	Advocative	Life saving
Eclampsia	_____	Preventive	Advocative	Life saving
Puerperal sepsis	_____	Advocative	Preventive	Life saving
Obstructed labour	_____	Advocative	Advocative	Life saving

Source: GoB (1998). The existing government facilities are distributed in a way that

comprehensive facilities regarding delivery are available at the divisional and district levels and basic at the district as well as at Upazila level. In order to render minimum acceptable level of EmOC services at sub national levels, there is a greater need for expansion of the government facilities at district, Upazila and union levels. Rural people have to rely on the government facilities because of the high cost of the private clinics,

which are concentrated in four big cities: Dhaka, Chittagong, Rajshahi and Khulna (Khan et al 2000).

In a study, it was found that among the institutional deliveries, 65.5 percent were normal vaginal deliveries, 30.6 percent Caesarean and 3.9 percent assisted deliveries (Table 4). The number of deliveries (Oct. 98-Sept 99) at government facilities constituted only 5.3 percent of the total estimated annual deliveries. Case fatality rate (CFR) being an assurance of quality of EmOC services provided at the facility in the country (all types of facilities combined) is 2.24, which is more than double of the maximum acceptable level of one percent (Khan et al 2000). If the CFR is computed of all complicated obstetric cases, the CFR is expected to be much higher. For a district hospital, the latter was found to be four percent (Maine et al 1996).

Regarding availability of service providers at government facilities, consultants/specialists were posted/available in 83 percent DH, 22.9 percent MCWCs and 9.5 percent UHCs. Only 25.4 percent DHs and 34.8 percent UHCs had MOs trained in EmOC (Khan et al 2000). Doctors play an important role in maternal health care but qualified medical technicians concentrated in urban areas. The rural areas maintain the imbalance of skilled attendants at birth. There is hardly any female gynaecologist to be found in rural areas.

The Government of Bangladesh (GOB) has focused its attention on improving maternal health since the mid 1980's. Since then it has gone through different phases starting from Third Five Year Plan to Fourth Five Year plan and now the Health and Population Sector Plan (HPSP) 1998-2003. In the past, the government took initiative to train one Traditional Birth Attendant (TBA) for each of the 86000 villages to handle normal delivery along with identifying risky births and making proper referral (Akhter et al 1995). However, it could not make much headway in reducing maternal mortality. This is due to inadequate duration, lack of supervision and follow up of the training and more importantly, an overtly high expectation. Indeed it was more of a classroom approach and did not incorporate practical exposure to the trainees. The government failed to anticipate that without proper referral and EmOC support, supervision, proper linkage,

the training alone could not deal with a complex issue like maternal mortality reduction. As no linkage between the formal health-care system and TBAs established, the TBAs did not act as effective referral agent (Gazi et al 1998; Blanchet 1991).

Table 2: Reproductive Health care indicators in Bangladesh.

Background Characteristics	Tetanus toxoid injection	Antenatal care		Assistance at delivery		Number of Births
		From doctor	From auxiliary ¹	From doctor	From auxiliary ¹	
Age						
<20	85.5	23.6	12.3	6.4	5.2	1,580
20-34	80.9	24.9	8.7	9.1	5.2	3,337
35+	65.3	12.3	6.1	2.4	4.5	347
Residence						
Urban	88.3	49.9	8.7	22.7	11.9	913
Rural	79.8	18.2	9.8	4.7	3.7	4,350
Division						
Barisal	80.5	25.2	8.6	5.1	6.0	334
Chittagong	82.6	24.9	5.8	7.0	5.9	1,075
Dhaka	79.7	25.0	7.5	9.1	4.2	1,646
Khulna	85.5	27.7	16.0	11.3	8.0	579
Rajshahi	84.3	20.0	13.5	6.1	4.9	1,271
Sylhet	67.4	19.5	7.4	7.9	2.9	357
Education						
No education	73.2	11.5	8.5	2.7	2.8	2,390
Primary incomplete	82.8	18.7	10.4	3.8	4.6	990
Primary complete	84.2	22.9	10.7	4.3	4.7	542
Secondary/Higher	93.3	49.5	10.5	21.4	10.0	1,342
Birth Order						
1	89.1	32.7	11.7	13.6	6.6	1,437
2-3	84.1	24.8	10.6	7.6	5.2	2,286
4-5	73.5	15.9	7.0	3.4	4.3	928
6+	63.9	10.6	4.8	1.7	3.0	612
Total	81.2	23.7	9.6	7.8	5.2	5,263

¹ Includes nurses, midwives, and family welfare visitors

Source: BDHS 2001

Table 3: Type of deliveries by facilities.

Type of delivery	Facility					
	MCHs	DHs	MCWCs	THCs	PCs	All
	13	59	62	104	224	
Normal delivery	47.33	79.58	86.22	96.21	53.50	65.48
Assisted delivery	5.04	2.75	3.85	3.68	4.15	3.89
Caesarean	47.63	17.67	9.93	.11	42.35	30.63
Total	100	100	100	100	100	100

Source: Khan et al 2000

Under the new health and population sector strategy (1998-2003) the government is now implementing an Essential Services Package (ESP), which includes interventions related to maternal and child health. The establishment of EOC in all 64 DHs, 358 UHC, 3200 UHFWCs and 13 MC&Hs at divisions and other health facilities is likely to be a major intervention towards reducing maternal health in Bangladesh. The framework of action is based on the ‘Three delays model’² and includes community awareness, proper referral and ensuring care in the facilities. Women Friendly Hospital Initiative (WFHI) is another effort supported by UNICEF and the Ministry of Health and Family Welfare (MOHFW) of the government. The goals of WFHI is to create the conditions necessary for women in a hospital, to be treated in a way that respects human dignity and women’s needs while challenging oppressive cultural practices. It is supposed to provide Mother–Baby Package of services that will include easily accessible EOC provided by skilled attendants and neonatal care.

Under the HPSP (1998-2003) the structure of health services for maternal care is the following.

Community level: At this level, the services are provided from a static centre called the Community Clinic, serving a population of approximately 6000 and within the

² Delay in deciding to seek medical care, reaching a medical facility and receiving care.

community's reach (by 30 minutes walking distance). For ESP service delivery a team comprising of one HA (HA: 5000), one FWA (FWA: 23500) are the core personnel who are supervised by FWV (FWV) and MA (MA). The personnel are supported by and imparted with relevant training so that they are able to provide the obstetric first aid with normal delivery care closest to the community (GOB 1998a: 22). There will be on average four clinics in a union with 16 outreach centres. The services include recognition of complications, ANC, trained birth assistance, PNC and obstetric first aid (parenteral antibiotics, oxytocics, and sedatives). The service would ensure clean delivery at home, detect complications and refer them promptly and also mobilise community in arranging transportation. Following the change of government in 2001 there is some uncertainty as to the future of community clinic.

Union level: Union level facilities such as HFWC provide obstetric first aid and all the 4500 unions will be covered by the year 2003. There are one MO, one MA, and one FWV for each H&FWC. The services include ANC, PNC, Health education particularly danger signals during pregnancy/delivery and after delivery breast-feeding, diet, immunisation, cord care, and appropriate referral. The MA provides clinical services but the FWVs are for outreach to cover a population of 27,000.

Upazila level: The target for the Upazila levels are two fold. About 280 Upazilas will be ready to provide basic obstetric care and 120 will provide comprehensive obstetric care services in phases. This will include parenteral antibiotics, oxytocics, anticonvulsants, management of shock, manual removal of placenta, Decidual and evacuation (D&E); assisted vaginal delivery, repair of first degree tears, management of labour using photograph, fresh blood transfusion, treatment of severe anaemia of pregnancy. There will be two MOs trained on basic EsOC, FWVs and trained blood technician.

District level: All the district hospitals will provide round the clock comprehensive EmOC services including caesarean section. There will be two consultant obstetrician, MO trained in anaesthesia and nurses/FWVs.

Under the new strategy, training is considered as the strong base to develop efficient birth attendants in the health care system. Training will be provided to the FWA and female HA regarding clean and normal delivery. Training is focused on development of skill with practical exposure. A six month training of midwifery for 300 FWVs was started from August 2000. This is the first batch planned in the sector plan to develop a cadre of community midwives. The Institute of Child and Mother Health (ICMH) has been given the responsibility of the lead training institute for the training. There are other training facilities where various training programmes are being implemented to provide skilled human resource for delivery, like NIPORT, Nursing Institute, Medical colleges and different NGOs.

At present there are 5000 FWVs. Giving them six months of training with a slow pace, as taking 300 at a time, will require a long time. Bangladesh needs skilled persons in lower level of health care service delivery.

Table 4: Existing Infrastructure for Maternal Health Care.

Institutions	Administrative unit (and number)	Obstetric Care provider	Expected services
Medical College Hospital	District (13)	Specialist Medical Officer (MO) Nursing Stuff	EsOC* & EmOC*
District Hospital	District (59)	Specialist MO Nursing Stuff	EsOC & EmOC
Maternal Child Welfare Centre (MCWC)	District (52) Upazila (240) Union (11)	MO FWV, dai nurse FWV FWV	EsOC & EmOC ANC, delivery ANC, delivery
Upazila Health Complex (THC)	Upazila (402)	MO, Nursing Stuff, FWV	EsOC
Health & Family Welfare Centre (H&FWC)	Union (4,770)	FWV, MA	ANC delivery
Community Clinic	Village (18,500)	FWV, Health Assistant (HA), FWA, TTBA	ANC, delivery

Source: HPSP 1998-2003

Bangladesh is committed to reducing maternal mortality to below 3 per 1000 live births. The HPSP (1998-2003) expect to reduce maternal mortality and morbidity using the following strategies (MOHFW 1998):

- i) Focus on EOC for reducing maternal mortality
- ii) Provisions of EOC services for promotion of ‘good practices’ early detection and appropriate referral of complications
- iii) Addressing the needs of women through a woman friendly hospital initiative
- iv) Communication for behaviour change and development
- v) Involvement of professional bodies
- vi) Stakeholders participation
- vii) Promotion of innovation

The existing health care system is less people friendly and maternal health is no different. Improving the existing infrastructure increases coverage of EsOC services in different levels of health facilities and recruiting skilled personnel are important but not sufficient to reduce maternal deaths. Timely referral and transport facility are essential components of an effective maternal health care system (Maine et al 1996). Women also need community and family support to seek formal care (Gazi et al 1998). Costs and unfriendly behaviour of providers often dissuade women from accessing formal healthcare (Afsana and Rashid 2000). We will address these issues in further detail in this report.

RESEARCH METHODOLOGY

This study explores new knowledge on access to skilled attendance at delivery among the poorest women. The study was conducted with the following objectives:

- Explore the situation of delivery care together with antepartum and postpartum condition from a comparative perspective in rural and urban Bangladesh.
- Identify the barriers and opportunities in seeking delivery care from users' perspective.
- Know the experiences and views of the providers with regard to barriers and opportunities for the poorest women in accessing their services.
- Obtain an idea about the availability and quality of provisions for pregnant women in a given study area, which would indicate what level of EsOC was available where.
- Assess the suitability of the methodology for needs assessment regarding skilled attendance at delivery.
- Sensitise the policymaking and development practitioners to ensure that the poorest women are capable to access delivery services of a reasonable quality when they need them.

The study systematically collected and presented data on women's needs regarding skill attendance at delivery by using qualitative methods. A review of the existing literature was also done to put the study in context.

Data collection techniques

Data for the study was collected during January to March 2001. A variety of qualitative technique was used to collect information on different themes (Table 5). Apart from in-depth interviews, several participatory techniques were used for data collection that included focus group discussion (FGD), free listing, matrix ranking, decision flow chart, ranking and problem tree. Table 6 shows an overview of data collection techniques indicating number and type of respondents. To get an overview about the study area and

the study population, social mapping and wealth ranking exercises were carried out beforehand. The participatory techniques used for data collection in the study are given briefly in annex 1.

The different data collection techniques used was complementary to each other. Triangulation of different techniques and sources was done to maximise the validity and reliability of data and reduce the chances of bias. For instance, data on a same theme was collected from several sources, such as women of reproductive age, mothers-in-law and husbands by using participatory techniques, FGD and in-depth interview. These were then crosschecked with each other to assess validity and reliability. Interview schedules and checklists that were used as data collection tools are given in Annex 2.

Study area

The study was conducted in two poor communities of rural and urban Bangladesh. For the purpose of comparison, the study was repeated in the better off communities as well. Korail slum in Dhaka city was selected as the poor community in urban area and Lalbagh and Rayar Bazar area of Dhaka city were considered as comparison areas.

Given the economically indolent background, Chilmari Upazila of Kurigram District was selected as the study area in rural category. With the assistance of local BRAC personnel Patro Khata village in the same Upazila was chosen for the study. This village or the Upazila did not have any special programme on safe motherhood undertaken by a government or nongovernmental organizations. In the village we interviewed the poor and non-poor individuals as part of the overall design of the study.

Prior to the main study a pilot study was carried out in a village of Rajnagar Upazila in another district (Maulvi Bazaar) to test the suitability of various research methods as a means of data collection. The pilot study helped to review the checklists used for data collection. Based on this, we decided that areas where skilled attendance would be present would be avoided for the main study. Further details of the pilot is given in Annex 3.

A brief profile of the study areas is given in the following.

Korail Slum in Dhaka city

Korail slum is located in Mohakhali area in the northeast part of Dhaka city. It is situated on T&T³ land and had 5000 households. It was a huge slum divided into five units, but the study covered a small part of it. The slum was accessible by road, and by boat across the Gulshan Lake. A study done by BRAC in 1997 had found that the inhabitants in this slum came from various districts of Bangladesh and that they had been living in Dhaka city one month to twenty-five years (Khan et al 1997).

The male slum dwellers worked as rickshaw pullers, daily labour, garment worker, baby taxi drivers, shopkeepers, tempo drivers, small traders and domestic help. Many of them did multiple jobs too. The women worked as domestic help, garment workers, daily labour, and small traders. The children in the slum were also in the labour market and involved as shop assistant, helper in garment factories and rickshaw pulling, etc. Some children collected throwaway things from the street and then used or sold those to others. Legally or illegally people had access to electricity in Korail slum and many households owned a television and/or a radio.

In the slum, there were a few schools ran by NGOs, two Madrashas and one coaching centre for secondary and higher secondary students. There were many children who did not attend school. The slum dwellers fetched water from tap, pond, and a shallow tubewell for drinking, washing and cooking purposes. Although a few slum dwellers had slab latrines but most of them were found to use *katcha* latrine⁴. Often the children were found to defaecate on the roads and those were hardly cleaned or wiped.

NGOs like BRAC, Proshika, Caritas, Innerwheel and Marie Stopes had their activities in the slum. Besides, there were some local NGOs working in the slum. The slum was in close proximity of pharmacies (drug store), private clinics and other health care facilities

³ Telephone and Telegraph Department (of the government).

⁴ It is bamboo-fencing open latrine hanging on the water.

run by NGOs and other voluntary groups. The slum dwellers received health care services from these places. There were some informal healthcare providers like *kabiraj* and *dais* and people were found to consult them in times of need. People's perception of the causes of illness was noted to influence their utilisation of different healthcare services (Khan et al 1997).

Patra Khata Village

Patra Khata village is situated in Chilmari Upazila of Kurigram district. Kurigram is historically vulnerable to natural and man-made disasters like flood, river erosion and famine. Located in northern Bangladesh, it is a chronic food deficit area where poverty incidence is highest (Bangladesh Bureau of Statistics 1997). The village, where the research was done, is located 40 km from Kurigram district town, and 10 km from the Chilmari Upazila town. The village is about 5 km away from the main road and could be reached by rickshaw. The rickshaw fare was about eight taka from the Upazila town. Chilmari town is reached from Kurigram and Rangpur by bus or train.

The study area in the village was along the main road and fields and included the main clump of *baris* (households). It consisted of 142 households. Map of the village is given in Annex 4. The village produce crops such as rice, jute, wheat and mustard. The main occupation of the male is largely in agriculture, and the female are mainly involved in household chores. Some poor women were employed as domestic help in the houses of village elites; they received three meals a day as wage. Rearing domestic animals was common among the women but they were not found to do it commercially; in emergencies however, it provided cash. A few women were found to do earth work organised by the local Union Parishad office. Majority of the people in the village earned their living as agri-labourer. During the peak agricultural season the wage rate ranges from Tk. 40-50 plus one meal a day. In other seasons it is about Tk. 25-30 without any meal. Through a WR exercise the villagers identified 13 households in the village who were considered *bhalo* or better off with food security throughout the year and five of them were considered *dhoni* or rich who had surplus after the year's consumption.

The WR divided all the households into four categories as follows:

- Category 1 rich (*dhoni*): 5 households (4%)
- Category 2 slightly better off (*bhalo*): 13 households (9%)
- Category 3 middle (*moddhyam*): 13 households (9%)
- Category 4 poor (*gorib/din cholena*): 111 households (78%)

Total : 142 Households.

Many households in categories three and four are migrants to the village from other places of the same Upazila after losing their land through river erosion. Thus they were basically landless. Many of the villagers often migrated out to big cities to work as rickshaw puller or construction labourer. Some of the women as well went to the cities to work in garments factories and as domestic help.

The nearest primary school and high school were in Sharifer Haat, 5 km away from the village but there was a non-government primary school in the village. The nearest bank branch also was 5 km away. The local bazaar and *haat* were both one and a half km away. There was no electricity in the village. Only two households owned slab latrine and there were a few private tubewells installed cooperatively in the village. The nearest health centre was in Sharifer Haat Union, but for maternal health problems the villagers usual destination is Upazila Sadar, which is about 20 minutes away by rickshaw.

Some of the NGOs like BRAC, Chinna Mukul, Apon Uddoyg, RDRS and Grameen Bank had their services in Patra Khata village. Most of these provided microcredit to facilitate income earning activities. BRAC also had its essential health care programme in the village with seven components including: health and nutrition education, safe water and sanitation, family planning, immunisation, routine health check-up for the BRAC VO (Village Organisation)⁵ members, basic curative service through *Shasthya Shebika*⁶, and care for pregnant women.

⁵ The VO is a primary organisational unit through which BRAC mobilises the poor women and implements its programmes (Mannan et al 1995).

⁶ Voluntary health worker. BRAC has trained a VO member in each VO to take care of the common illnesses faced by the poor. They diagnose and sell medicine with a small mark-up.

Study population and sampling

The study was conducted among women of reproductive age (WRA) belonging to poor and non-poor households, influential family members and health care providers from both formal and informal sectors.

Women of Reproductive Age (WRA): Sixteen women of reproductive age were interviewed in rural and urban areas. Table 7 shows the profile of WRA interviewed in the study. In the rural area a WR exercise was carried out prior to selecting women respondents. As mentioned earlier the villagers categorised the households in the study village into four socio-economic groups according to their judgement of the relative wealth (Annex 5). The respondents were selected purposively from both the poor and non-poor groups to explore the role of economic status in decision making related to pregnancy termination. It has already been mentioned that the poor WRA in the urban area came from the slum and the non-poor WRA from Lalbagh and Rayar Bazaar area of Dhaka city. In selecting the WRA, priorities was given to younger women to ensure that the findings reflect the current and recent practices. The WRA in rural and urban areas were further divided into two categories: user and non-user of the formal health service during delivery. In order to identify the barriers and enablers concerning service utilisation for delivery care, the contrasting groups of ‘users’ and ‘non-users’ were included in sample. There were some women had experience of deliveries both within and outside the formal system, and their circumstances were also recorded in the study.

Influentials: In the Bangladeshi society it is not always the WRA or the pregnant women who decides on what to do at the time of delivery or labour complications. There are certain family members who play important role in such decision making. On the basis of literature review and pilot interviews with WRA, the groups of ‘influential’ most suitable for inclusion in the study emerged to be mothers-in-law and husbands. Therefore, one FGD was held each with mothers-in-law and husbands of WRA. In the urban area one informal group discussion was held with the elderly women (mothers and mothers-in-law) in the slum.

Health care providers: The study included several categories of health care providers. In the urban area, two doctors and a nurse from the government hospitals were interviewed. In the rural area two FGDs were conducted with the nurses of UHC and field based FWA. The Upazila UHFPO was also interviewed. Given the important role of TBA, a FGD was also conducted with them.

Field operations

Table 8 presents the time frame of the data collection. In the urban area, assistance was received from BRAC's urban development programme in order to get access in the slum. Through the *Shasthya Shebika* the WRAs were contacted in Korail slum for interview and other participatory exercises. The purpose of data collection was clarified to the women in advance so that they felt free and at ease to participate. Some women however were somewhat cool in participate in the participatory exercises. They observed the processes from a distance and every now and then threw their remarks on particular issues under discussion. On the whole the slum women were found to be well responsive and cooperative. We had planned that both user and non-user WRAs would be selected from Korail slum but identifying two user WRAs was found difficult, since institutional delivery was less prevalent in that place. As a result, one of the user WRA was selected from Korail slum but the other was taken from a nearby slum called the TB gate slum. In identifying user and non-user WRA from non-poor category in urban area, personal linkages and communication of the researchers was applied.

BRAC personnel assisted the researchers in doing the field work in Patra Khata village. Prior to data collection a meeting was organised with local elites to win their support. In that meeting the activities and purpose of the study were explained. Due to BRAC's presence in the area access to rural and urban study areas was smooth. Otherwise, it would have required some extra effort and time to build enough rapport with the villagers to create an environment of trust for conducting ethnographic research in the community.

A preliminary rapport was built with the villagers through the social mapping exercise. It also served as a useful guide to household location and sample selection. The researchers

were cordially received in the village and the rural women were very spontaneous to participate in every exercise. Yet, during individual interviews a few women were not forthcoming. It indicated that more rapport should have been built prior to conducting the interviews with the women. Due to curious onlookers it was quite hard to conduct the in-depth interview in a quiet and relaxed atmosphere, which often affected the interview. The respondent also felt uneasy to share her experience in front of her female in-laws and other women of the village. The participatory exercises, on the other hand, turned out as a better means for revealing information from various perspectives.

With regard to collecting information from providers of formal health care in both rural and urban areas the consent was received verbally and then the interviews and FGDs took place. Senior staffs assisted the researchers in organising the FGDs with FWVs/FWAs and nurses. In order to further understand the situation relevant documents were scanned and reviewed. The TBAs were brought to FGD at BRAC's office in Chilmari Upazilby *Shasthya Shebika*.

During fieldwork ethical considerations were taken into account. The respondents were assured from the beginning that the information they provided would be kept confidential. During individual interview with some WRAs, their in-laws and other relatives had to be informed and were convinced beforehand as they became suspicious about the interview. The work schedule was adjusted with the activities of the women in both rural and urban area so that data collection did not interfere with their daily household chores. Throughout the data collection due respect was paid to people's values, attitudes and beliefs.

Tape recorder was used to record interviews and FGDs, and field notes were taken during participatory exercises and informal discussion with the respondents. Data was transcribed and the field note was finalised almost the same day as data collection.

Processing of data and analysis

The data was processed and analysed manually. During data processing codes were developed from the study themes and data from different sources were coded. Subsequently data compilation was done under different themes. Data analysis included comparison of the facts from different area and sources and relation between the themes.

Limitations

Since the study themes were translated into English from Bengali transcripts it was not always possible to translate keeping all the cultural connotations intact. So there was some chance of losing the exact meaning. To overcome this limitation, particular quotation and terminology in Bengali was verbatim along with English translation.

The study was done in only two of Bangladesh rural and urban areas. The result of the study thus cannot be generalised for the whole country. However, much of the findings do coincide with these of other studies on the same subject in other parts of Bangladesh.

Table 5. The themes in the study with number of sample and techniques used.

Data collection techniques	Number		Themes in the study
	Urban	Rural	
Interview	10	9	Significance of ANC, access and quality; Normal delivery care access and quality; Emergency delivery care access and quality; Postpartum care and care of baby; Quality of a good attendance at delivery; Groups of women attending; Job satisfaction; Communication with patient.
Focus group discussion	1	6	Perception of delivery care services; Decision about delivery care; Difficulties in accessing formal care; Expected quality of care; Way of overcoming the problems; Job satisfaction; difficulties in fulfilling the job; Communication with patient; Perception of an ideal delivery care services.
Free list	1	1	Delivery care; Good quality of care; Decision maker in the family; Barriers in accessing care.
Matrix ranking	2	2	Associate advantages and disadvantageous in delivery cares.
Decision flow chart	1	1	Decision makers and their role.
Ranking	1	1	Prioritising good quality of care.
Problem tree	1	1	Linkage among the barriers in accessing the care.

Table 6. An overview of data collection techniques and respondents in rural and urban area.

Techniques	Respondents														Total
	Rural							Urban							
	WRA		Care providers				Decision makers		WRA				Care providers		
	U	NU	D	FWA	NS	TBA	H	G	U	NU	U	NU	D	NS	
Interview	4	4	1	-	-	-	-	-	2	2	2	2	1	1	19
FGD	1		-	1	1	1	1	1	1		-	-	-	-	7
Free list	1		-	-	-	-	-	-	1		-	-	-	-	2
Matrix ranking	2		-	-	-	-	-	-	1		-	-	-	-	4
Flow chart	1		-	-	-	-	-	-	1		-	-	-	-	2
Ranking	1		-	-	-	-	-	-	1		-	-	-	-	2
Problem tree	1		-	-	-	-	-	-	1		-	-	-	-	2

U = User, NU = Non user, D = Doctor, FWA = Family welfare assistant, NS = Nurse/Midwife, TBA = Traditional birth attendant (trained and untrained), H = Husband, G = Grand Mother.

Table 7. Profile of study WRA in rural and urban area.

Rural area

ID.	SES	Type	Age	Length of marriage	No. of living children	No. of pregnancy	Years of schooling	Delivery condition	IGA
A.	N-poor	N-user	16	3	1	1	7	Normal	No
B.	Poor	User	30	4	2	2	7	Complicated	No
C.	Poor	User	26	6	2	2	7	Complicated	No
D.	N-poor	N-user	30	10	3	3	2	Normal	No
E.	Poor	N-user	19	8	1	1	0	Normal	No
F.	N-poor	User	24	5	1	1	12	Normal	No
G.	N-poor	User	19	3	1	1	11	Complicated	No
H.	Poor	N-user	19	10	1	1	5	Normal	No

Urban area

ID.	SES	Type	Age	Length of marriage	No. of living children	No. of pregnancy	Years of schooling	Delivery condition	IGA
A.	Poor	N-user	25	12	2	3	0	Complicated	No
B.	Poor	N-user	30	7	2	3	0	Complicated	No
C.	Poor	User	30	8	1	3	0	Complicated	Yes
D.	Poor	User	32	21	7	8	0	Complicated	No
E.	N-poor	User	28	11	2	3	12	Complicated	No
F.	N-poor	N-user	27	11	3	4	9	Normal	No
G.	N-poor	User	24	3	1	1	14	Complicated	Yes
H.	N-poor	N-user	26	6	2	3	9	Normal	No

Table 8. Time frame taken for data collection and data transcription in rural and urban area.

Rural area (Two investigators)	
<u>Data collection and transcription</u>	<u>Days</u>
Social mapping and wealth ranking exercise:	One day
Interviews WRA and doctor (9):	Nine days
FGDs WRA, providers, influential (6):	Six days
Free listing and ranking, Flow chart:	One day
Matrix Ranking (2):	One day
Problem tree:	One day
Facilities mapping	One day
Total:	Twenty days
Urban area (Two investigators)	
<u>Data collection and transcription</u>	<u>Days</u>
Interviews WRA (8):	Eight days
Interview care provider (2):	Two days
FGD WRA (1):	One day
Free listing and ranking, Flow chart:	One day
Matrix Ranking (2):	One day
Problem tree:	One day
Facilities mapping	One day
Total:	Fifteen days

STUDY RESULTS

Significance of antenatal care services, access and satisfaction

It has been argued that antenatal care (ANC) is an important prerequisite for the reduction of maternal mortality (Fathalla 1994). In Bangladesh, however, most women considered it less significant (Ahmed et al. 1999). According to Bangladesh Demographic and Health Survey ANC coverage is 33.3 percent, which was 31 percent in 1996-97 (BDHS 2000). The women who attended ANC were mostly for tetanus toxoid (TT) immunisation (Ahmed et al. 1999). The present study explored the significance of ANC for the women and their access to and satisfaction regarding the services.

Perception of the need for ANC

The notion that ANC during pregnancy was not that important for the delivery process was echoed by our study participants. However, almost all of the women were keen on taking TT vaccine. The rural women mentioned that they came to know about the importance of receiving TT from radio, Family Welfare Assistants (FWA) of the government and other neighbouring women. As part of receiving TT they attended ANC session in UHC and Family Welfare Centre (FWC). Apart from this a few women attended ANC either to confirm their pregnancy or for consultation on physical discomforts that they were experiencing.

Most urban women irrespective of their socio-economic status perceived that ANC was not that essential unless there was physical discomfort during pregnancy. One of the women in the slum wondered:

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!
(Poor; urban; in-depth interview)

Similarly, one of the non-poor women explained her reason for receiving ANC:

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. (Non-poor; urban; in-depth interview)

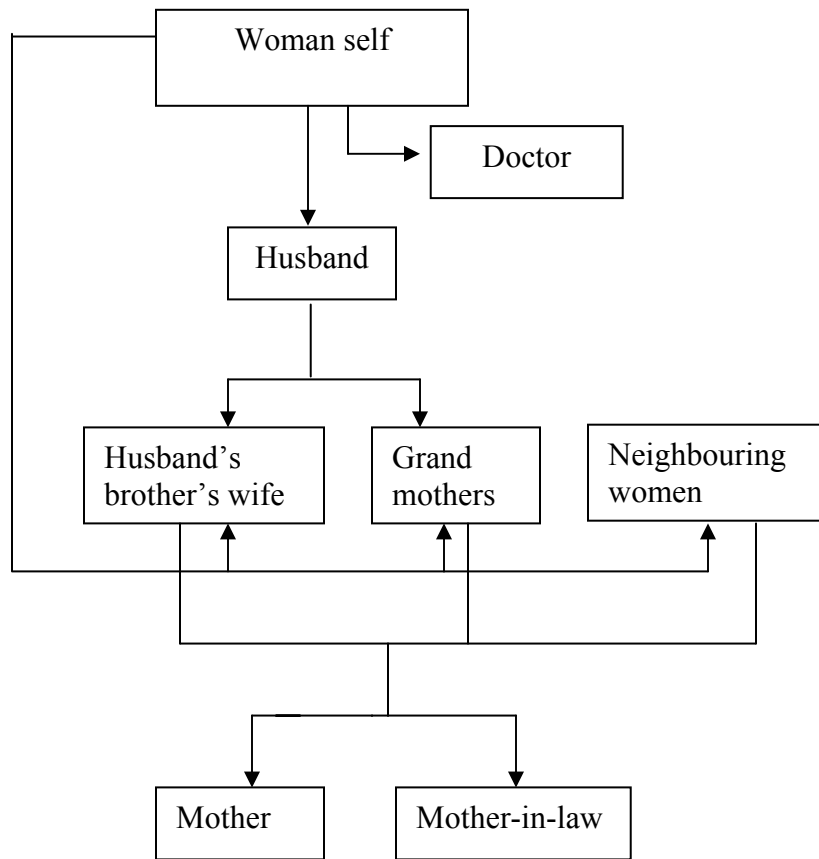
Women from non-poor category were found to attend ANC routinely during pregnancy. Also a few women in the urban slum received ANC from a nearby centre. Apart from the reason of physical discomfort, women were found to attend ANC services if they had any serious complication in a previous pregnancy or childbirth. Some slum women however went to the centre as they provided medicine and advice. As a cross-check on the response on ANC, the women was asked about the essential needs for safe pregnancy and childbirth, they pointed out many things including good food like vegetable, egg and fruits, mental peace, rest, avoid weight lifting, etc, but the need for attending ANC was seldom pointed out.

Women usually consulted their sisters-in-law, neighbouring women, sisters, and husband regarding diet, mobility, and in case of any problems during pregnancy. In the urban slum during focus group discussion the women said that whenever they discovered themselves pregnant they usually went to the nearby ANC centre in the first instance. But when this was compared with information collected from individual interviews this did not stand out. Visit to an ANC centre therefore might not be that common as one may infer from the other informants. However, through decision flow chart (Figure 1), done by the WRA a typical situation during antenatal period in urban slum was revealed. As indicated in the chart when a woman found herself pregnant she usually informed either her husband or husband's brother's wife, grandmother or the neighbouring women. Sometimes they were found to go to the nearby clinic directly for advice from the doctor. In the extended family when a husband found his wife pregnant he often informed his brother's wife and grandmother about it. Afterwards they informed the matter to the mother or mother-in-law. In the urban slum in a nuclear family the decision regarding to go for an ANC was found to be taken by woman herself or by her husband. In the

extended family, however it was either her husband's brother's wife or the grandmother; but often the main decision maker in this regard was the mother-in-law.

The village women reported that seeking ANC during pregnancy was not common among them. Nevertheless it was found that sometimes the sisters-in-law suggested and accompanied them to the health centre to have ANC. It appeared that sisters-in-law, grandmother and the neighbouring women influenced decision making on several issues during antenatal period. But the mothers-in-law had a major role in the whole process.

Figure 4. Chart of information flow during antenatal period in urban slum.



Inter generational differences in attitude towards ANC revealed by the study. In the rural area, the older women especially the mothers-in-law did not consider ANC essential during pregnancy and as such they often discouraged their daughters-in-law from attending ANC. In contrast, many mothers in the urban slum were enthusiastic to accompany their daughters in attending the ANC services. Peer consultation played a significant role in regard to ANC attendance during pregnancy. Monowara, a slum dweller, went for ANC during her pregnancy and found it helpful. In her words:

I always counsel the neighbouring women to go for check-up during pregnancy as I have realised the benefit of having it regularly. Even I accompanied some of them to the centre. (Poor; urban; in-depth interview)

Access to ANC services

In order to explore women's experience in accessing ANC services a facility mapping exercise was done with the slum women. During that exercise different available ANC services and women's preferences regarding those facilities were identified (Figure 5). The barriers in accessing the services were also noted.

The women pointed out that the services in Marie Stopes Clinic run by an NGO was the most accessible to them in terms of distance and other benefits. They elaborated:

As the service is just behind our house, we do not have any problem to go there. They provide us tablets and family planning methods and even injection. After childbirth they provide injection (vaccine) to the children also. We need to pay a small fee but we can pay this according to our ability. (Poor; urban; FGD)

In terms of accessibility they ranked Wireless Gate Charitable Dispensary run by a private charity, as second. According to them they required rickshaw fare for visiting that place as it was slightly far away. They mentioned their reasons:

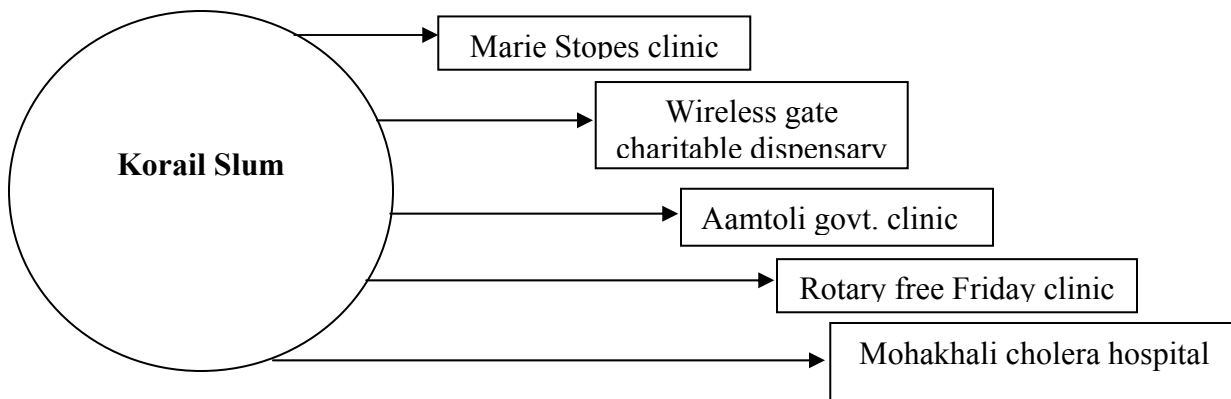
It is a bit difficult for us to go there. We need to pay eight taka as rickshaw fare. Besides, we are poor, and some of us work as domestic help in others' houses. Therefore, it is not always possible for us to go to that place. Usually we take half an hour's leave to make the trip but we cannot get everything done within this. They don't provide much medicine as Marie Stopes does. (Poor; urban; FGD)

Aamtoli government clinic was ranked third by the women. Here they had to pay ten taka for check-up and rickshaw fare to reach that place. Moreover, the waiting time was longer than the other two places. The Rotary Free Friday Clinic was ranked poorly though it was providing free service. According to the women the clinic was open only on Fridays.

Mohakhali hospital⁷ was placed at the end of the facility map, as that was the farthest. The women stated that that service was rarely used by them. Thus in using available ANC services distance, free or subsidised medicine provided, waiting time, amount of fees, period of availability of the services were important consideration for the women in urban slum.

The study women in non-poor category visited MCWC⁸, a private medical college hospital and private clinics for ANC. According to them they did not have any problem in accessing those services. One of them stated that she noticed during her check-up in pregnancy in a private medical college that the same doctor was more attentive to the patient in her private clinic than at the hospital outpatient clinic. In her opinion the doctor should have paid similar attention to the patients of both places, so that the women who were unable to afford private check-up could receive equal benefit.

Figure 5. Available ANC services and women’s preferences in urban slum.



As the village women did not go for ANC much and the facilities available was limited, there was not much question of preference. Some village women who were found to visit UHC and FWC for ANC and TT vaccine did not have any complaint about accessing those services. But a few women grumbled that their family did not allow them to attend ANC. One poor WRA stated:

⁷ The International Centre for Diarrhoeal Disease Research, Bangladesh runs this hospital; they also provide MCH services.

⁸ Government Mother and Child Welfare Centre.

I wanted to go for check-up in the hospital but I could not convince anybody in the house to accompany me. Everybody asked me to stay home. They teased me that it became a fashion of present time to visit a hospital. Due to poverty they did not pay any heed to me. It would have required some money to go to the centre and get a check-up.

(Poor; rural; in-depth interview)

The study also revealed that the village women were not aware of the schedule of ANC in UHC and other facilities. As one WRA informed:

I went to thanahaat (UHC) for check-up but I failed to meet the doctor, as that was not the day for check-up. The people in the hospital asked me to go the next day but I could not make it.

(Poor; rural; in-depth interview)

Satisfaction about the ANC services

The women in the slum who attended ANC in a centre run by an NGO expressed their satisfaction about the services. A woman Pari said:

I was pleased to receive their services. They told me to visit there every month. Each time they measured my weight and checked the position of the baby. They advised me what should I do for the well-being of the baby and myself. They also provided me medicine. They talked nicely. Sometimes they also visited my house to inquire about my health.

(Poor; Urban; in-depth interview)

The non-poor women were also more or less satisfied about the services they received during their pregnancy. Although they grumbled that when it was very crowded the doctors paid less attention to them and made hasty examination.

The village women who attended ANC in UHC and FWC were more or less satisfied as they received vitamin tablets and were able to know the position of the baby.

Delivery Care, Access and Quality

Delivery planning

The study found that almost all the women in rural and urban areas irrespective of socio-economic condition had some kind of plan and preparations for their delivery. Except three WRAs (two from urban non-poor and one from rural non-poor category) all preferred home delivery. Regarding delivery the WRAs consulted their mothers, sisters, sisters-in-law, neighbouring women, *dais* and elderly women whom they considered knowledgeable and experienced. The WRAs took a variety of measures in advance in accordance with their plan. In the urban area WRAs who preferred home delivery made prior contact with *dais* and collected instruments, viz. new blade and thread (sterilised in boiling hot water). One WRA in urban slum stated:

I collected blade and thread in advance. We are very poor; still I tried to save some money every month during my pregnancy. I knew that I would not be able to join my work until forty days after delivery; therefore, I needed to save some money for that period. In addition, as I might have difficulties during delivery, I needed some money in my hand. Thus I saved as much as possible; even when my husband asked for money in need I refused him. (Poor; urban; in-depth interview)

Similar to the urban WRAs the rural WRAs undertook certain initiatives according to their delivery plan. As a one of the younger non-poor WRA reported:

“It was a shame and embarrassment for me to deliver at my natal home, as there were many people in that house. Thus I planned to deliver at my in-law’s house. I talked to my mother regarding the matter. According to

my plan I came to my in-laws' house with my grand father just before my delivery.” (Non poor; rural; in-depth interview)

Another non-poor rural WRA who from the very beginning wanted to have hospital delivery pointed out:

I did not like the way a woman gives birth at home in the village. Therefore I preferred to deliver the baby at Matri Mongol (normal maternity hospital in Upazila town). My mother also advised me to do so. She had seen how other women entering into the delivery room and deteriorated the condition by stirring that place of the woman. My husband was convinced of my plan. As soon as I felt the labour I went to Matri Mongol. My mother and husband accompanied me. (Non poor; rural; in-depth interview)

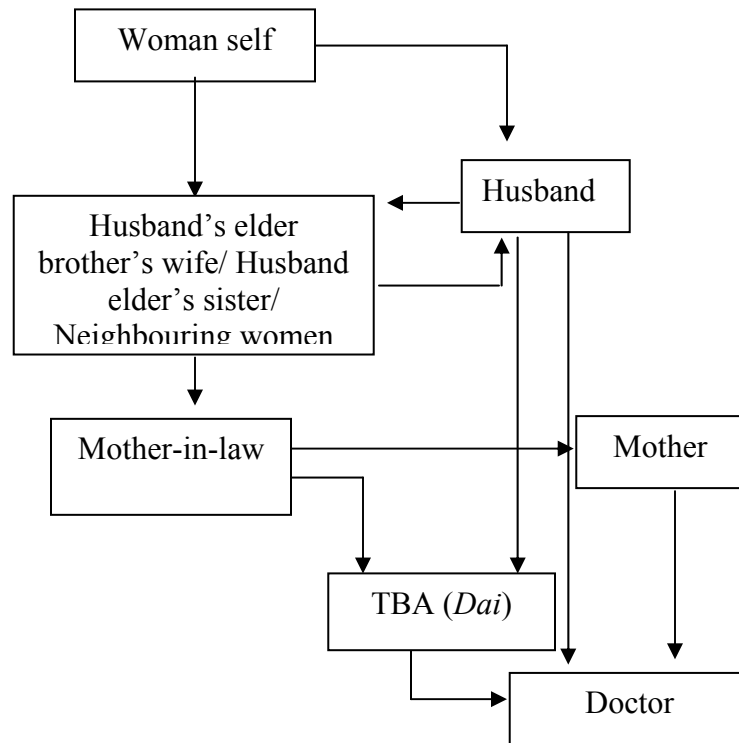
Delivery situation and decision making process

In the study a nearly common pattern emerged regarding delivery situation in rural and urban area that permeates decision-making process during that condition (Fig 3 and Table 9). It was reported that in urban slum when labour pain started the pregnant women usually informed her husband about it. The husband then called his mother, aunt, brother's wife or the neighbouring women for assistance. They tried to deliver by themselves as far as possible. Once unsuccessful they called in a TBA. Often the TBAs accomplished the task by providing injection and other drugs that stimulates labour. Sometimes they also consulted a doctor for assistance. If the TBA failed either another TBA was called or the woman was taken to a hospital. In the later case her husband usually accompanied her and the neighbours helped to get a transport. As soon as the woman was taken to the hospital the doctors and the nurses became the prime decision makers as they were expected to do everything to save the women and the baby.

Clearly woman herself had the deciding role on whom to inform first about the labour pain. Unlike rural area, often the husbands were the first to be informed about the matter

in the urban slum. Sometimes the woman herself sent her husband to call in a *dai* whom she had contacted beforehand.

Figure 6. Chart of information flow in delivery in urban slum



In case of complications it was the husband and mother-in-law who decided what should be done. The TBA also had a significant role in this regard. However, the study found that the neighbouring women also influenced the decision making process during complications. One such example is Parveen, a slum woman:

Parveen fell from a rickshaw when she was about eight months pregnant. She was bleeding. She went to a nearby doctor who suggested her to get admitted at the medical college hospital immediately. As the neighbouring women advised her not to go to the hospital, she remained at home. She herself also wanted home delivery. She had severe pain but one neighbouring woman who was also a *dai* assured her that the delivery would take place when Allah wished. The woman tried to handle the

situation by inserting her hand, which resulted in hand prolapse. The bleeding did not stop and gradually Parveen felt weak. The women were whispering among themselves that as it was bleeding profusely before the labour the baby may not be delivered in a good condition. At the same time they were discouraging her to go to the hospital as they thought it was not a worthy place for delivery. Parveen's husband brought a doctor and a traditional healer but nothing helped. Finally after remaining under such condition for almost ten hours, she was taken to the medical college hospital at two o' clock in the morning. (Poor; urban; in-depth interview)

It was found that in rural area when the labour pain started, women usually asked their elder sisters-in-law or neighbouring women for assistance. Primarily they were found to provide all kind of assistance for giving birth. In the words of a woman:

Some of them make the woman sit; some women hold her shoulders and massage her back, some encourage her to press down. (Poor; rural; FGD)

When the labour became prolonged or other complications show up the women from the neighbourhood assemble in the courtyard. They talk among themselves on how to deal with the situation. They might suggest to the husband to bring a doctor or take the woman to the hospital. Considering the situation and followed by a discussion with the mother-in-law, the husband take the decision. The decision flow chart indicates the role of different people in the view of study women (Table 9).

Table 9. Role of neighbours regarding decision-making in delivery in rural areas.

<u>Person</u>	<u>Role</u>
Woman herself	Inform sisters-in-law/mother-in-law about the labour pain.
Sisters-in-law	Take care during labour and assist in normal delivery. During complication advise the husband to take proper action.
Grandmother-in-law	Sometimes is informed about the labour first. Assists normal delivery. Provides suggestion to the husband during complication. Accompanies the woman to the hospital.
Mother-in-law	Asks the husband to take the women to the hospital.
The neighbouring women	Provide suggestion about taking measures during labour. Provide financial assistance to take the woman to the hospital.
<i>Dai</i> (TBA)	Admitting failure, advises the members in the household to take the woman in the hospital. Often accompanies the patient to the hospital.
Husband	During labour and complication asks for suggestion to the sisters-in-law, neighbouring women, mother and grandmother. Decides to take the woman to the hospital and arranges transport.

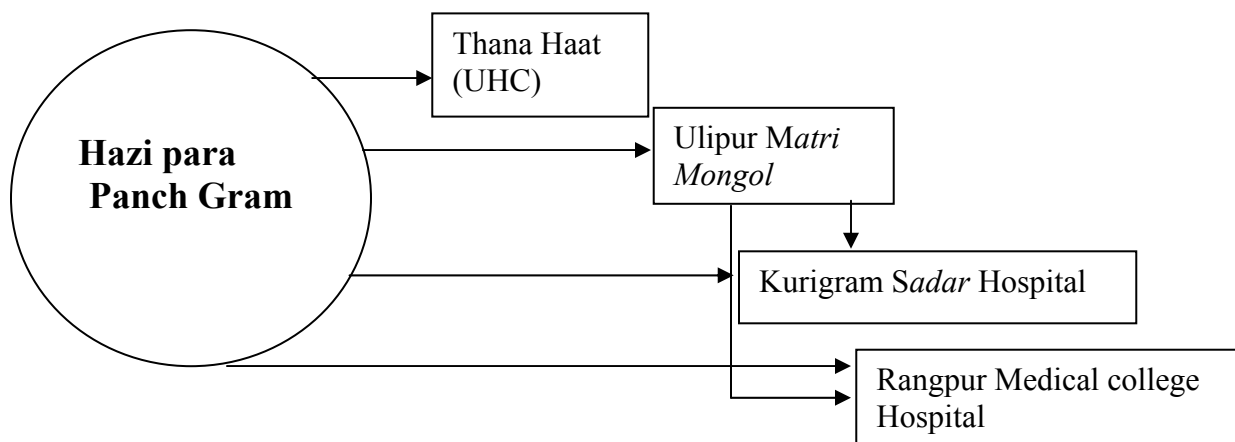
Delivery care services in the views of women

The rural women mentioned four delivery care facilities, which they visited in case of complications (Annex 6 gives an account of the existing facilities). During facility mapping exercise the women prioritised the facilities on the basis of distance (Figure 7). They told us that during complications in delivery they preferred to go to UHC, as that was close to the village. If the doctors and nurses in UHC failed to deal with the condition, their next stop was *Ulipur Matri Mongol*. The women pointed out that as *Matri Mongol* exclusively dealt with delivery they sometimes preferred to take the patient directly to that place. However, if the nurses in *Matri Mongol* failed to deal with the complications, depending on the nature of the complications some women were taken to Kurigram District Hospital and some directly to Rangpur Medical College. The village women opined that very few women could make it to the last two facilities, as mostly the decision to taking the women to the hospital were taken at the eleventh hour. Besides the villagers did not have adequate knowledge about the facilities. Therefore,

they were found to try the facilities one by one, which eventually became expensive for them.

A number of delivery care services were available for the women in the urban slum. Although the women named different hospitals in Dhaka city, it however appeared that during complication they preferred to take the women directly to Dhaka Medical College Hospital. A few well-to-do women were found to prefer private clinics as they could afford it. Women from non-poor category mentioned the services of private medical college hospitals, government hospital and the government MCWC (Mother and Child Welfare Centre). Surprisingly, no woman in slum mentioned the MCWC.

Fig 7. Facilities used by the rural women during complication in delivery (done by the women).



Advantages and disadvantages of the delivery services

Advantages and disadvantages of different delivery care services were revealed through matrix scoring exercises with the poor women. It came up also during individual interviews and group discussions.

In assessing advantages and disadvantages of different services the women in the rural area mentioned several criteria. According to the women in the village they felt encouraged delivering at home as it was a familiar atmosphere and all near ones were close by. Home delivery was inexpensive as well. The women were frightened in going

to distant places like Kurigram or Rangpur for receiving delivery care services and it was considered as last resort. One woman Fulbanu stated,

Depending on the severity of the condition a woman is taken to either Kurigram or Rangpur. If the condition is serious the woman thinks she will not survive, so she takes blessings from others before she leaves.
(Poor; rural; FGD)

Ulipur *Matri Mongol* was considered as low-cost. The services were also perceived as better in the sense that nurses were more qualified. Therefore, next to home the rural women felt at ease in delivering at *Matri Mongol*. In terms of better arrangements and availability of the facilities the women gave highest score to Kurigram District Hospital and Rangpur Medical College Hospital.

However, in terms of the advantages of the delivery care services available for women in the village Rangpur Medical College Hospital was given the highest score (25%) followed by Ulipur *Matri Mongol* (19%) Kurigram District Hospital and home were given similar score (17%) (Table 10).

In terms of disadvantages, the poor village women pointed out that as no measure could be taken at home during complication, they gave highest score to home. Since all kind of measures were really available at Rangpur Medical College Hospital during complication, they did not see any disadvantages in that service. They opined that *dais* were more knowledgeable than the sisters-in-law and the neighbouring women. Insufficiency of qualified doctors and nurses was pointed as a drawback of UHC. The women said:

There is a lack of qualified doctors and nurses in thana haat haspatal in dealing with delivery. Hence women feel nervous to go there for delivery. Rather they are much comfortable in Matri Mongol as the nurses are more qualified there. (Poor; rural; FGD)

Regarding Ulipur *Matri Mongol* it was revealed that the nurses and *ayas* demanded money and clothes more than the other delivery care facilities and the behaviour of the nurses was not good as well. The women informed us that although *dais* demanded soap and clothes at home, they did not require to pay instantly, they could be paid afterwards in instalments.

Unavailability of transport to reach such distant facilities as Kurigram District Hospital and Rangpur Medical College Hospital was stated as a disadvantage of the services. In addition, the cost for transport, food, and accommodation along with treatment increased the total expenditure in these services. Thus the delivery services became expensive for the villagers. It is clear from Table 11 that the women scored Ulipur MCWC and UHC as highly disadvantageous (22%) followed by Rangpur Medical College Hospital (20%).

In assessing advantages and disadvantages of the delivery care services the slum women of Dhaka city (Table 12) mentioned that although home delivery was inexpensive and a women received better care at home but no assistance could be given at home in case of complications. *Dais* and trained *dais* were found to take care of the patients similar to the relatives. They were found to massage the back of the women and provide warm tea and milk to them for comfort and easy delivery. Regarding trained *dai* the women opined:

Trained dais are more knowledgeable than the bangla dai (untrained). They can even inject injection to the patient on their own. Nevertheless, the payment is almost the same. Usually they are given two soaps and a bottle of coconut oil. If we are pleased, we give them a saree, but this is not obligatory. If one cannot afford it they would not mind. (Poor; urban; FGD)

It appeared that in women's view the trained TBAs had some capacity to deal with adverse situation in delivery as they were more knowledgeable and could provide medicine and injection. In complicated delivery women in slum consulted the doctors in the nearby pharmacy in Korail bazaar. They took them as somewhat more capable in

dealing with prolonged labour and other complications during delivery. The women considered the Dhaka Medical College Hospital and private clinics most suitable place for taking measures for all kind of complications during delivery. Nevertheless they pointed out the disadvantages of these services, as it was expensive in terms of transport and treatment cost. Besides they thought the patients did not receive proper care in the hospital.

Table 10. Advantages of delivery services: in the view of rural women.

Delivery services	Advantages						Total
	Feel encouraged	Apply delivery techniques	Facilities at low-cost	Less costly	Better arrangements	All facilities available	
Home	9	1	-	10	-	-	20 (17%)
<i>Dai</i>	2	2	-	4	1	-	9 (7%)
UHC	4	3	5	3	2	1	18 (15%)
Ulipur MCWC	5	4	7	2	3	2	23 (19%)
Kurigram hospital	-	4	4	1	5	6	20 (17%)
Rangpur hospital	-	6	4	-	9	11	30 (25%)

Table 11. Disadvantages of delivery services: in the view of rural women.

Delivery services	Disadvantages						Total
	No measures during complication	Money/ clothes need to give	Lack of qualified doctor	Unfriendly behaviour	Transport unavailable	Costly	
Home	9	-	-	-	-	-	9 (7%)
<i>Dai</i>	5	6	-	3	-	1	15 (12%)
UHC	3	4	11	5	2	1	26 (22%)
Ulipur MCWC	2	7	4	7	3	3	26 (22%)
Kurigram hospital	1	2	3	4	5	5	20 (17%)
Rangpur hospital	-	1	2	1	10	10	24 (20%)

Table 12. Advantages/disadvantages of delivery care services: in view of women in urban slum.

Delivery services	Advantages/disadvantages					Total
	Less costly	Good care	More skilled	Aid to progress labour	Measures to deal with complication	
Home	1	5	1	-	-	7 (7%)
Dai	2	5	2	2	1	12 (12%)
Trained <i>dai</i>	3	5	3	3	2	16 (16%)
Korail bazaar doctor	4	3	4	5	3	19 (19%)
Dhaka Medical College hospital	5	1	5	5	7	23 (23%)
Private clinic	5	1	5	5	7	23 (23%)

Barriers in accessing formal delivery care services

A number of barriers to accessing formal delivery care services was revealed through the problem tree exercise (Annex 7) in rural area. This was also reflected in the in-depth interviews. Women's unwillingness to go to the hospital due to fear and sense of shame was identified as one of the barriers. In the word of one WRA Morjina:

I was not willing to go to the hospital at all as I have heard that in the hospital the nurses bring out the baby by inserting their hand inside. What an embarrassing matter it is! I was frightened as well.

(non-poor; rural; indepth interview)

The women emphasised their disliking about the method of delivery in the hospital. A previous study found that rural women were conditioned to giving birth in a particular way (Afsana and Sabina 2000), which was often not identical the way the delivery took place in a hospital. In the present study the village women stated that they did not feel comfortable with the way the nurses in *Matri Mongol* and other hospitals conducted delivery, as they were asked to bend their legs and hold by themselves. The behaviour of

nurses also appeared as a barrier in using the services in formal delivery care. In this regard the women mentioned that due to ill behaviour of the nurses, those who went to the hospital were reluctant to go there again.

Due to ill behaviour of the hospital personnel the influential persons in the family was also found to discourage the women in going to hospital for delivery. One such example in the village was Rahela:

Rahela had prolonged labour during her first childbirth. Becoming unsuccessful in getting the delivery at home her husband, grandmother and mother decided to take her to UHC. Considering Rahela's condition critical the nurse in the hospital asked them to take her to go to Rangpur Medical College. According to Rahela's mother and grandmother the nurse was cooperative and behaved well with them. As Rahela stated, *"the nurse had not interested to attend me as it was late at night. Even though she helped to remove the water from my body (helped her to urinate through catheter), she did not want to give me any medicine. She was rebuking my brother and husband that they had not yet taken me to Rangpur. My brother urged her to provide me an injection. Although she listened to him but rudely asked them to take me from the thana haat hospital immediately."* As the vehicle was not available, they could not decide what to do. The grandmother also wanted to wait until the morning. She thought there was still time for delivery as no sign was yet visible. However, at four o' clock in the morning her grandmother recognised that the time of delivery had arrived. No nurse was available there as they went off to sleep. Finally she herself attended the delivery with the assistance of other female patients in that ward. According to them no nurse was present there throughout the night. After the delivery Rahela's mother and elder sister cleaned the floor of the hospital and at seven o' clock in the morning they left UHC without informing any hospital personnel. When Rahela became pregnant again her grandmother and mother strongly disapproved of her going to the hospital for delivery, even though her brother, who was

a Health Assistant (HA) had suggested. Rahela was not very keen to go there either. (Poor; rural; in-depth interview)

In addition to ill behaviour of the nurse the above story indicated a communication gap between the nurses and Rahela's family. It may be that the nurse was not able to present well the condition of the patient to her relatives. So they misunderstood her that as if she was avoiding to attend the delivery by sending them to Rangpur. Because of this adverse experience the hospital lost a future patient.

Lack of adequate transport facilities especially in the area created obstructions in taking the women to distant places like Kurigram or Rangpur. Often the cost for such transport goes beyond the means of the poor in the community. The villagers felt that as there was only one ambulance in UHC, it was unable to meet the need of the people in emergency. Although rickshaws were available in the village but the fare became prohibitive during emergencies. It was also discovered that due to lack of knowledge about availability of exact services, the villagers usually spent extra money for seeking services in different facilities. In this regard a male villager Tonu Mia grumbled:

While my wife had complication during pregnancy and delivery I spent a lot of money for transport. I went to thana haat (UHC) first, then they referred me to Kurigram. As it was expensive for me to take my wife to Kurigram hospital, I took her to Ulipur instead. I thought she might recover there, but watching her condition they refused to admit her. Then again I brought her back to thana haat. As she was not getting any better, the neighbours advised to take her to Kurigram hospital. The doctor in Kurigram hospital treated her for a few days but the condition did not improve then they asked me to take her to Rangpur Medical College Hospital. Finally, I rented in a microbus for Tk. 1000 and took her to Rangpur. Meanwhile, I spent a huge amount of money unnecessarily for transport, as I did not know where would I get the necessary service for my wife. I should have taken her to Rangpur Medical College Hospital in the

*first place and thus could save money and suffering of my wife.
(Poor; rural; FGD and Indepth interview)*

Not many women have a husband like Tonu Mia, unfortunately.

The villagers pointed that in emergencies the neighbours extended their cooperation. But as most of them were poor, often it was difficult for them to provide financial support or loans. Although it was possible to get loans from the moneylenders as the interest rate was very high. Therefore, economic constraints were noted as one of the major hindrances in accessing formal delivery care services. In this regard they mentioned Hosna's story:

Hosna's husband was an agri-labourer and earned thirty taka per day. During delivery Hosna experienced hand prolapse. The neighbouring women advised her husband to take her to the hospital. The husband did not have the ability at all to take her to the hospital. The villagers helped him by contributing some cash and kind. With this he called in a doctor. AS the condition deteriorated the doctor referred her to the hospital, but she was not taken there. Finally her husband called in a *dai*. The child was dead by that time. The *dai* inserted her hand inside and brought the child out in pieces. (Poor; rural; FGD)

Almost a similar pattern emerged in the slum and among non-poor women of urban area in terms of barrier in using the formal services (Annex 8). Women were usually disinclined to have their delivery in the hospital due to fear of caesarean and presence of male doctors. In the words of a non-poor women, Shahinoor:

*I resisted going to the hospital during labour until I had convulsion.
I was taken to Dhaka Medical College when I lost my sense. I was
reluctant as I thought it would be embarrassing if a male doctor in
the hospital attended me. Besides, I had heard that in the hospital*

the doctors performed caesarean without any justification. (Non-poor; urban; in-depth interview).

Disapprovals by influential persons in the household, discouraging attitude of the neighbouring women and ill-behaviour of the hospital personnel acted as impediments in seeking formal care during delivery in urban area. Although transportation was not noted as a significant problem in the opinion of the urban women but the people in urban slum pointed out that the cost of local transport increased enormously in times of emergencies.

Perception of an ideal service

Clients' expectation from the services is essential to understand in order to enhance sensitivity in the service (Whittaker 1996). Therefore the study tried to identify women's perception of an ideal service regarding delivery care.

In urban and rural areas a number of expectations was mentioned (Tables 13 and 14). Although the women stated that each of the care was essential, nevertheless, they prioritised the issue of immediate attention for the doctors in the hospital. In explaining the immediate attention of the doctor a woman in urban slum shared her experience:

Once I took my neighbour to Dhaka Medical College Hospital as she had complications during delivery. At eleven o' clock we arrived in the hospital, the condition of the woman was critical, the hand of the baby hanging out. The doctor came to the woman and saw her but did not take any measure. The whole day passed away neither a nurse nor a doctor came to visit the patient at all. The two males who accompanied us from the slum were trying to collect money from different places. The woman was very poor. I pleaded to the ayas and nurses to attend the woman. Finally, they took the woman for operation at the time of magreb prayer (evening) and a dead child was born. I took that woman in the morning and they operated her in the evening, her abdomen had become inflated by that time.

The child could be saved if they would take immediate measures just after our arrival. (Poor; urban; FGD)

The rural women mentioned that during complication immediate attention of the doctor was primarily required. Measures regarding cleanliness during delivery were not mentioned in rural areas, whereas the urban slum women pointed this out as first priority. They opined that clean blade and thread should be used during delivery otherwise the women would suffer from tetanus, which was life threatening. Some of the urban women mentioned the need to have a lady doctor in handling delivery to make the women comfortable.

As a second priority the women in the slum mentioned about good quality of bed in the hospital. One of the WRA who delivered in the hospital expressed her opinion in this regard. As she stated:

In the hospital I had to share my bed with a woman who also delivered a child a few days earlier. It was very difficult for us to accommodate ourselves along with two children in that small bed in the hospital. (Poor; urban; in-depth interview)

Medicines at subsidise rates and care after delivery were ranked as third expectation by the urban slum women, but the rural women ranked it second. According to them in addition to providing medicine from the hospital, the hospital personnel should behave well with the patient and her relatives. They complained that the nurses, *ayas* and the doctors were always unnecessarily impolite to them in the hospital.

However the rural women placed the need of better accommodation at hospital in third position. At the same level they talked about the need of taking proper care of the patient by the hospital staff. They also argued that in delivery care the nurses should apply all techniques as far as possible so that a normal delivery could take place. They also pointed out the need to providing meal and soap to the patient in the hospital.

Interestingly they talked about the need of providing cow's milk to the baby after delivery, which indicated that they had lack of awareness about giving colostrum to the child after delivery.

According to the women in urban slum the women should be given hot rice and curry and tea after delivery in the hospital for quick healing. They also mentioned the need for a seat for the attendants as well as cleanliness of the place. They placed the behaviour of *aya* and nurses in the hospital at the end of the list. In contrast the non-poor women of Dhaka city found this point as significant in ensuring quality services in the hospital.

Table 13. Ranking of quality of care in the view of urban slum women.

<u>Rank</u>	<u>Issues identified by the women</u>
1	<ul style="list-style-type: none"> • The doctors should take immediate measures. • Female doctor in the hospital. • Use of new and clean tools blade, thread, savlon during delivery.
2	<ul style="list-style-type: none"> • Provide seat to the patient. • Good bed.
3	<ul style="list-style-type: none"> • Medicine should be provided at subsidise rate from the hospital. • Taking care of the patient.
4	<ul style="list-style-type: none"> • Provide meal in the hospital. • Provide tea with <i>ada</i> and <i>tejpata</i> to the patient after delivery. • Provide hot rice and curry to the patient after delivery.
5	<ul style="list-style-type: none"> • Seat for the attendant of the patient. • Cleanliness of the place where the patient stays. • Warm water soap and soda at home.
6	<ul style="list-style-type: none"> • Inexpensive hospital. • Good behaviour of <i>aya</i> and nurse.

Table 14. Ranking of quality of care in the view of rural women.

Rank	Issues identified by the women
1	<ul style="list-style-type: none">• The doctors should take immediate measures.
2	<ul style="list-style-type: none">• Provide medicine from hospital.• Good behaviour of doctor and nurses in the hospital.
3	<ul style="list-style-type: none">• Provide seat, blanket, and mosquito net from the hospital.• Apply techniques for normal delivery.• Proper care of the patient.
4	<ul style="list-style-type: none">• Provide meal in the hospital.
5	<ul style="list-style-type: none">• Provide soap from hospital.
6	<ul style="list-style-type: none">• Provide milk for the baby from the hospital.

Perception of good attendants at delivery

In defining the good attendant at delivery the rural women emphasised the point that a good attendant would be capable to conduct the delivery nicely without any difficulties. In addition to that she would provide care to the women like massage oil, hold the shoulder during delivery and clean mother and child after delivery. A few women in the village mentioned adequate experience of the person who would attend birth. They also highlighted the capacity of such person in applying techniques to conduct a delivery by any means.

The non-poor women in urban area mainly indicated two points in considering good attendants at delivery. According to them the person should have knowledge and experience in handling the delivery and should be well behaved. The attendants should also have the sense of responsibility during delivery. The women in urban slum also gave importance to knowledge and experience in assessing the quality of a good attendant. A few women in this category mentioned that although a good attendant

should have the competence to conduct the delivery by applying appropriate means a good attendant was not expected to insert hand inside and stir to expedite the process.

Care after delivery

The study revealed that the study women in urban and rural usually practised self-care for the newborn like keeping them warm and clean, placing them under the sun with an oil massage and giving them bath in a fixed time in the morning. Women in non-poor category and a few women in the slum reported that after a few days of birth they took their children to the nearby government MCWC or health clinic (non government) for weight monitoring. Consulting the pharmacists in case of children's sickness was common among the slum women. They were also found to buy medicine for their own from the pharmacy to reinvigorate their body strength after delivery. As a slum women Morjina stated:

After my delivery I sent my husband to the nearby pharmacy for buying medicine for me. I told him to ask for medicines, which helped to regain energy after delivery. He asked for that type of medicine accordingly and they gave him three/four types of medicine. (Poor; urban; In-depth interview)

The women in the village of all categories also were found to be given saline after delivery to resume body strength if they were considered weak. However, women were completely unaware of any postpartum care for themselves. Maintaining food taboos was included in their self-care, which was believed to be beneficial for both mother and child.

Whilst taking their baby for immunisation the weight of the baby was monitored. Similar to urban slum medicines were taken by consulting the pharmacist of nearby bazaar during children's sickness. Some women reported that they took their children to *Chinno Mukul*

Hospital⁹ in case of mild to severe illness. Women in the village were found to be ignorant about giving colostrum to their babies after birth. Providing cow's milk to the child until three days after delivery was common in the village, as it was perceived that breast milk was only produced after three days of delivery.

In general women in urban and rural areas received advice regarding postpartum care from the elderly women, i.e. mother, mother-in-law, grandmother and other senior women in the household and neighbouring households.

Providers perspectives

The strategy to overcome the obstacle and understand the issues vital to pregnancy and delivery care is to focus on understanding the problem from the provider's perspective as well. The issue of taking provider's views was to enhance the findings with their participation and to match with that of the clients, and, to look into the prevailing situation in the birthing culture. Another prime factor is to derive a practical and effective mechanism to ensure skilled attendance for every woman. The study dealt with the providers of both formal and informal attendants in delivery and the findings revealed a clear insight in accordance with the situation that was persisting in pregnancy and delivery care in Bangladesh.

The informal service provider: the nature of service of TBAs

It was found in the study village that the TBAs usually assisted in delivery of their own relatives or neighbours. Their profession was more of a social work than of earning money. The remuneration of their work depended upon the economic status of the family they serve. They usually received soap or a meal from a poor household whereas from a relatively better off household they might get a saree or two. They felt socially obliged to serve in times of need because a poor family did not have the means to afford otherwise. If they did not comply with such need they would earn a bad name in the society.

⁹ A hospital run by an NGO called Chinna Mukul .

Nevertheless the TBAs did not feel responsible for the outcome of a birth or a consequent morbidity of the pregnant women. As one of them said:

I was asked, why the baby died? This is not my responsibility. My duty is to facilitate birth. (TBA; rural; FGD)

They were found to have different traditional beliefs and took pride in sharing their experiences. One of the TBAs mentioned:

Once I had performed a complicated delivery. All the villagers knew that the woman was “doshi”(possessed by an evil spirit), therefore she already had experienced hand prolapse in all of her three deliveries. During this delivery I applied all of my kaida koishol (techniques) to deliver the baby and I was successful. (TBA; rural; FGD)

The participation of TBAs during birth

According to the TBAs they were not called in at the preliminary stage of labour. The female family members usually they tried to conduct the delivery themselves first. When they fail the TBAs are called in to deliver the baby. They were found to call in to complicated deliveries. As they were experienced in applying “*kaida koishol*” to handle complicated birth, they mentioned that people called them in emergencies. Besides, the fear of expense in seeking formal care, the distance and problem of transport enforced the people to call in a *dai* during complications.

The study found that the TBAs often insisted the family members not to take the woman to the hospital. Although they agreed that a better treatment could be received in the hospital but it might be expensive for the people. In addition they were confident enough that they would be able to perform the same job during complications. Some of them narrated their experience in handling the *upazilla* (breech presentation) and other complications. In this regard one TBA mentioned that she did not let her sister-in-law go to the hospital, because it would have cost them thousands of taka. In spite of complications she successfully performed the delivery at home.

TBAs and formal care

It appeared in the study that both TBAs and the women were aware that they would get better services from the doctors or midwives. Nevertheless, they turn to TBAs because of culture, accessibility and affordability. Moreover, TBAs were found to share and respect their feelings, as well as provide services such as cooking, cleaning, massage, traditional rituals etc.

Women attended by the TBAs were mostly poor. The TBAs also mentioned of rich families who prefer home delivery and asked for their services. According to the TBAs hospitals was a safe place for delivery. Nevertheless, they preferred and promoted home delivery as it was cheap and convenient for the villagers. It also preserved the privacy of a woman from the male doctors of the hospital. The TBAs stated:

There are times when the delivery is complicated and it becomes necessary to take the woman to Matri Mongol because they have a special medicine, which they use to deliver the baby. They push injection and saline and thus make it easier for the woman to deliver. These things we do not have and that is why sometimes it becomes necessary to go to the hospital. Those are times when we become helpless after trying so hard.

(TBA; rural; FGD)

When they found that the delivery was beyond their capacity to handle, they referred the women to a health centre or a hospital, or whatever possible option could be reached at that time. Sometimes they even accompanied them.

The TBAs cited some examples of such experiences. One TBA said:

In some serious cases we feel that we will not be able to manage. Therefore we refer them to the maternity centre. I took a complicated patient a few days back. She was not having any pain. Her husband asked

me what to do, as he wanted the delivery at home. I told him to take the patient to the maternity centre, as the condition was pretty serious. I, along with her husband accompanied her. (TBA; rural; FGD)

Another TBA said:

One of the women whom I attended, was having problem to release a part of the placenta. The mother-in-law told me to try hard. We waited the whole night but nothing happened. Then I asked for a pushcart to take the woman to Chinno Mukul. The doctor came out and asked who was the Dai (TBA). Someone pointed towards me. She then charged me that I must have stretched the placenta and it tore off. I said that I did not. I lied. (TBA; rural; FGD)

It was found that none of the TBAs had ever referred any of their patient to the district hospital. They mentioned about *Marti Mongol* where only normal deliveries took place. They had very limited knowledge of what level of service points was provided in what type of obstetric facilities.

Conditions of the health care facilities in rural and urban areas

In the FGD session the nurses of UHC provided a clear view of the quality of services. It appeared that UHC was very poorly managed. There were shortage of supplies (medicines, cotton, gauge, saline, injections etc.) and equipment. The doctor being a male never entered the labour room no matter how critical the situation was. He always gave instructions by listening to the condition of the patient through the duty nurses. The nurses said:

Situation worsens during night, because we cannot even consult with the doctor as he does not reside in the campus. (Nurse; rural; FGD)

There were provisions for housing for the doctor within the campus. However, it was found that the labour room was beside the female ward and poorly equipped with a rusted and almost broken labour table with no sucker machine. There was no weighing scale either to weigh the newborn. The nurses said:

It is very difficult to manage since the labour room is in the ward and it attracts the patients to crowd and scream outside the room, they even try to enter into the room and interfere with our work. (Nurse; rural; FGD)

The nurses informed that in case of normal condition they conducted the delivery otherwise they referred to Ulipur. There was no assistance for referral. The only ambulance in UHC was not working due to mechanical problem. However, the reason they gave for referral to *Matri Mongol* was the presence of female doctor in that place. Indeed in *Matri Mongol* a nurse (Family Welfare Visitor) was found to perform only normal vaginal delivery. The nurses and the Family Welfare Visitors (FWVs) insisted that there should be a separate labour room and a female doctor to provide quality service to the rural women. Health staff of the UHC feels the lack of skilled personnel to handle delivery.

In the urban setting the health providers appreciated their working environment although they pointed out the problems of inadequate supplies. The FWV in the urban centre termed it as a very recent problem. She said:

These days I find it difficult sometimes when I do not have the necessary supplies in the labour ward. Although I manage somehow but it definitely plays on my nerves. (Nurse; urban; in-depth interview)

The lady doctor there also mentioned that earlier poor people used to get absolutely free services by paying a registry fee of only two takas. But in recent days they had to buy medicines and other necessary things.

Provider's view on women not attending the services

In the UHC two to three normal deliveries usually took place per month. They commonly received patients suffering from eclampsia, locally termed as possession of evil spirit. The nurses informed that the complicated cases or premature pregnancy were not attended in the UHC. They said:

The villagers know that there is no medicine and no doctors, so they do not bother to come. People of Chilmari Upazila know what quality of service is available in the Upazila Health Centre, which is the nearest to their domicile. (Nurse; rural; FGD)

One of the nurses added:

People think that what is the use of going to the Centre, (Chilmari Upazila Health Complex) where there is no medicine, the service is not good and there are no doctors. Sometimes when the electricity goes off the staffs or the clients need to buy the kerosene for the lamp. In a situation like that it is very difficult to attend a delivery patient. (Nurse; rural; FGD)

The study found that people in the village perceived that in the hospital they would get modern treatment, which assured better outcome in terms of recovery. But the problem lied in their understanding of when to seek care and the lack of knowledge regarding the whole pregnancy procedure and its complications.

According to the health providers mostly the lower middle class and poor and illiterate people came to seek care in the government facilities or in the nongovernmental healthcare centre in rural areas. The rich went to the private clinics or sometimes called in the FWVs at their home. The healthcare providers opined that the village women tried to deliver at home first with the help of *dais* and in case of complications they looked for formal care.

In a government MCWC in Dhaka city people from socio-economic strata were found to receive services. The doctor informed that about four thousand women came to take ANC services per month but only about five hundred deliveries took place. She mentioned that not many poor came for delivery. It also turned out that those poor women were mostly illiterate. It was found that after the introduction of a new building the profile of the client had changed. It was mentioned that before the new building there were more poor people found in the hospital but in present days the ratio was fifty-fifty. The doctor informed that there were two complicated cases everyday, which indicated only 10% complicated cases went to the hospital whereas there should be 15%. In the urban area one of the nurses also mentioned that in their health centre three-fourths of the patients were registered and often the unregistered patients came with different complications including a high rate of IUDs (Intra Uterine Death).

In the urban area the providers said that complicated cases were mostly prevalent among the poor, as they did not come for ANC. Apart from that they tried to deliver at home first then came to the hospital, which made the delivery more complicated. One of the doctors mentioned the complicated case of a woman:

The pregnant woman was anaemic. They tried with a dai at home, they even gave her saline. She had a swelled valva when she came at the hospital. She was a fourth gravidae. She had her previous delivery at home. Her husband is also a homeopath doctor; he also tried when all these efforts turned into vein then they decided to bring her at the hospital. Then we went for a caesarean. Though her condition was severe with the proper treatment she recovered later. (Doctor; urban; in-depth interview)

The reasons of women not taking formal care

Many reasons were revealed from the perspective for the providers of not taking any timely formal care. The FWVs and FWAs mentioned two important reasons. One of them was the absence of a proper system of service delivery in the health centres and another one was lack of family support. One of the FWVs elaborated:

We say that we are providing primary care but why do we refer our patients to a similar facility (Ulipur Matri Mongol) where they perform two deliveries on average per day. If they can provide the service then why can't we? All the cases do not require comprehensive obstetric care. When it is needed, there is always the provision of referral. So it means the system is not working properly. (FWV; rural; FGD)

A woman had to seek permission and needed the support of her family to seek care and even for her ANC check up. One of the FWVs said

Women are still not in a position that they can take decision on their own and can say that I am going for a check up. If she has a mother-in-law she needs her permission. Then her husband, her father-in-law, her others-in-law--- after taking everyone's consent, maintaining the protocol she steps forward as she is going to attend some ceremony or something. There are husbands who are illiterate but they support their wives and do not bother to take consent of others. (FWV; rural; FGD)

Almost all of the health providers talked about traditional practices of people regardless of urban or rural background who did not think that it was necessary to be under a medical advise during gestation period. Especially, the mothers-in-law and other elderly women in the family had great influence in delivery and pregnancy. They always discourage and give examples of how they had managed well their multiple pregnancies without any medical help. The nurses and the FWVs quoted the elderly women:

We did not go for ANC, we delivered hundred babies at home. These are all new rules made to use as an excuse to take the woman outside home. (FWV; rural; FGD)

The health providers of the urban area also mentioned about the role of the family that created a barrier for the woman to seek care. One of the doctors said:

Often the patient say that the reason why they could not come earlier (in case of complicated delivery, one that should have come earlier) is either their in-laws did not allow them or their husbands. But there are differences between an educated and uneducated woman. I found the educated woman to be more conscious of their health and having more power in taking decisions for themselves. (Doctor; rural; in-depth interview)

The providers pointed out another issue. The women themselves preferred a female doctor, which sometimes acted as a strong barrier to seek care. Another reason that came up several times in the study was the fear of cost for which the poor avoid coming to the hospital. The cost included transport, accommodation, drugs and supplies as well as informal fees imposed by the health staff.

The missing part of the essential care: Referral

One of the priorities emphasised in the safe motherhood action agenda is the a functional referral system with reliable means of communication that is needed to ensure that women with complications are taken promptly to health facilities capable of providing appropriate care (The Safe Motherhood Action Agenda: 1997)

It was found that in the rural area even if the women came to the health centre after trying at home there were problems of referral. Because the nearest health centre, which was 15 kms away only provided primary obstetric care and there was no facility of referral for the clients. The poor people usually hired rickshaw or rickshaw van to reach the facility since they could not afford an ambulance. Even though they managed to pay the cost it would be difficult to get one, as ambulances were hardly available. A FWA said:

When a labour is in progress the villagers do not want to send their women to a distance of five to eight km by a rickshaw or by a van. They fear that incidence might happen on the way. They would have felt differently if the facility were situated in a nearby place. So distance is a major obstacle in the rural areas. Some even get discouraged fearing that they might be referred to different health facilities, one after another, which is a hassle and at the same time painful and expensive. (FWV; rural; FGD)

Moreover they were not properly received at the next higher level of health facility. The providers also found it difficult to refer a patient, as the client's expectation was to get treated in the primary health care centre. Thus they became disappointed and discouraged by the uncertainty of the circumstances. As one of the FWVs said:

It becomes very difficult to refer a patient as they come in a bad condition to a primary facility where there is not even a separate labour ward and no referral facility. If they are lucky they get a trained nurse who can refer the patient, but by that time the condition of both the baby and the mother get worse. Then only the baby or the mother could be saved or none. For the clients, both their money and lives are lost. (FWV; rural; FGD)

Provider's view on communicating with the clients

In terms of communicating with the patients or the companions the providers seemed very confident. Almost all of them mentioned that the patient came to them in time of pain and crisis. So they had to be co-operative to whatever the provider's think as best for them. Although it had been widely mentioned by the service seekers that the behaviour and the attitude of the health providers were often not so good and regarded this as one of the reasons of avoiding formal care service. One of the health providers of an urban health care centre mentioned that there are times when the guardians hesitate to give decisions regarding caesarean section. This delays the procedure of treatment. The FWVs mentioned:

The guardians sometimes say we do not want caesarean, if the tree survives it will bear fruit, we will accept whatever God has decided for us.

(FWV; rural; FGD)

Provider's view on how to improve the situation

There were many suggestions that came from the providers on how to improve the situation. In rural areas they talked about to set up a basic obstetric care centre in each union providing with one FWV or FWA, skilled enough to handle normal delivery. They said that since the FWAs were posted according to their domicile they had easy access in the community and had greater acceptance as well. One of them mentioned:

The village people will not mind to take the service in time of a delivery because they would say she is our apa (like a sister) bring the push cart and take our bou (Village bride) to the centre, this is our health centre.

(FWA; rural; FGD)

There were also suggestions to increase ANC coverage and make them aware about complications and make them understand to seek care in case of complications without any delays. The FWAs were very much confident to bring a behavioural change by motivating the people towards proper delivery practices. According to the providers the poor expected that they would get free medicines (saline, injections etc.) from the hospital. At least they would like to get an assurance that the hospital would take care of the required medicines and other necessities rather than asking them to buy from outside. The emphasis was also given in increasing staff to provide quality service to the people. Almost all the providers put emphasis in having lady doctors to increase the client flow in the hospitals.

DISCUSSION AND CONCLUSION

In the recent past Bangladesh has made tremendous progress in many of its development indicators. Poverty is still very pervasive but there has been some improvement in head-count poverty (Sen 2000). In terms of social indicators, the literacy rate has reached over 60 percent and nearly 80 percent of the primary school-aged children are attending schools (Chowdhury et al. 1999). The infant mortality rate has reduced to 66 per 1000 live birth from about 120 in the mid-1970's. A most significant positive change that has happened is in the fertility rate. The total fertility rate has been halved to 3.3 over the past two decades (BDHS, 2001). One of the areas where improvement has been least is maternal mortality. There is no one reliable estimate for maternal mortality in the country. Various estimates suggest that the maternal mortality ratio is somewhere between 4.3 and 6.1 per 1000 live births (GoB 1998).

There have been a number of interventions to reduce maternal mortality but sadly those did not have much impact¹⁰. One of the major interventions was the training of traditional birth attendants (TBAs). Through this thousands of TBAs were trained by the government and non-governmental organizations (NGOs). There were problems of both conceptual and design nature. It is now widely believed that the potential benefit of training TBAs in reducing maternal mortality was inflated and too optimistic (Goodburn et al. 2000). As described at the outset of this report the emphasis has now shifted to providing skilled attendance in delivery. It has been argued that since much of the complications in delivery that lead to death can neither be predicted nor prevented, the only way to reduce maternal mortality and serious morbidity is thus to provide essential obstetric care so that each and every birth is attended by a skilled attendant with necessary supplies and equipment. There are five major causes of maternal death and Table 2 showed the effectiveness of different interventions on each. It shows that it is only the appropriate management for each case of delivery that can save lives.

¹⁰ A recent study found a 20% reduction in maternal mortality over a 15 year period (1986-2000) (NIPORT 2002).

In most of the developed countries, skilled attendants attend almost all of the births. But this is not the case in many developing countries. In Bangladesh, for example, such attendants attend only about 12 percent of the births. It has increased by 50 percent from a base of 8 percent in 1996/97 (BDHS 1997) but has remained unchanged since then (NIPORT 2002). The challenge for a country like Bangladesh is how to increase this proportion further and faster. This study has looked at the use of skilled attendance at birth in Bangladesh. For simplicity, the operational definition of skilled attendance included only institutional care in the study. There is a serious equity problem in accessing birthing care in the country and this study thus paid special emphasis on the perspectives of the poorest women in this regard.

Deliveries that are conducted in a facility are only a fraction of the total deliveries (8 percent). Increasing the number of deliveries in facility is not easy. In this regard the Union Health and Family Welfare Centres (UHFWC) could play a major role because of their wide spread in the rural areas. Although these centres were originally thought of performing maternal services including deliveries, they are now reduced nearly to an outpatient clinic. The FWVs posted in UHFWCs are trained in deliveries but most have forgotten this because of a lack of practice. A recent assessment of the maternal health programme in Bangladesh lamented this as "a waste of resources" and recommended that these centres be equipped to provide obstetric first aid including injectable antibiotics, sedatives and oxytocics (GoB 1998). Accordingly, the government has decided in principle to upgrade these UHFWCs with basic obstetric care facilities. But one has to see how long it takes to get the result. A constraining factor is the training (or retraining) of FWVs. As mentioned before the training has started at ICMH but it is going to take a long time to train all, 5000 FWVs.

Increasing the proportion of institutional deliveries could pose many problems. This study has looked at the barriers of accessing skilled attendance at birth, particularly those related to facilities. Let us now discuss some of the results we found in the study. The kind of facilities available varies between rural and urban areas. The kind of problems

faced by poor and non-poor women also vary. Antenatal care (ANC) was not a felt need, neither for poor nor for non-poor women. They consider pregnancy as a normal thing in life and thus required no special attention. It seemed, however, that demand for ANC could indeed be induced with increased supply. In urban areas, many women in slums were found to go to ANC centre but that too was for getting free medicines in NGO centres. That the poor slum women utilised the ANC services indicates that the poor-rich inequity in service utilisation could be minimised with increased and quality services. The use of ANC, are for that matter for any other health need, was regulated by various considerations. An important consideration was the factor of convenience. The ANC centre which was close by (not requiring a rickshaw ride), which required less waiting time, and was accessible at the time the women are free was more preferred. The cost of transportation and service fees were also important considerations. Sometime the cost factor is overtaken by the convenience factor. For example, the Free Friday Clinic was less preferred because it was open only on a fixed day. In rural areas, this was hardly a problem as ANC services were little available. But for those who used ANC services, the attitude of the family members was critical as many of them were not convinced about the usefulness of ANC.

It was quite interesting to find that all women, irrespective of poverty status, or residence (rural, slums, non-slums) made some preparations for their deliveries from the day they became pregnant. The following decisions and preparations are made from very early on in pregnancy.

- Place of delivery (own or natal)
- Person to deliver (Family member/TBA or facilities)
- Blade for cutting umbilical cord, and
- Save money for unforeseen expenditures at the time of delivery.

It was interesting to find that neighbours played an important role in the decision on whom to call for delivery. This was particularly true for poor women in both rural and urban areas.

The study also identified barriers to utilising formal health care facilities for urban and rural areas. Annex 7 and 8 show the range of barriers which can be summarised in the following:

Women's own

- Hesitation to share symptoms of complications with others
- Sense of shame to deliver in unfamiliar environment (Particularly by poor women)
- Sense of shame to deliver by male doctors (by both poor and non-poor)
- Fear of death
- Over-concern for family leaving, behind at home
- Fear of surgery or use of equipment such as knife.

Family level

- Belief that programmes is normal and not life threatening (on a misconceived notion that 'no one die in childhood')
- Indecision and procrastination in seeking emergency care
- Low status and value of women
- Poverty
- Lack of knowledge on where to get the most appropriate services.

Community level

- Over dependence on TBAS.
- Community not mobilised to provide money to poor women/.....at the time of emergencies

Supply related

- Facilities in far away places
- Lack or costly transportation
- Unfriendly and irresponsible

- behaviour of staff in facilities
- Unaccustomed practice of delivering babies
- Lack or shortage of supplies

The question of equity is important factor in accessing institutional care. As was shown earlier the richest quintile access such facilities 15 times higher than the poorest quintile. It has been reported on a number of occasions in the present study that the poorest women are disadvantaged in this respect. An important point here in that it is not only the poor who are disadvantaged in safe motherhood. When only 12 percent receive safe care, a vast majority of the well-to-do are also deprived, even through they many have the means to pay for it. It has been seen in ANC that within by the poorest increases it the services are available in close proximity and friendly.

Major issues in Safe Motherhood

There are many issues in safe motherhood and these have been widely discussed. However, in the context of Bangladesh the following are some of the issues along with tentative recommendations.

Issue 1: Increased access to safe motherhood services

Recommendations:

- i. Increase the reach of safe motherhood services; this should be done by improving the existing facilities upto the upazila level and gradually upgrading the union facilities
- ii. Expedite the upgrading process of facilities at various levels
- iii. Expedite the training of FWVs in safe motherhood
- iv. Encourage private entrepreneurs and NGOs to extent their safe motherhood services to rural areas where most births take place and where the services are almost non-existent.
- v. Promote public-private NGO partnerships.

Issue 2: Attitudes of the community and family

Recommendations:

- i) Make the communities and families aware on the signs of complication in labour
- ii) Prepare and mobilise the communities on the urgency of seeking immediate care for complicated labour.
- iii) Increase the value and status of women in family and society (e.g., by sending them to school and increasing their role in family income earning)

Bangladesh has a network of NGOs who work at the grassroots levels. Together they cover almost the whole of the country; BRAC alone has its presence in 60,000 villages, nearly 70 percent of all villages of Bangladesh. BRAC workers visit these villages at least once a week. It is believed that the potential of this huge network has not been fully realised in promote awareness and action for safe motherhood in the community.

Issue 3: Arrangement of transport

Recommendations:

1. Convince families and communities to send women in complicated labour to the nearest facility immediately
2. Save money (as some already do) for use in delivery matters
3. Use the fraternity of women's (NGO) groups to help fellow village women in need by arranging/paying for transport
4. Encourage NGOs to start 'ambulance service' using available local transportation (van, boat, microbus, etc.)
5. Encourage NGOs to lend their local offices (e.g., BRAC has offices in over 400 of 460 upazilas) for use as 'contact point' for people in need of emergency transportation and referrals.

As mentioned above Bangladesh has some of the most successful NGOs in the world. Their dense network and concern for women and the poor make it all the more imperative for them to get involved in safe motherhood activities in larger depth and scale. With a small additional investment they can make a big difference in the way the women are treated for complicated labour now.

Issue 4: potentially Role of supplementary interventions,

Appropriate obstetric care is the essential element of safe motherhood intervention. However, other interventions have been found beneficial in reducing maternal mortality and serious morbidity. These include supplementation of Vitamin A (West et al 1999), community detection and treatment of reproductive tract infections (Goodburn et al 2000), and abortion services including menstrual regulation.

Recommendations:

1. Review the other interventions available for this effectively and relevance for Bangladesh
2. If relevant and potentially effective, introduce them in the primary health care programme. For instance, supplementation by Vitamin A capsule for children under sin years of age has been a part of the PHC since mid-1970s in Bangladesh. Women can be easily included under this.

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Annex 1. A brief Account of participatory techniques used for data collection in the study.

Social mapping: Social mapping was done to identify the respondents to be included in the study and also to get a general idea about the village. In this exercise the villagers were asked to sketch a map of their immediate neighbourhood. Due to the large number of households in the village, it was necessary to select two neighbourhoods as study area. The study area was easily delimited using roads, paddy fields and ponds as boundaries. The households, mosque, small grocery shops, school, etc. were also identified in the map. Small cards indicating the name of each household head were used to locate each household in the demarcated area and those cards were also used in wealth ranking exercises.

Wealth ranking: Following social mapping the villagers were asked to classify household cards into group according to their judgement of relative wealth and to describe the characteristics of each group identified.

Free listing: In the free listing exercise the women were asked to mention the name of facilities used for delivery, criteria of quality of care and the problems in accessing the services they could think of. Afterwards the information was used in matrix ranking, ranking and problem tree exercise.

Matrix ranking: Matrix ranking was done to elicit the advantageous and disadvantageous of the delivery care services in rural and urban areas. Using symbols identified by the participants to represent different delivery care services and the criteria regarding advantageous and disadvantageous, a matrix was drawn. Delivery care services were listed on the vertical axis and the criteria were placed on the horizontal axis. Twenty seeds were given to the women to distribute in each matrix cell (horizontally) to indicate the advantage and disadvantage of the services. A final scoring (120 seeds in total for six criteria) was done in terms of advantageous and disadvantageous of each delivery care services.

Ranking: For this exercise the criteria of good quality of care were collected through free listing. Afterwards the women were asked to organise the criteria in order of their priority. They were then asked to explain the reasons behind.

Decision flow chart: Decision flow chart exercise was done with the women to elicit the role of different people regarding decision making during pregnancy and childbirth. From free listing exercise the people involved in the process were identified. Then women were asked to elaborate their involvement and role during the situations.

Problem tree: The problem tree is used to locate the immediate and more deeply causes of the problem. In this exercise the women were asked to name the main problems in accessing the formal delivery care services. Then they were asked to analyse the first primary effect through its secondary and tertiary consequences.

Annex 2. Interview schedule used in the field work.

B. Interview/focus group questions for women of reproductive age.

Background information of interviewee

1. How old are you?
2. What is your level of educational attainment? (illiterate/literate/years of schooling)
3. How many deliveries have you had?
4. Can you describe the type of delivery/deliveries you had. Please choose between the categories 'normal', 'a bit complicated' or 'very complicated'.
5. Where have your deliveries taken places? (your own home; health centre; hospital; other)
6. Are you involved in any income generating activities?

Significance of antenatal care, access and quality

1. When you discovered you were pregnant, were there any worries or concerns you had? (prompts: your own health; your baby's health).
2. With whom did you talk about your pregnancy? (prompts: what did you talk about? How did they respond?)
3. Did you try to get any health related help during your pregnancy? (prompts: from whom? What kind of help? Any plan to receive care during pregnancy? Benefiting baby? Mother? Both? Family?)

If help (formal or informal) was sought:

1. What did you have to do to access this [help – use terms used by women in previous answer]?
2. Were you satisfied with the [help]? (prompts: Why (not)? Would you recommend it to your friends? Why (not)?)

If support/care was not sought:

1. Why did you not seek any help?

Normal delivery care, access and quality

1. When were you thinking about the delivery for the first time? (prompts: beginning/middle/end of pregnancy? What aspect/s of the delivery were you thinking about? Health of baby, mother or both? Skills of birth attendant)
2. Did you make any plans for your care at delivery?
3. Did you talk about your delivery with anyone during your pregnancy? (prompts: what aspect/s of the delivery? With whom? What did they say? Were you/they concerned about the health of baby? Mother? Both?)
What happened in the hours before the delivery? (prompts:- was a delivery care service sought? What kind? When was this decided? Who decided? Would there have been other care options for you? Which ones?)

If delivery care service (formal or informal) was sought:

1. Were you satisfied with your delivery care? (prompts: Why (not)? Do you think you suffered unnecessarily? What could be improved? How?)
2. What skills are important for a birth attendant to have?

If delivery care service was not sought:

1. Why not?

Emergency delivery care, access and quality

(Reference here either to participant's own experience if relevant, to a case she knows about, or a theoretical case)

1. When it became clear that the delivery would not be easy, were there any choices discussed of what could be done next? (prompt: people involved in decision-making; preferred type of care by woman/decision –makers)
2. What happened in reality? (prompt: type of service accessed? How was it accessed? Was it a 'good' service? Why (not)?)
3. Do you think you suffered unnecessarily? (prompt: what could have been done to help you better?)
4. If the same happened to you again, what kind of delivery care service would you prefer to have? (prompt: Why? Are there services you would try to avoid? Why?)
5. Could there be difficulties in accessing your preferred service? (prompt: costs; transport; view of service by other community members; can anything be done about these difficulties?)

Post-partum care

2. After a delivery, would you have any health related concerns? (prompt: what kind of concerns? Related to baby's health? Your own health?)
3. Are there any circumstances under which you would seek help [related to concerns mentioned in previous answer] (formal or informal sector)? (prompt: what kind of help? Who would you discuss this with, if anyone? What would they say?)
4. Are there any factors, which may prevent you from getting the help you would prefer? (prompt: can anything be done about this?)

B. Checklist for Focus Groups with WRA

1. What are the associated advantages and disadvantages of the delivery care services?
2. What makes for good quality of care? What could be an 'ideal delivery care service'?
3. What did the decision-making process during pregnancy and delivery look like?
4. What are the barriers to accessing care?
5. Are there any special problems, which mainly poor women have related to seeking help during pregnancy? (prompts: normal/complicated deliveries; poor and poorest groups; could anything be done about the problems?)

C. Interview schedule for hospital doctors

Background characteristics of interviewee

- a. What is your job title?
- b. How many years experience do you have in obstetrics and gynaecology (fulltime)?
- c. For how long have you been working at the hospital?
- d. Where have you worked before, if anywhere?

Background characteristics of hospital

- a. Name of facility
- b. Type of facility
- c. How many deliveries occur here each year? (Source of information?)
- d. Have the following obstetric services been available here during the last three months. If yes, please state whether they were provided as required; often; sometimes; hardly ever or never.

- i. ergometrine or oxytocin

As required	Often	Sometimes	Hardly ever	Never

- ii. manual removal of retained placenta

As required	Often	Sometimes	Hardly ever	Never

intravenous oxytocin for prolonged labour

As required	Often	Sometimes	Hardly ever	Never

iii. forceps/ventouse extraction

As required	Often	Sometimes	Hardly ever	Never

iv. D&C for retained tissue

As required	Often	Sometimes	Hardly ever	Never

v. Antibiotics

As required	Often	Sometimes	Hardly ever	Never

For Basic EOC only

vi. Transport: How often in the last three months has your unit been able to supply transport to get a patient to a referral unit within a time span which you consider reasonable?

As required	Often	Sometimes	Hardly ever	Never

For Comprehensive EOC only

vii. Blood transfusion

As required	Often	Sometimes	Hardly ever	Never

viii. Caesarean section

As required	Often	Sometimes	Hardly ever	Never

c. Neonatal care

B. Do you have and use an Ambu bag (or similar equipment) for resuscitation of the newborn?

Yes	no

ii. Do you have the following facilities for pre-term infants:

Some form of incubator?

Yes	no

Oxygen at a controlled rate?

Yes	no

Interview question:

1. Groups of women attending

Can you describe the groups of women who seek your service?

(prompts: - poorer vs wealthier; normal vs complicated cases;

- do you feel that any group is underrepresented? (e.g. socio-economic) Is this a problem? What are the reasons for this? (e.g. cultural beliefs) What could improve the situation?)

2. Job satisfaction

a. How do you like working here?

(prompt for Thana level: do you find the obstetric work here more difficult than other work? For district level: how do you like working in this district?)

b. Are there any problems you face in your work?

(prompt: -difficulties with patients' attitudes towards your profession? Women's and relatives' cultural beliefs?

-do you feel confident in providing the full range of basic EOC? (for doctors at thana level); comprehensive EOC? (for doctors at district level)

-enabling environment: supplies; equipment; referral system (transport)

-can anything be done about these difficulties?)

3. Communication with patients

What is it like trying to communicate with your patients?

(prompts: -any groups of women who are more difficult to deal with? (poorer?)

-any problems of communicating with accompanying relatives?

-Can anything be done about this difficulty?)

D. Checklist for Focus Groups with Influential Actors (grandmothers; fathers)

1. What would you see as the best delivery care service available to your [daughter (in-law)/wife] during childbirth?

(Prompts: -associated advantages and disadvantages of chosen service;

-possible advantages and disadvantages of other services discussants are aware of;

-normal and complicated births)

-Who should take the decision in a family about the delivery care a woman should receive?

2. If your [daughter (in-law/wife)] was experiencing difficulties during her delivery, what would you do?

-hospital: any difficulties in accessing?

-what would be your expectations of the quality of care she receives there?

3. Are there any special problems, which mainly poor women and their families have related to seeking help during pregnancy?
(Prompts: -poor and poorest; could anything be done about those problems?)

E. Checklist for FG with TBAs (trained and untrained)

1. What do you think are the advantages of your service?
(prompts: -why do women come to you? (low costs; accessibility; cultural acceptability; good emotional care)
-who comes? (any particular group of women, e.g. poorer or better off?)
2. Are there any difficulties which you sometimes find in your job?
(prompts: - expectations of WRA and family; blame;
- complications; possibilities of involving other health workers; ability to refer on; transport)
3. Could anything be done to make your job more successful?
(prompts: -possibilities of involving FWAs and Has;
-referral possibilities to hospital; transport)
4. Are there any advantages in receiving care in a health facility or hospital?
(prompts: -disadvantages? –for complicated cases?)

F. Checklist for FG with for doctors/healthcare providers in formal level

1. Are there any problems women may face in accessing your service?
(prompts: -any particular group of women? (poorer?; those living further away?)
-what are the reasons for the problems? Can anything be done about this?)
2. Are there any difficulties you may face in your job?
(prompts: -do you feel confident in providing the full range of basic EOC?
-enabling environment: supplies; equipment; referral system (transport)
-can anything be done about these difficulties?)
3. Do you or your colleagues sometimes experience any difficulties in communicating effectively with women?
(prompts: -any groups of women who are more difficult to deal with? (poorer?)
-any problems of communicating with accompanying relatives?
-Can anything be done about this difficulty?)

Annex 3. Map of Patra khata village

Annex 4. Criteria of wealth category done by the villagers.

Rich	Middle	Poor	Poorest
4%	9%	9%	78%
1. Land (eight bigha ¹¹ to one bigha).	1. Small amount of land (one bigha to 10 katha).	1. No cultivable land.	1. No land at all.
2. Surplus food after the year's consumption.	2. Food security throughout the year but no surplus.	2. Mainly live on sharecropping and occasional mortgaging of land.	2. Live on other's land.
3. Shallow machine for irrigation.	3. Involve in small trading.	3. Living on own crops for six months.	3. Jute-stick fencing house; not in good condition.
4. Livestock.	4. Livestock.	4. Small number of livestock.	4. Live on daily wage earning.
5. Television and tubewells.	5. Tubewells.	5. Straw roofed house.	5. Migrate out to work as rickshaw puller, construction labourer, etc.
6. Involve in government and non- government jobs.	6. Small amount of cash in the house.	6. Seasonally migrate out for work.	6. Three meals a day are insecure
7. Well-built house with tin roof and many rooms.	7. Tin-roof and bamboo fences house.		
8. Have big shop in bazaar.	8. Few involve in government and non-government service.		
9. Have more cash in the house.			

¹¹ Unit of measuring land.

Annex 5. Description of the facilities used for delivery care by the village women.

C. Sadar Hospital Kurigram.

- Type of facility: Comprehensive EOC.
- Delivery occurs in each year: 500-600.

The following obstetric services have been available during the last three months.

- Ergometrine or oxytocin: As required.
- Manual removal of retained placenta: As required.
- Intravenous oxytocin for prolonged labour: As required
- Forceps/ventouse extraction: As required
- D&C for retained tissue: As required
- Antibiotics: As required

For Basic EOC only

- Transport to a referral unit: N/A

For Comprehensive EOC only

- Blood transfusion: As required
- Caesarean section: As required.

Neonatal care

- Ambu bag (or similar equipment) for resuscitation of the newborn: Yes.
- Some form of incubator: No.
- Oxygen at a controlled rate: Yes.

B. Matri Mongol in Ulipur Upazila.

- Type of facility: Normal delivery.
- Delivery occurs in each year: 1600.

The following obstetric services have been available during the last three months.

- Ergometrine or oxytocin: As required.
- Manual removal of retained placenta: Sometimes.
- Intravenous oxytocin for prolonged labour: Never.
- Forceps/ventouse extraction: Never.
- D&C for retained tissue: Never.
- Antibiotics: As required

For Basic EOC only

- Transport to a referral unit: Never.
-

For Comprehensive EOC only

- Blood transfusion: N/A
- Caesarean section: N/A

Neonatal care

- Ambu bag (or similar equipment) for resuscitation of the newborn: No.
- Some form of incubator: No.
- Oxygen at a controlled rate: Yes.

B. Upazila Health Complex (UHC) in Chilmari.

- Type of facility: Basic and comprehensive EOC.
- Delivery occurs in each year: 44.

The following obstetric services have been available during the last three months.

- Ergometrine or oxytocin: As required.
- Manual removal of retained placenta: As required.
- Intravenous oxytocin for prolonged labour: Never.
- Forceps/ventouse extraction: Never.
- D&C for retained tissue: As required.
- Antibiotics: often.

For Basic EOC only

- Transport to a referral unit: As required.
-

For Comprehensive EOC only

- Blood transfusion: N/A
- Caesarean section: N/A

Neonatal care

- Ambu bag (or similar equipment) for resuscitation of the newborn: No.
- Some form of incubator: No.
- Oxygen at a controlled rate: Yes.

Introduction

In order to develop a strategy development tool for increasing the proportion of deliveries with skilled attendance, a research will be conducted in SAFE project to identify the type of delivery care utilised by the poorest group of women, their preferences for cares and place, and the barriers they face in accessing skilled attendants. Of interest in this pilot study are attempted to assess the effectiveness of various methods as a means of collecting necessary information.

Methodology

Preliminarily it was decided that the study would be conducted in two villages of Sylhet and Rangpur region, and the pilot study would be conducted in one of these two region. Accordingly, a village in Rajnagar Thana at Moulovi Bazaar District in Sylhet region was selected as study area. The following methodologies were tested with men and women respondents in study area:

- Interview with two categories of WRA (women of reproductive age), user and non-user of formal healthcare services.
- Focus group discussion with aged women (mother-in-law), men (husband) and WRA.
- Interview with service providers (doctor).
- Facility mapping regarding formal healthcare during delivery.

Study findings

In the village there was a facility of government satellite for ante natal care (ANC) check up where a family welfare visitor attended. Health workers were responsible to inform the village women, when the satellite was going to be held and asked the pregnant mother to attend the clinic. Although it was well known in the village that pregnant women were encouraged by the government to visit the satellite for their ANC check up but it was found that women in the village were not that keen or spontaneous about having their antenatal check ups. But they were eager to take the tetanus toxoid injection.

In the village delivery was perceived as a natural phenomena and women were very much in accordance with home delivery. It was found that regardless of their socio-economic status villagers/women preferred their own home as their place of delivery. There was a slight change of thoughts in the younger women who did not mind or to some certain extent preferred going to the hospital for delivery. Since they were strongly influenced by their family and their age old practices they hardly raised any voice of their preferences. Here the decision of the women was always influenced by their in-laws and elderly women of the family. The study revealed that the husbands generally supported the idea of normal delivery taking place at home. They mentioned many reasons for home delivery i.e. it was comfortable, it took less time to recover at home and at home they could keep their privacy, less expensive, they could take good care of the baby and above all they could avoid all the trouble of going to the hospital.

It was found in the study that usually the rural women did not have constant contact with a medical person during their delivery so it was unlikely for them to know which delivery was going to be complicated. Therefore, during delivery they usually followed a normal delivery procedure at home. In which they were found to call a traditional birth attendant or someone from the village maybe a relation who were known in the village for facilitating childbirth. When these traditional facilitators failed to bring the child from the womb it was only then they realised that the birth became a complicated one. Hence they were found to decide to seek formal health care. However, men actually intervened in this stage to arrange all the necessities i.e. money, transport to take the women to the hospital. It was reported that although it was difficult for the poor villagers to tackle the unexpected emergency situation (in terms of money and transportation), they somehow seemed to manage by borrowing money from their neighbours/relatives or by selling their assets. It was also found that in case of emergency, villagers co-operate each other in any way they could.

During rainy season it even became more difficult to take a patient to the hospital. The villagers said that in fact they carried the women on a plank when it became difficult to

find any transport. However, the common transports in this regard were rickshaw, tempo microbus etc.

The villagers expressed their dissatisfaction on the services provided by the government facilities. They complained that often they found it difficult to get the prescribed medicine or other necessary things in times of emergency as it was not available in the hospital. They talked about unclean environment and non-availability of bed in times of their need. They also said that they had to meet the unjust demand (cash or kind) of the attendants such as the ayas, cleaners and other such employees of the hospital. They felt that due to their poverty they did not get the proper care from the hospital, where usually people with money had better access to good care. According to them good services were only available when money was offered to the hospital staffs. In fact, villagers perceived hospital as a place where one had to spend lot of money for better service, a place of uncertainty and non co-operation.

The study revealed that the women practised self-care for the newborn like keeping them warm and clean and placing them under the sun with an oil massage. They reported that in case of emergency, they usually took their children to the hospital for medical attention. However, women were completely ignorant and unaware of any postpartum care for themselves.

It is relevant to mention here that during the pilot it was found that CARE took an initiative called “Nirapad Ma Project” which had five main components and whose main objective was to ensure safe motherhood. The project aimed to increase women’s participation in the decision making process and promote improved reproductive health seeking behaviour.

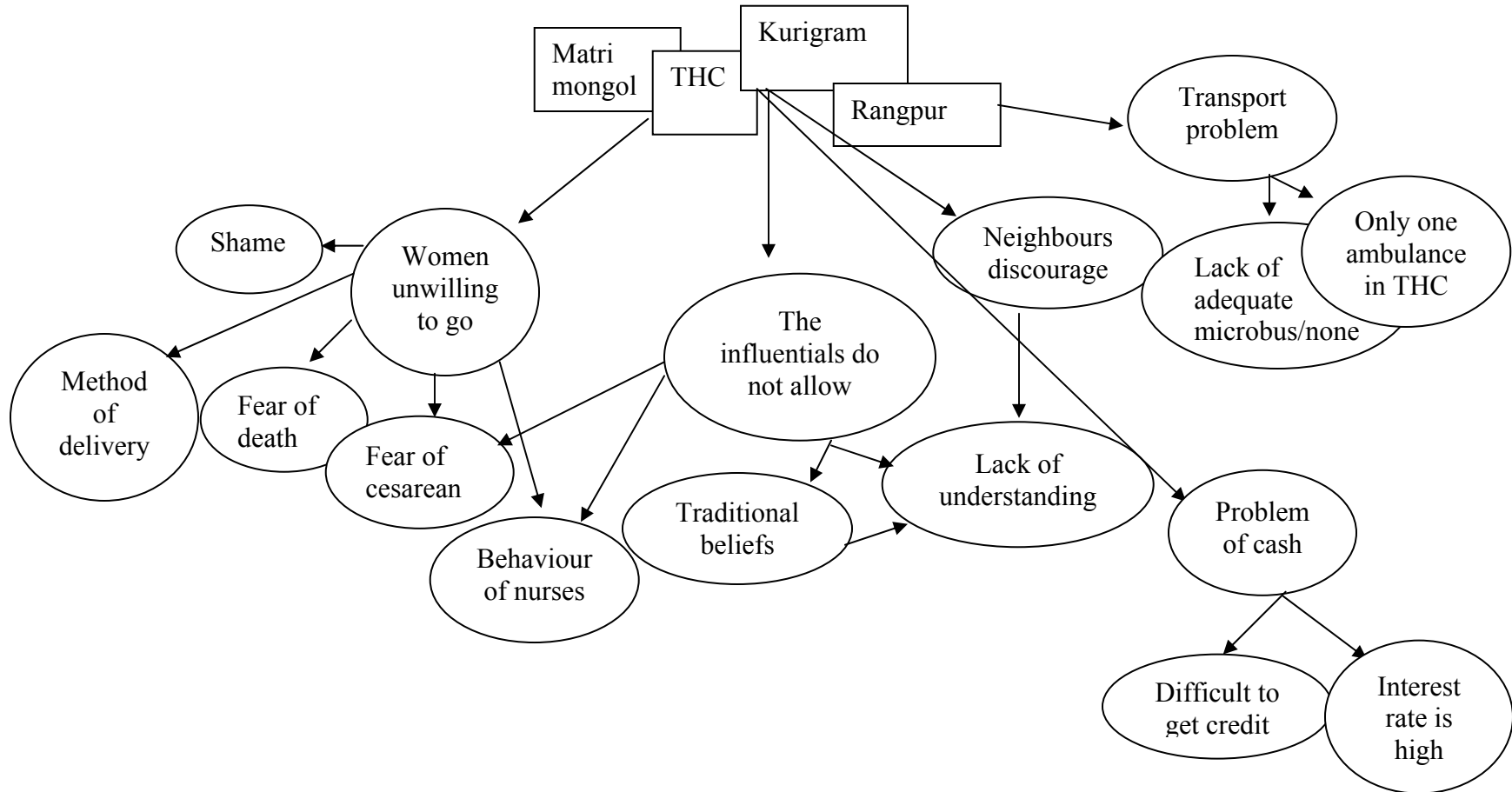
Conclusion

The Pilot helped to reconsider the checklist of all the techniques and improvise the questions making it more relevant to the study objectives. It was reconfirmed in the pilot that one to one interview required more than one day to get in-depth information. On the

basis of pilot it was decided that the main study would be conducted in one rural area of Rangpur region among the rich and poor women of reproductive age group (WRA) for ensuring a similar situation regarding comparison of data during analysis. Besides Sylhet region was excluded as there was already some activities going on in the community by CARE regarding safe motherhood.

Annex 7

Barriers in Accessing to Formal health care in rural area



Annex 8

Barriers in Accessing to Formal health care in urban area

