

Health Care Seeking Behavior during Delivery Time among the Women of Slums in Dhaka

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I declare that Health Care Seeking Behavior during Delivery Time among the Women of Slums in Dhaka is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references. Any mistakes or inaccuracies are my own.



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DEDICATION

This thesis is dedicated to all slum dwellers.

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ABSTRACT

The present thesis explores the health care seeking behavior during the time of delivery among the women of slums in Dhaka. The study was based on a mixed method. One hundred and thirty six respondents were selected for conducting this quantitative survey. Eighteen participants were included in the study for in-depth -interview, and two group discussions has been conducted to understand their health care seeking behavior during delivery period. Result suggests that 50% of adolescent women (aged less than 19 years) and 57% young adult women (20-29 years) and 38% of elderly women aged 30 years and above delivered their babies at delivery centers. It is found that, 59% of mothers who were engaged in any paid work compared to 49% mothers who were engaged in household work delivered their babies at some health facility. The mothers belonging to extended families were significantly (co-efficient -3.509) less likely to seek institutional delivery compared to mothers who were from nuclear families. Qualitative study also shows, mothers from nuclear family more likely preferred delivery centers for delivery, where mother from extended family were dependent upon mother-in-laws' decision, and in most of the cases mother-in-laws did not allow them to go to delivery centers for delivery. Mothers, experienced with pregnancy related complication earlier were more likely to prefer delivery centers compared to the mothers who were not experienced with any kind of pregnancy related complications. However, study found that negligible numbers of participants were not aware about the services of delivery centers but a significant proportion of mothers from slums sought their pregnancy related service from delivery centers.

Glossary

ANC	Antenatal Care
BBS	Bangladesh Bureau of Statistics
BDHS	Bangladesh Demographic and Health Survey
BMMS	Bangladesh Maternal Health Services and Maternal Mortality Survey
BRAC	Bangladesh Rural Advancement Committee
Bari*	Household
Dai*	Traditional birth attendant
CHW	Community Health Worker
DC	Delivery Centre
DMC	Dhaka Medical College
EDD	Expected Delivery Date
FGD	Focus Group Discussion
FWV	Family welfare Volunteer
GoB	Government of Bangladesh
HNPSP	Health, Nutrition and Population Sector program
ICDDR'B	International center for diarrhoea disease research, Bangladesh
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Ratio
MNCH	Maternal, Neonatal and Child Health
NGO	Non-Governmental Organization
PO	Programme Organizers
PRSP	Poverty Reduction Strategy Paper
RTI	Reproductive Tract Infections
SBA	Skilled Birth Attendant
SDNP	Sustainable Development Network Programme
SK**	Shasthay kormi (Health Worker)
SS**	Shasthya Shebika (Health Assistant)
TBA	Traditional Birth Attendant
U5MR	Under Five Mortality Rate
WRA	Women of Reproductive Age
WHO	World Health Organization
TBA	Trained Birth Attendant
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UN-HABITAT	The United Nations agency for Human Settlements Programme

* Bangla words

** Abbreviation of Bangla words

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Health Care Seeking Behavior during Delivery Time among the Women of Slums in Dhaka

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Safe delivery is the most important feature of reproductive health care. Adequate maternal care is required during the antenatal and post natal period. A slight negligence at this period can cause death or a lifelong distress for both mother and child. Globally approximately 536,000 girls and women die every year and one mother expires per minute from pregnancy-related complexities (WHO, 2007). Moreover, it is estimated that 20 million girls and women suffer from maternal morbidities-surviving childbirth a year but enduring chronic ill health (Women Deliver, 2010). Thus, improvement of maternal health is given priority and it is also included as one of the main goals of MDGs (Millennium Development Goals).

For ensuring safe delivery it is essential to provide health care services such as skilled birth attendant, arrangement of emergency obstetric care and financial resources to purchase the services. Usually, all of the delivery related facilities are disproportionately available in urban than in rural areas. In Bangladesh urban population is rising rapidly. The capital city, Dhaka, is bearing near about 14.5 million people (BBS, 2013). Among them a total of 3.5 million people (24%) are living in 4,000 slums in Dhaka metropolitan area (bdnews24.com, 2013). This growing number of people in the city's slums have generated an urban catastrophe. Urban slums are located mostly in ecologically fragile areas coupled with insufficient basic needs like food, accommodations, sanitation and health care (Akter, 2012). The slum dwellers are lacking in wealth, power and social associates; and under-served by both government and non-government organizations (Cameron, 2010).

Generally, people in Bangladesh migrate from rural to urban areas in search of economic opportunities, not in search of basic social services like pure drinking water, sanitation and health care. Indeed, such services are mostly fictional in slums, and even when they are available are provided characteristically through corrupt intermediaries using manipulative means – at an awfully high cost to slum dwellers (UNICEF, 2010). MICS (2009) reveals that the public health condition in slum areas is worse than that of rural areas, even in case of delivery service indicators.

The proportion of births attended by skilled health personnel is one of the important measures to ensure safe delivery. Almost 80% of world's maternal deaths could be prevented by the involvement of skilled birth attendants (SBA) who have access to required equipment and sustenance (Pradhan et al., WHO 2002). According to Bangladesh Maternal Mortality Survey 2010 (BMMS, 2012), the proportion of women delivering in a facility has begun to upswing in the past decade, from 8% in 2001 to more than doubling to 23% in 2010. As facility based delivery has increased, the birth with skilled birth attendant (SBA) has also amplified, and it has doubled from 12.2% to 26.5% during 2001 to 2010. While the rise in facility based delivery is encouraging, it still leaves about 2.4 million births at home. A study conducted by Manoshi (2009) reveals that 96% of children were delivered by untrained traditional birth attendants at home in the slums of Dhaka.

Delivery at home is frequently performed in unhygienic condition in the absence of SBA or midwives. As a result, the risk of having Reproductive Tract Infections (RTI) is higher among them. In fact, during delivery and post delivery period women need intensive care. Approximately 75% deadly complications arise during this period. Traditional birth attendants (TBA), whether trained or untrained, can neither predict nor cope with those serious adverse events (Hossain and Hoque, 2005).

In case of maternal health, slum areas are much worse than those in rural areas. Multiple Indicator Cluster Survey (MICS, 2009), showed two social indicators which are closely related with maternal health, one is mortality under five years and another is skilled birth attendant at delivery. In rural areas mortality under five (U5MR) is 66 per 1000 live births whereas, in slums it is 95 per 1000 live births. It means that, 29 more children under five per 1000 live births are dying in urban slums than that of rural areas. In addition, if we look at skilled birth attendants at birth in rural areas the proportion is 19%, while in urban slums it is 15% only. It is also noted that, in case of under five mortality (U5MR), national average was 53.8 per 1000 live births and for skilled birth attendant at birth it was 24% (MDG's progress report 2009, UNDP). Therefore, it is easily understood that, in urban slums maternal health care is neglected and government and non- government organizations are not giving proper attention to address this issue.

During every pregnancy a woman is at risk of generating complications which can be life threatening. A pregnant woman is entitled to special care from her family as well as the

health service provider. Access to antenatal and post natal care, trained birth assistance and emergency obstetric care greatly reduces the risks of her dying.

Thus care seeking behavior during delivery time is the first important step toward escaping any pregnancy related complication. There has been evidence that due to lack of motivation to seek help, many women suffered from pregnancy related complications. This situation is even worse in the urban slums area. Lack of motivation of the reproductive woman to seek health care during pregnancy is deep-rooted within the political, economic, and cultural context as well as specific social relations (Price and Hawkins, 2007).

1.2 Significance of the Study

According to Bangladesh Maternal Health Services and Maternal Mortality Survey, 2010, maternal mortality in Bangladesh has dropped to 194 per 100,000 live births, but this needs to drop further to 144 per 100,000 live births in order to achieve Millennium development goal on maternal mortality (Maternal mortality rate 144, per 100, 000 live births) by 2015. And in case of proportion of births attended by skilled health personnel, our achievement is 26.50% (BMMS 2012) in contrast to the target set at 50% by 2015 (Millennium development goals Bangladesh progress report 2009). Therefore, it is evident that we are far behind from our target. The majority of births in Bangladesh take place at home and a large proportion are assisted by unskilled persons. In such situations, women who experience life threatening complications may never receive the required life saving emergency services because of several factors including lack of skilled birth attendants at hand. The major causes of these deaths have been identified as hemorrhage (both ante and post partum), toxemia (hypertension during pregnancy), anemia, obstructed labor, puerperal sepsis (infections after delivery) and unsafe abortion.

It is necessary for a pregnant woman to be under care of a skilled birth attendant (SBA) during her pregnancy, childbirth and the postpartum period. The SBA is a person who can handle obstetric emergencies and is also aware when the situation reaches a point beyond his/her capability, and hence needs to refer the pregnant woman to a higher health care centre. Therefore, the presence of a SBA at every delivery, along with the availability of an effective referral system, can help reduce the maternal morbidity and mortality to a considerable extent.

Antenatal and postnatal care seeking behavior has significant impact on women's lives as well as their children. A large number of factors are responsible for health care seeking behavior of women. The way of responding to sickness or seeking care varies by several factors. Poor socio-economic status of women, lack of physical accessibility, cultural beliefs and perceptions, low literacy level of the mothers and large family size are the prime among them. Sometimes men's attitude towards women in a specific society or community determines their health care seeking behavior too.

It is evident from a study of Fronczak et al. (2007) that, women suffer needlessly from delivery-related complications and postpartum morbidity in urban slum areas of Bangladesh. To improve maternal morbidity and mortality, safe motherhood programmes must be developed as effective strategies to discourage potentially-harmful home-based delivery.

The study identifies the care seeking behavior during delivery time among the women of urban slums particularly in Dhaka. It will help the researcher to understand their condition regarding skilled birth attended service particularly pregnancy related services and also develop appropriate strategies to address reproductive health care seeking behavior of slum dwellers. Skilled birth attendance service is an important concern of every mother and it is their right to have all types of facilities required. This study findings will be helpful to increase the existing knowledge of urban slums' maternal health seeking behaviour and would contribute significantly to formulation of appropriate strategies in mitigating and necessary steps can be taken by concerned authority regarding this.

Furthermore, reducing maternal mortality is one of the priorities of the Government of Bangladesh and is reflected in the national poverty reduction strategy paper (PRSP) and Health, Nutrition and Population Sector program (HNPSP). Skilled birth attendance service is recognized as a woman's right. Considerable investments have been made for improving access to skilled birth attendance services, but this facility is not equally availed by all groups of people, rather selective group of people are accessing this benefit. This study will be helpful to document; at least partially, how far urban slum dwellers are getting benefit from Government initiatives on reproductive health.

1.3 Rationale of the Study

In 1990s, a series of global conferences organized by the United Nations identified maternal mortality and morbidity as an urgent public health priority, and mobilized international commitment to address the problem. Governments from around the world pledged to ensure access to a range of high quality, affordable reproductive health services, including skilled birth attendance service and family planning, particularly to vulnerable and under-privileged populations.

Keeping these in mind, Bangladesh is committed to achieve the MDGs which includes among others, the pledge to halve the proportion of people living on less than 1US dollar a day by 2015 in line with international commitment (SDNP 2004, Government of Bangladesh 2003, Sachs and McArthur 2005). Enhancing disadvantaged populations' ability to access quality health care at low cost has a potential poverty alleviating effect. It acts through mitigation of the income erosion consequences of ill-health. For achieving the health related MDGs also, improving health system's ability to reach the poor effectively is essential (Gwatkin 2005; Haines and Cassel 2004; Task Force on Health Systems Research 2004).

In order for Bangladesh to achieve Millennium Development Goal 5, which will require a further 25% reduction in the maternal mortality ratio by 2015, continued improvements will be important. The strategies that are most likely to be effective include a further reduction in fertility, which will shift births away from high parity higher risk mothers. Continued investment in female education can be expected to bring behaviour changes which favor more use of skilled birth attendants, more facility deliveries and more and quicker treatment seeking for complications. Since most of the improvements have apparently resulted from improved access to facilities continued attention to improving the quality of facility services will be crucial to attract and appropriately treat women at high risk. (ICDDR, B, 2011) Institutional delivery care is important for both maternal and newborn health. It is true that complications that arise during pregnancy period are sudden and unpredictable and it requires immediate attention. If such complications occur in a facility well equipped to handle such emergencies or in the presence of a trained medical attendant then maternal and prenatal outcomes can be greatly improved (Hossain and Hoque, 2005).

To maximize this effect, health interventions are needed to be designed according to the demand of slum dwellers. Knowledge and understanding about their current health seeking behavior including its differentials and determinants is required for this to happen. There is lack of aggregated information for different disadvantaged population groups, for example urban slum dwellers; thus there is a need for studying the role of integrated socioeconomic development intervention in changing such behaviour.

This study attempts to identify the factors that influence the choice of delivery care of slum women in Dhaka city. Identification and analysis of determinants of choices of delivery care is quite important for a resource starved country like Bangladesh. Because analysis of the determinants will help the policy makers to design some new policy measures that overcome the shortcomings in the existing delivery system so that current utilization rate of modern delivery facilities by urban slum women is increased.

Moreover, the study provides an opportunity to identify the role of intervention in changing health care seeking behavior during delivery time.

1.4 Objectives

The prime objective of this study is to see the current state of maternal care practices among slum dwellers of Dhaka.

The specific objectives of this research are as follows:

Identify biosocial, economic and cultural factors related to the acceptance of institutional delivery;

To know the reasons of seeking different types of birth attendants during delivery;

To identify availability and accessibility of seeking institutional delivery;

Identify the barriers and opportunities in seeking delivery care from users' and provider's perspective

1.5 Operational Definitions

1.5.1 Slum

A slum, as defined by the United Nations agency UN-HABITAT, is a run-down area of the city characterized by substandard housing and squalor and lacking in tenure security. In many poor countries, like Bangladesh, they exhibit high rates of disease due to unhygienic conditions, malnutrition, and lack of basic health care. One of the UN Expert Groups has created an operational definition of a slum as an area that combines to various extents the following characteristics: inadequate access to safe water; inadequate access to sanitation and other infrastructure; poor structural quality of housing; overcrowded; and insecure residential status. (UN - HABITAT, 2007). In many slums, especially in poor countries, many people live in very narrow alleys that do not allow vehicles (like ambulances and fire trucks) to pass. The lack of services such as routine garbage collection allows rubbish to accumulate in huge quantities. The lack of infrastructure is caused by the informal nature of settlement and no planning for the poor by government officials. Additionally, informal settlements often face the brunt of natural and man-made disasters such as landslides, as well as earthquakes and tropical storms. Eruption of fires in the dry season is often a serious problem.

1.5.2 Dhaka City

Dhaka City is centrally located in Bangladesh, in the southern part of the district of Dhaka. It is situated between latitudes 24°40' N to 24°54' N and longitudes 90°20' E to 90°30' E and defined by the Buriganga river in the south; the Balu and the Shitalakhya rivers in the east; Tongi Khal in the north and the Turag river in the west. The city has developed on the higher elevated Pleistocene terrace land or Order Alluvium of the central part of Bangladesh, otherwise referred to as the Madhupur-Bhawal Garh Region. In addition, a substantial portion of the adjoining low-lying areas have recently been brought under the structured zones of the city due to the accelerated rate of the urban growth in Dhaka and these transformed into a megacity.

1.5.3 Health Care Seeking Behavior

Health care seeking behavior is the first step towards the cure of any health problem. There has been evidence that due to lack of motivation to seek help, many of the health problems remain untreated in the world even though services are available at the doorstep. A study

revealed that health care seeking behavior is deep-rooted within the political, economic, and cultural fabric as well as some specific social relations (Price and Hawkins, 2007). The sequence of curative actions that an individual seeks to cure perceived ill health is known as health seeking behavior (Christman 1980; Mertens and Thomas 1997).

1.5.4 Health Care Seeking Behavior during Delivery

Care seeking behavior during delivery period is defined as selecting a skilled birth attendant, arranging articles needed for safe birth, identifying where to go in case of emergency and arranging money and transport for this purpose (Choudhury et al., 2009).

1.5.5 Skilled Birth Attendant

According to a joint WHO/International Federation of Midwives/ International Federation of Gynecology and Obstetrics definition, “A skilled attendant is a qualified health professional such as a mid-wife, doctor or nurse-who has been educated and trained to have proficiency in the skills needed to manage normal (uncomplicated) pregnancies, child birth and the immediate postpartum period, and in the infection, management and referral of complications in women and newborns”.

1.5.6 Institutional Delivery System

Institutional delivery system means a place where life saving equipment and hygienic conditions are available which can help to reduce the risk of complications that may cause death or illness to mother and child (Campbell et al., 2006).

In this study institutional delivery refers delivery at delivery center and hospital.

1.6 Theoretical Framework

Care seeking behavior in a particular society depends upon various determinants. In social sciences, there have been lots of model introduced by social scientists to understand the health seeking behavior on the basis of past experience and empirical evidence. Some of those models have been used in this research work such as, the Health Belief Model, the “Four As”, the Pathways Model, the Healthcare Utilization Model (Socio-behavioral model).

1.6.1 The Health Belief Model (HBM)

According to Sheeran and Abraham (1995) the HBM is guided by -

- i) Beliefs about the impact of illness and its consequences (threat perception);
- ii) Health motivation i.e., readiness to be concerned about health matters;
- iii) Beliefs about the consequences of health practices (behavioral evaluation);
- iv) Clues to action, which include internal and external factors;
- v) Conditions such as socio-demographic and psychological characteristics of the population;

In this model, it is mainly focused on how one individual perceives illness and its consequence. In this study it is postulated that when a group of women conceive some may take it seriously, on the other hand, some of them take it very lightly. Women who consider the matter of delivery seriously are more likely to seek for institutional delivery, where SBA is available. In addition to that, the care seeking behavior on the part of pregnant women depends upon their belief, health motivation, and concern about health issues.

1.6.2 The "Four As"

The "Four As" model includes following:

- i) Availability: geographical distribution of health facilities, pharmaceutical products etc
- ii) Accessibility: include transports, roads etc
- iii) Affordability: direct, indirect and opportunity costs of health services
- iv) Acceptability: relates to socio-cultural barriers

The aforementioned four factors immensely influence the care seeking behavior. When the services are available around the community then the community dwellers are more likely to avail this service. However, it depends upon the accessibility, affordability and acceptability of the care seekers.

1.6.3 The Pathways Model

In this model, paths taken from recognition of symptoms to use different health services are followed and the role of extended groups of relatives and friends in illness negotiation and

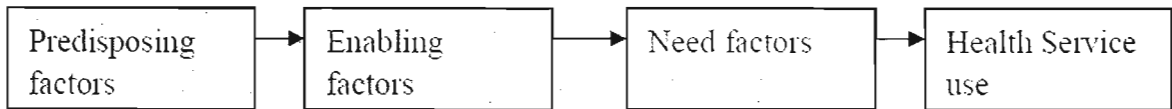
management (“significant others”) is given importance. Most of the studies using pathways model investigate the path until the first contact with a health facility. The strength of the pathways model is that it depicts health-seeking as a dynamic process.

1.6.4 The Healthcare Utilization Model (Socio-behavioral model)

In the socio-behavioral model originally proposed by Andersen (1995), three categories of factors which influence health-seeking behaviour are grouped into a logical sequence

(Figure: 1)

Figure: 1 Socio-behavioral model



- i) **Predisposing factors:** age, gender, religion, ethnicity, education, occupation, social capital, knowledge and prior experience about the illness and health services
- ii) **Enabling factors:** availability of services, affordability, health insurance, social network support
- iii) **Need factors:** perception of severity, days lost due to illness, help from outside for caring

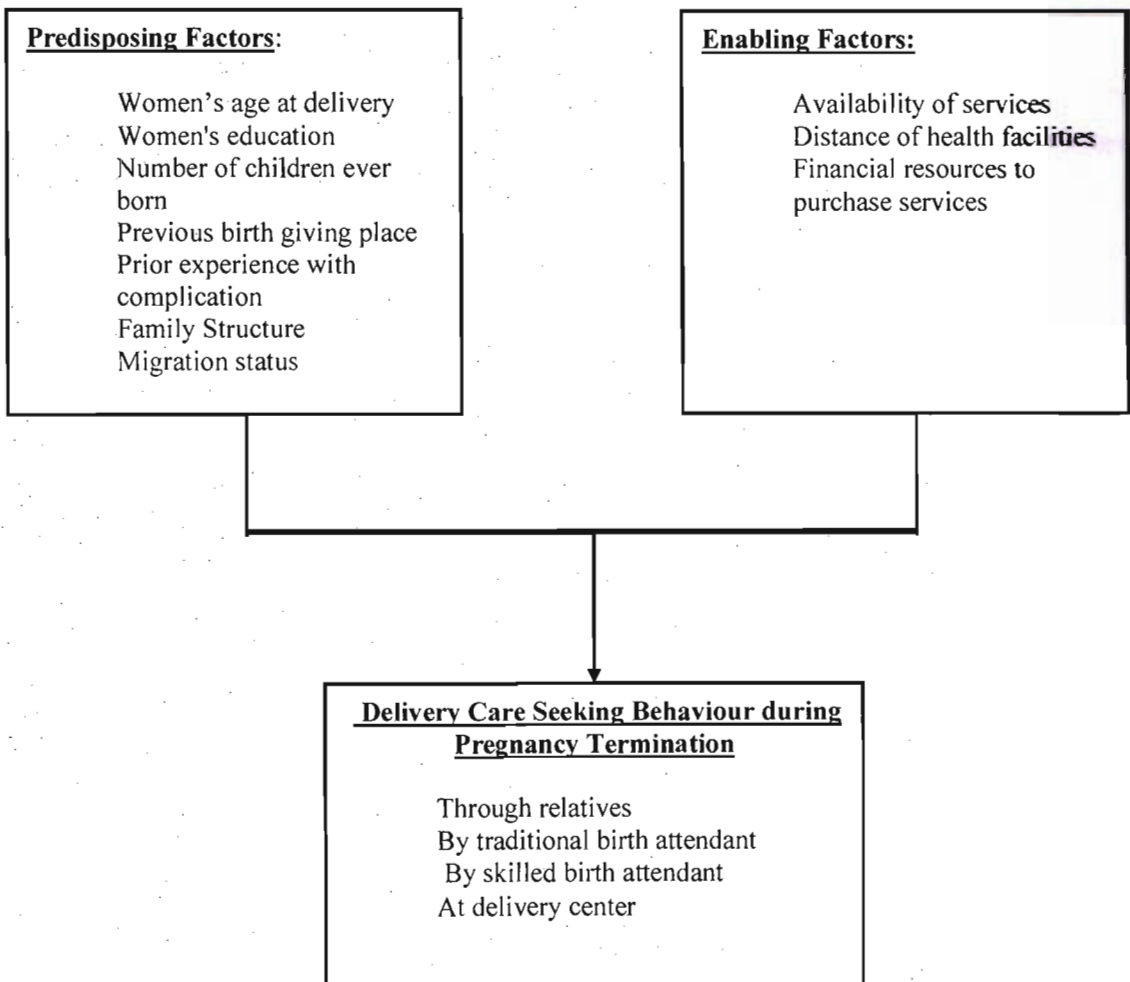
From the author’s point of view the above model has covered all aspects of care seeking behavior. This model has elaborately depicted the influencing factors of health care seeking behaviour. It described all the factors step by step and how one factor affects other factors and so on. For example, an individual who has a higher level of education with good income and lives in that place where service is available with affordable cost in that case it is more possible that s/he will avail that service rather than his/her counterpart whose level of education is lower as well as his/her income and service not available with affordable cost at his/her neighborhood. Therefore, it can be said that if all the predisposing factors go in positive direction then it will have positive impact on health seeking behavior.

1.7 Conceptual Framework

Given the overall review of the four major model developments in the field of health care seeking behavior, an attempt will be made here to formulate a theoretical framework for this paper (Figure : 1.1).

The majority of the above models concentrate on the individual characteristics. The health provider perspective and the context in which health-seeking behaviour operates are not appropriately addressed. Lately, argument is also made for developing a tool for

Figure: 1.1 Conceptual Framework: predisposing and enabling factors effecting care seeking behavior during delivery time



understanding how populations engage with health systems, rather than using health-seeking behaviour as a tool for describing how individuals engage with services (Mackian et al..

2004). This concern on looking at health-seeking behaviour from a holistic perspective is addressed in the healthcare utilization model or the socio-behavioral model of Andersen (1995). This model takes into account both the material and structural factors into consideration unlike other models.

In this paper Andersen's behavioral model of healthcare utilization is used with some modifications. The model is used in the context of a low-income country, to identify the factors influencing health-seeking behavior of the disadvantaged population groups in the slums of Dhaka in Bangladesh. In this conceptual model, health-seeking behavior is postulated to be determined by a set of predisposing factors (mother's age at birth, mother's education, number of children ever born, previous birth giving place, prior experience with complication and family structure), enabling factors (e.g., factors that are amenable to policy changes such as availability of services, distance of health facilities, financial resources to purchase services, social network support) and Need Factors (perception of severity). These factors influence health care seeking behavior from whom they will take the service during delivery time (relatives, traditional birth attendant, and trained birth attendant and delivery care center).

Predisposing Factors

1.7 .1 Mother's Age at Birth

The age below the birth giving age, particularly below 20 is physically risky for a woman and varies significantly depending on general health conditions and access to prenatal care (Islam, 1999). The physical risk of giving birth during adolescence is not high for women with good nutritional levels and extensive access to prenatal care (Makinson, 1985). This circumstance is not the case for societies where anemia and malnutrition are widely prevalent and where access to health care is generally poor. In our society, women who are too young or too old or have babies too closely spaced face increased risks of complications not only during pregnancy but also at childbirth. Very young and nulliparous women are also more likely to experience prolonged labor as a result of immature pelvises, a circumstance that can lead to complications such as vesico-vaginal fistulae (Wacker, and Baster, 1996; Tahzib, 1989).

1.7.2 Mother's Education

Globally, the level of education of female is associated with behaviors which reduce risk of maternal (and child) mortality. The investments by the Government (and some NGOs) over the past several decades in female primary and secondary education have started to show positive impacts on risk aversion behaviors. The proportion of mothers with no education has halved since 2001, and the proportion with secondary schooling has nearly doubled. It is estimated that this trend alone has contributed to the impressive 25% increases in facility delivery, 33% increase in use of medically trained attendants at delivery and 81% increase in treatment seeking for obstetric complications from 2001 (Steatfield and Arifeen, 2012).

1.7.3 Number of Children Ever Born

Although family planning programs have made tremendous achievements in expanding access and use of contraceptive methods, in many settings, informed choice is limited by a narrow range of temporary methods that are available, especially for adolescent girls. In addition, evidence indicates persistent rates of discontinuation of contraceptive use and a high number of unplanned pregnancies (Ali and Cleland, 1995). The effects of multiple births on maternal health are well documented. Higher parity increases risks of maternal morbidity and mortality, including uterine prolapse and other gynecological morbidities.

Recent evidence from Latin America shows that, women who experience birth intervals of less than 15 months have 2.54 times increased risk of maternal death. They also experience an increased risk of third-trimester bleeding, premature rupture of the membranes, and anemia compared with women who experience 27–32 months between births (Conde-Agudelo and Belizan, 2000). Additionally, children born 3 years or more after a previous birth are healthier at birth and are more likely to survive at all the developmental stages of infancy and childhood through the ages until 5 years (Rutstein, 2002).

1.7.4 Previous Birth Giving Place

In Bangladesh context, women are very conservative. They do not want to go outside for delivery purpose. They feel shy and embarrassed. So, women who gave birth at home earlier without any complications are likely to prefer home delivery than institutional delivery. She feels more comfortable and safe at home rather than institutions. In addition, most women

have misconception regarding institutional delivery and feel that health service providers will not give proper attention to their needs.

1.7.5 Prior Experience with Complication

Choosing a place for second delivery depends to a great extent on the experience a woman has had at the place of first delivery. As we know, Bangladeshi women normally prefer home delivery so; if first birth was delivered at home without any complication then they would most likely prefer home delivery rather than institutional delivery. However, if they had faced any problem during first delivery period at home then they would feel the necessity to go to health facilities. In other-words, experience of the first delivery place determines the following delivery place.

1.7.6 Family Structure

In the context of Bangladesh, mother-in-laws are very influential regarding decision making where to go during delivery period. Most of the time they prefer to have home delivery because they had already experiences of this process earlier at home. In addition to that, they believe delivery outcome depends upon God's will. They also believe that even having sophisticated health services, complication still may arise if God wishes. That is why home is a better place to them for delivery than that in an unknown place. If any complication arises, at least the family members can take care of them based on their previous experiences.

1.7.7 Migration Status

It is one of the important factors. Here, family linkage plays a crucial role. A family who recently migrated to urban slum is very normally unfamiliar with the facilities available nearby. That is why during the delivery period they prefer to go their home town.

Enabling Factors

1.7.8 Distance of Health Facilities

The geographic coverage of health facilities, usually reported as distance or time required to reach the nearest health center is an important barrier for large segments of societies in most countries, particularly in rural areas and urban slums. Women in rural areas often walk more than an hour to the nearest health facility. Poor road infrastructure and lack of reliable public

transport or access to emergency transportation make access difficult, especially when obstetric complications arise. As a result, women are obliged to seek health care from less-trained providers who are more accessible but who are neither competent nor equipped to deal with pregnancy complications. A study in Turkey found that urban women were more likely than rural women to choose a facility delivery over a traditional home delivery (Celik and Hotchkiss, 2000). In Malawi, 90% of women in a study wanted to deliver in a health-care facility, but only 25% of them did, those who did not cite distance and time as major obstacles (Lule and Ssembatya, 1996).

1.7.9 Availability of Services

Even when women reach a health center, they may not be able to receive the health-care services they require. Public facilities, especially those serving poor and geographically remote areas, commonly face limited human resources and a shortage of skilled providers to provide emergency obstetric care. In Asia and sub-Saharan Africa, only one skilled attendant is available for every 300,000 people, resulting in a ratio of one skilled attendant for every 15,000 births (MacDonald and Starrs, 2002).

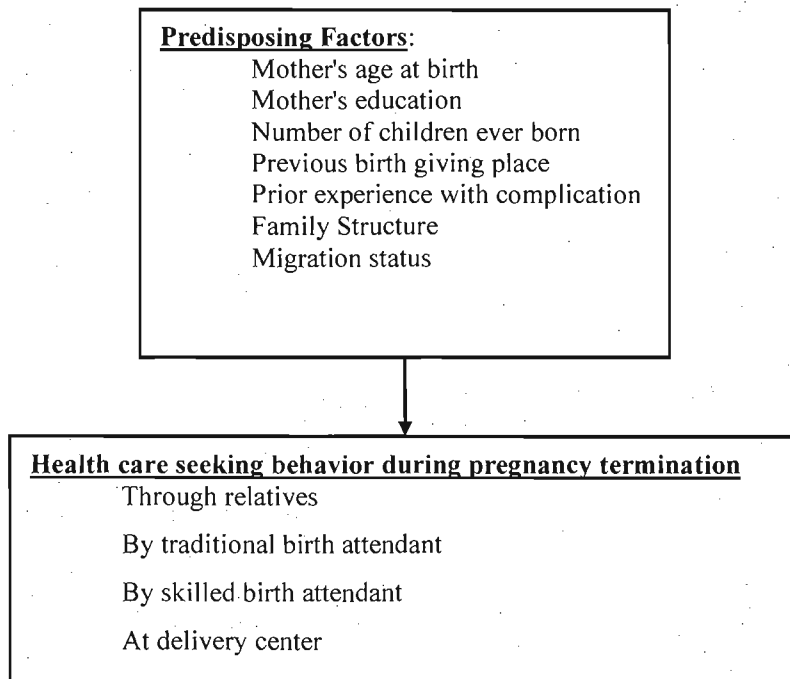
1.7.10 Financial Resources to Purchase Services

A low level of public expenditure for health services and, particularly, maternal health services is a major problem for many developing countries including Bangladesh. Cost of health services often translates into increasing a household's financial burden through user fees, out-of-pocket payments, and other cost-recovery mechanisms (McPake, 1993). Families that are already too poor to pay for normal childbirth procedures are overwhelmed and suffer catastrophic financial consequences as they try to support the costs of emergency medical care (Lule et al., 2005).

1.8 The Analytical Framework

In this study I only consider the predisposing factors and its effect on health care seeking behavior during pregnancy termination because in case of enabling factors all the components are constant for all.

Figure: 1.2 Analytical Framework: predisposing factors effecting care seeking behavior during delivery time



1.9 Hypothesis

Six hypotheses are posited for verification in the study;

- i. Age is likely to be inversely related to institutional delivery. Younger women are more likely to prefer institutional delivery than women of higher ages. This is because most women in Bangladesh become pregnant for the first time before they reach the age 20. And these young women (aged below 20) are likely to be worried about their first pregnancy as well as more conscious about delivery care services than the women who are above 20. Young women are likely to be better educated than their older counterparts and this could also predispose young women to institutional delivery. The value of education got its higher currency among women in Bangladesh in recent years.
- ii. Higher educated women are more likely to prefer institutional delivery than those with little or no education. This is because educated women are likely to be more aware about health care needs of pregnant women, high risk of pregnancy and the advantages of facility based delivery.

- iii. Women who have one child are more likely to prefer institutional delivery than women who have higher parity. This is because mother of one child is likely to be relatively younger, educated and knowledgeable including knowledge on reproductive health care need than mother with higher parity.
- iv. Women who have had their previous delivery at an institution are more likely to prefer institutional delivery. This is because women who had their delivery at a health facility are expected to be more favorably predisposed to institutional delivery as it facilitates safe delivery. They also know that complications may arise at any time during child birth which could be promptly attended to by a skilled birth attendant at a health facility.
- v. Complications during previous delivery may be a leading cause for preferring institutional delivery. This is because pregnant women who have experienced complications during previous pregnancy are more likely to seek institutional delivery to guard against any possible complications during pregnancy and ensure safe delivery as skilled birth attendants are readily available at health facilities.
- vi. Family structure is an important determinant of choosing place of delivery. Women from nuclear families are more likely to choose a health care Centre for delivery i.e., to institutional support during pregnancy than their counterparts who are from extended families. This is expected because the former have no kith and kin at home who can provide any support/advice during delivery period to the mother unlike their counterparts who live in extended families can get necessary support during delivery. This is why pregnant women from nuclear families are likely to seek institutional support during delivery to ensure safe delivery. Women who migrated to Dhaka city and live in slums are less likely to seek institutional support during pregnancy and child birth than their counterparts who have been living in the slum area over a longer period. This is because the recent migrants may not be familiar with the availability of health care, particularly pregnancy and delivery care related services within the vicinity of their current residence and they have few friends and acquaintances in the neighborhoods compared to their counterparts who have been living in the area longer. In the circumstances the latter groups of women are more likely to seek institution based support services related to pregnancy.

CHAPTER TWO: LITERATURE REVIEW

It is important for every society and family to keep mothers healthy and alive. Lule et al. (2005) have studied with the mothers of developing countries and in their paper mentioned that, complications during pregnancy and childbirth along with STIs, HIV and AIDS are the prime causes of death and disability among women of reproductive ages. However, it is also evident from the WHO report of 2001 that, maternal mortality is not the only adverse outcome of pregnancy it also causes maternal and child morbidity. Miscarriages, induced abortion and other factors of the pregnancies in developing countries result in complications, illnesses, or permanent disability for the mother or the child in more than 40% cases. The chances of women's death in the developing world from pregnancy related causes is 1 in 48; the ratio in developed countries is 1 in 1,800 cases. Almost half of the maternal deaths occur due to pregnancy related health problems such as vesico-vaginal fistulae, infertility, and depression in the developing countries (WHO 2001).

Since about 98% of newborn deaths occur in developing countries, where most newborns deaths occur at home (Sreeramareddy et al., 2006) it clearly indicates the absence of enrolment into institutional delivery system. Ensuring the access to institutional delivery can be effective. Maternal mortality rate can be reduced by taking a number of initiatives and that is why WHO recommends that all births should be assisted by a skilled attendant to address unacceptably high levels of maternal mortality and morbidity (WHO 2001). According to Lule et al. (2005), health sector interventions for reducing maternal mortality and for promoting maternal health need to work through a system wide approach to delivery needed services. The key actors for health systems include the people, the state, and the private sector. An efficient health system should improve health outcomes and ensure financial protection to the poor, especially during catastrophic illness. Responsiveness to the client is another important health system outcome, which involves providing culturally appropriate services with adequate clinical quality. The later is determined by the quality and availability of human resources as well as by the adequacy and regularity in supply of essential commodities such as pharmaceuticals, contraceptives, and consumables. To ensure these outcomes, the health systems need to provide adequate financing through revenue generation, risk pooling, and efforts to enhance efficiency through competitive purchasing of services

from the private sector. An overarching function of public health systems is their stewardship or oversight role, which among other things involves setting policy, regulating quality and price of services, partnering with the private sector, and regularly collecting and disseminating information to the communities.

Question may arise whether various strategies can reduce the maternal mortality rate or not. In this regard we can refer the study of Campbell et al. (2005). They found in their study that in 1992–93 the maternal mortality ratio in Egypt was 174 maternal deaths per 100,000 live births. By the year 2000 using a combination of strategies, it had dropped to less than half that figure at 84 maternal deaths per 100,000 live births. The proportion of all deliveries that occurred with skilled health personnel increased from 40.7% in 1992 to 60.9% in 2000. Health facilities were upgraded and equipped, health personnel were trained and treatment protocols for obstetric complications were developed and implemented. Greater access to family planning resulted in increased use of contraceptives, which rose from 47.1% in 1992 to 56.1% in 2000, thus reducing the total number of pregnancies, including higher risk and unwanted pregnancies.

Similar improvement has been found in Sri Lanka, Pathmanathan et al. (2003) pointed out that, Sri Lanka's achievement in maternal mortality reduction is one of the spectacular success stories in human development. Multi sectoral public investments led to a steep decline in maternal mortality ratios (deaths per 100,000 live births) during 1930s and early 1950s and a continuation of this decline to a current MMR level of 60 estimated for 1995. Several studies have attributed the early decline of MMR to Sri Lanka's on communicable disease reduction (malaria and hookworm), general improvements in sanitation and the introduction of modern medicine (antibiotics). General improvement also occurred in living standards, including food supplies, which improved women's nutrition. In addition, specific factors acted on improving MMR. During the 1950s, Sri Lanka increased investments in midwife training and expansion of Public Health Midwives (PHM) positions, increased the number of hospitals providing obstetric services, and increased investments in ambulance service throughout the country. The effect of these investments resulted in an increase in the percentage of births delivered by skilled attendant. Before 1940, 30% of live births in Sri Lanka had skilled attendance, with most of these births taking place at the mother's home with a trained public health midwife. By the late 1950s, skilled attendance had increased to

50%, with PHMs conducting half of these deliveries at home. Today, 95% of births are attended by a skilled practitioner with the majority taking place in a hospital.

However, in developing country the reason behind the mothers not taking institutional and trained delivery facilities is the lack of education and this is the cause why we need to focus on educating the mothers. Campbell et al. (2005) found that mother's level of education is inversely related to maternal mortality ratio. Higher levels of education attainment are generally associated with lower mortality risks, since education exposes mothers to information about better nutrition, use of contraception to limit and space births, health care during pregnancy. Maternal mortality ratio might have been dropped due to the increase of women's secondary education. That is why, for further reduction of maternal mortality ratio, mass media campaigns were carried out, aimed at educating women and their families to access maternal health services appropriately. Steatfield and Arifeen (2012) have also pointed out similar aspect. Moreover Bangladesh Demographic and Health Survey 2007 reveals that, delivery in a health facility is substantially higher among women who have at least completed secondary education (43%), and among those in the highest wealth quintile (43%). Women with secondary complete or higher education and those in the highest wealth quintile are much more likely than other women to deliver by C-section.

So far we have been discussing about the maternal mortality issue from a holistic perspective. It is essential to focus on Bangladesh to see the scenario here as this research is mainly concerned with Bangladesh. The BMMS (2001) reported that, the two major causes accounting for over half of maternal deaths were hemorrhage (29%) and eclampsia (24%). Both of these normally require management at facility by medically trained provider. According to Bangladesh Demographic and Health Survey 2004, nationally, only 9% of births took place in a health facility. But according to BDHS 2007 report 85% of births in the past five years occurred at home, and 15% occurred in a health facility, so we can see a sharp increase in the institutional delivery. The BDHS 2007 data also showed that, only 18% of babies were delivered by medically trained providers, compared with 63% who were delivered by untrained birth assistants. Overall, 8% of births were C-section deliveries. The BDHS 2007 also shows that 67% of births in the private or NGO sector occur by C-section and 35% of births in public health facilities. One in seven births in the five years preceding the survey had at least one of the following maternal complications around delivery prolonged labour, excessive bleeding, baby's hands or feet came first, fever with foul

smelling discharge, convulsions/ eclampsia, and retained placenta. The most common complication was prolonged labour of over 12 hours, associated with one in 15 live births. For 5% of births, the mothers experienced excessive bleeding and 3% of births involved retained placenta and high fever with foul discharge. Two other problems, convulsions and baby's hands or feet coming first, were reported for 2% of births. Treatment was sought from a medically trained provider for 43% of the cases that had maternal complications around delivery. Nineteen percent of women with complications did not seek any care. Compared with the BDHS 2004, the BDHS 2007, it is found that, an increase in the percentage of women with complications who sought care from a medically trained provider (from 29% to 43%). However, one in five women sought no medical care, and 34% of women with complications sought help from non-medically trained providers such as unqualified doctors and traditional birth attendants. However, it has been found from Bangladesh maternal mortality and health care survey 2010, the risk of a maternal death is now down to 1 in 500 births, which is a significant achievement. It can be inferred that women's potential fatal obstetric complication is reduced. Thus it is strongly recommended that all pregnant women minimize risk by delivering with a skilled birth attendant, preferably in a facility (Steatfield and Arifeen, 2012).

Since the focus of the study is urban slum it is evident for this research to review studies conducted on pregnant women living in Dhaka slums. Above mentioned data and literatures have strived to demonstrate the overall scenario of maternal health care and delivery condition in Bangladesh. It is true that there were few studies available regarding maternal health care seeking behaviour of urban slums. There are few Government and private survey reports are available which can help us to understand the phenomenon to some extent. Uzma et al. (1999) noted in their study "Delivery related complications and early postpartum morbidity in Dhaka, Bangladesh" that postpartum morbidity is common among women in Bangladesh. Moreover, Bangladesh maternal health services and maternal mortality survey 2001 (2003) revealed that, 24% of women reported at least one complication during the postpartum period, while two studies (Fronczak et al., 2005; Uzma et al., 1999) in urban slum areas of Dhaka, demonstrated approximately 75% of women reported at least one postpartum morbidity a cross- sectional study by Nahar, et.al. (Nahar, S., Banu, M., & Nasreen, H. E. , 2011) indicates that of all the obstetric complicated cases, 82% respondents experienced complications during delivery, 11% during ante partum, and 7% in postpartum periods.

Eighty-five percent of women had faced single complication, 15% women had multiple complications ranged 2-3; and the mean number of complications per woman was 1.2. Fronczak et al. (2005) noted that, among women with deliveries at home, self-reported postpartum morbidity was significantly associated with high risk parity (prim parity or grand-multi parity of five or more births), poor economic conditions, malnutrition, and anemia. With regard to delivery practices, postpartum morbidity was significantly associated with having two or more vaginal examinations and reports of practices to expel the placenta or stop bleeding (forced gagging, applying hard manual pressure to the abdomen or pulling on the umbilical cord). Morbidity was not associated with manual removal of the placenta or with use of labour-augmenting drugs. Despite the availability of health facilities in Dhaka, large proportion of women deliver at home and report delivery related complications and subsequent postpartum morbidity. According to Bangladesh demographic and health survey 2004 almost 82% deliveries were performed at home in urban slums, Among the rest 6% beginning labour at home but transferred to a health facility prior to delivery (emergency transfer) and 12% going to a facility prior to active labour (delivery at elective facility). About one fourth of women who made emergency transfers were referred between two or more facilities.

There are many reasons for the urban slum dwelling pregnant women for not seeking safe institutional delivery. These reasons include, among other others, teenage mothers, mothers from joint family, mothers with little or no education, mothers from rural areas, non-exposure to radio and TV and poor economic condition are less likely to receive all maternal health care services than other counterparts. It means reversely that the middle aged mother, mothers from nuclear family, higher educated, mother live in urban areas, exposure to radio and TV and highest wealth quintile are more likely to receive all maternal health care services than other counterparts. It has also been observed that mothers who accessed to NGO are more likely to receive antenatal care (Rahman, 2009).

Ahmed and Hossain (2010) noted that, though there are various MNCH services and service providers are available in the slum, their capacity to provide quality services is questionable. Community has superficial knowledge of MNCH care and services. Due to economic hardships, the slum community mainly relies on cheap informal sector for health care. Cultural beliefs and practices also reinforce this behavior including home delivery without skilled assistance. Men and women differ in their perception of pregnancy and delivery. Men

are more concerned with expenses while women expressed fear of the whole process, including delivering at hospitals. People expected 'one-stop' MNCH services from the community delivery centres by skilled personnel. Social support network for health was poor compared to other networks. Referral linkages to higher facilities were inadequate, fragmentary and disorganized.

Even it is also found from various studies that women sense a lack of privacy while being delivered at hospital as Hossain and Hoque (2005) cited that, most of the women in the slums of Dhaka expressed at the time of survey that they feel it safe and secure to give childbirth in the presence of their family members at home. One of the reasons behind this finding is that hospitals give little privacy in treatment. Some urban slums' nearby hospitals of Dhaka provide almost no dignity to patient and little opportunity to meet relatives. Moreover, different social taboos and wrong explanations of religious belief impede slum women's' access to delivery care facilities. As the slum women are mostly illiterate, they are affected by these social taboos highly. In addition to that, they also found that most of the slum women in Dhaka still rely on traditional home delivery system (89%). Only 11.5% of the women have had their childbirth in the hospital after facing many barriers only one fifth of the child delivery was in the presence of the trained birth attendant (19.23%) Midwife and family members are the provider of delivery care for most of the slum women (79.74%) (Hossain and Hoque, 2005).

At national and international level, many researched have been conducted by various organizations and researchers on maternal mortality and maternal health care services during delivery period. But there is very little research which has been conducted on maternal health care practices in slum area. The objective of my research is to unearth the existing situation of maternal care practices among slum dwellers in Dhaka. The present study has focused on bottom-up approach, which was not attempted by earlier studies, why slum dwellers are not accepting the help of delivery center facilities which are within their reach and also free of cost and their perception regarding the necessity of institutional delivery center facilities. The study findings will be helpful for making plan and program to prevent maternal mortality in slum area.

CHAPTER THREE: METHODOLOGY

3.1 Study Area

3.1.1 Korail

The study has been conducted among slum dwellers in Korail slum of Dhaka where Manoshi MNCH program exists. Korail slum is located in Mohakhali area in the northeast part of Dhaka at the centre of Dhaka's residential area Gulshan, populated by the rich class but isolated on a kind of peninsula formed by a loop in the river and it is extremely flood prone area (Stuart, 2010). This slum is situated on the land of Telephone and Telegraph Department of Government of Bangladesh. It has been divided into five units, but the study covered a small part of it. The slum is accessible by road and by boat crossways the Gulshan Lake. A study done by Bangladesh Rural Advancement Committee (BRAC) in 1997 found that the inhabitants in this slum came from various districts of Bangladesh and that they have been living in Dhaka one month to twenty-five years (Khan et al., 1997).

They have excess to electricity. Most of the households have television with satellite connection. Most of the male slum dwellers engage in rickshaw pulling. Apart from that, they are also involved in daily labour, CNG driving, small trading and domestic helping. Some of them have no specific occupation. They do whatever is available. Women are involved in different types of occupation. Among them aged women work as domestic helper and comparatively younger women work in garments. Children are not interested to attend school. They are involved in different occupations like helper of tempo and garbage collection. The practice of child marriage is still prevalent in this slum area.

There are a few schools run by NGOs, and Government but children do not attend schools regularly. From childhood they are involved in income earning activities, most importantly, their parents are not much aware of the necessity of their education. There are many children who do not go to school at all or drop out after completing class two or three. The slum dwellers collect water from tap, pond, and a shallow tube well for drinking, washing and cooking purposes. Although a few slum dwellers have ring-slab latrines, most of them were found to use katcha latrine. Children are often found to defecate on the roads and those are hardly cleaned or wiped.

NGOs like BRAC, Proshika, Caritas, Inner wheel and Marie Stopes had their activities in the slum. Besides, there are some local NGOs working in the slum. The slum is in close proximity of pharmacies (drug store), private clinics and other health care facilities run by NGOs and other voluntary groups. The slum dwellers receive health care services from these places. There is some traditional healthcare providers like kabiraj (herbal medicine practitioner) and dais (traditional birth attendant) and people found to consult them if necessary. People's perception of the causes of illness influences their utilization of different healthcare services (Khan et al., 1997).

3.1.2 The Manoshi Project

The Manoshi project has been launched for five years by BRAC to establish a community based health programme targeted at reducing maternal, neonatal, and child deaths and diseases in urban slums of Bangladesh. It is supported by the Bill and Melinda Gates Foundation's Community Health Solutions (CHS) initiative that aims at strengthening and leveraging community organizations and individuals to be proactive in community based interventions. This five-year project is led and implemented by BRAC and International Centre for Diarrheal Disease Research, Bangladesh (ICDDR, B) in collaboration with the Research and Evaluation Division (RED) of BRAC to provide technical assistance to the project. This project is guided by a Technical Advisory Committee and a Technical Management Committee.

3.1.2.1 Project Design

This community-based intervention is designed to implement in urban slums of Bangladesh. The primary target populations of the programme are pregnant and lactating women, neonates and children. At the very outset, the deployed or newly recruited staffs are trained for technical support and supervision at field level. The Managers and Programme Organizers (PO) received training in maternal, neonatal and child health and staff development training. On the other side, BRAC also started organizing consultation workshop for stakeholders at national level as an integrative effort. The government of Bangladesh and its local government officials, development partners, Maternal, Neonatal and Child Health (MNCH) experts and researchers participate in the workshop, which formally orient them about the project in urban slums and look for their feedback through participatory methods.

3.1.2.2 Establishment of “Birthing Huts”

Simple clean birthing huts or delivery centres (DC) have been established, for each 2,000 households (a population of 10,000), adhering to set standards of hygiene and run by SBAs /community midwives. The proximity, standards of cleanliness, maintenance of privacy and assistance with normal deliveries are likely to make huts both popular and viable. The SBA and community midwife is responsible for the managing of hemorrhage and eclampsia, and immediately refer complicated cases to referral facilities. Neonatal complications, such as, birth asphyxia are treated by Shasthya Shebika (SS) (health worker) and if serious, referred to referral facilities. For low birth weight babies, mothers are taught how to provide *kangaroo* mother care, or care to maintain body temperature and feeding.

3.1.2.3 Provision of Health Services

The Manoshi programme employs various strategies to deliver health services in urban slums. During household visit in each month, the SS does follow up the target population, assess their needs and accordingly, mark their needs or achievement in family cards. Immediate postnatal care is provided in the birthing huts. One of the significant features of the programme is to make frequent visits to mothers and newborn babies during postnatal period. To maintain better maternal and neonatal health status, postnatal care of mothers and newborn babies, especially to low birth weight (LBW), and asphyxiated babies have been provided through additional home visits by SSs in every alternate day from 0-28 days. The data shows that in Bangladesh 30% to 33% babies are born with low birth weight, thus, one third of births need frequent home visit by Community Health Workers (CHW,s) (*MANOSHI Working, 2009*). In this project, the LBW babies are followed up by SS every alternate day for the first four weeks and then, twice a week till their weight increases to 5 kg. When neonatal infections are identified, the SS provide treatment and follow them up in alternate days till recovery. The Shasthay Kormi (SK) visits mother and newborn four times during postpartum period within 3 days and on 7th, 21st and 28th days. The SKs also ensure intake of iron folic acid by distributing tablets during the first visit and checking on status on each visit. The SK provides treatment for puerperal infections with antibiotics and if failed, refers to health facilities with backup referral. During visits, they provide health education on essential newborn care and exclusive breastfeeding for neonates and nutrition, hygiene and

family planning for mothers. The SS do community based treatment of neonatal sepsis and birth asphyxia and refer to hospitals if needed.

3.1.2.4 Referral of Complications

The BRAC facilitates developing referral linkages between community and health facilities. BRAC staffs with the assistance of community health workers and other stakeholders select referral facilities depending on accessibility from slums and availability of required services in a special meeting. In this meeting, a specific committee is formed consisting of four members, namely, BRAC Manager and three members from different community networks. They are responsible for selection and communication with the referral facilities. Two to three referral centers, preferably Urban Public Health Complex (UPHC)-run maternity clinic, NGO clinic, Government health facilities (Medical College Hospital, District Hospital, Upgraded Thana Health Complex and Mother and Child Welfare Centers), or private hospital are selected. A close partnership is built up with health providers to assure quality of care for emergency obstetric cases and neonatal and child health complications. At the very outset, the committees under the leadership of BRAC manager meet with the manager of the referral facilities to discuss about referral of emergency cases from urban slums. A memorandum of understanding is developed with the referral centres where commitment to provide emergency quality services to referred cases at fixed low prices are made.

3.2 Study Design

Both quantitative and qualitative methods were used in this study. For data collection, I have contacted with the director, Manoshi project, BRAC and visited their three delivery centers (DC), which are located at that slum area. Each DC has a program organizer. With the permission of programme organizer, I have collected the register log books of the centers which are organized by month and year. After that I have selected the respondents from those register books through lottery.

3.3 Study Population and Sampling

To know the practices and ritual during pregnancy and delivery, respondents were selected randomly from the WRA, who gave birth within five years preceding the survey for the quantitative analysis. For the qualitative analysis respondents were selected purposively from influential family members (mother/mother in laws, sister/in laws) and health care providers from formal sector (SBA, SS, SK and PO).

3.4 Sampling Method

A list of women of reproductive age (15-49), who have delivered babies at institutions and homes, was prepared using the register book of the delivery centers. Thereafter, 136 respondents were selected, 71 from institutional delivery and 65 from home delivery, through lottery for quantitative analysis. For qualitative analysis respondents were selected purposively from influential family members (mother/mother in laws, sister/in laws), some women in the reproductive ages (WRA) and health care providers. In this regard, 18 respondents for in-depth-interview, 3 WRAs for one group discussion and 4 Skilled Birth Attendants for another group discussion were selected.

3.5 Data Collection Technique and Process

In this research work data has been collected from September 01, 2011 to April 30, 2012. In quantitative part, face to face interview was conducted using structured questionnaires. And in qualitative part, in depth interview was conducted through semi structured questionnaire and group discussion through check list. The respondents were contacted by the Shasthya Shebika (SS) of BRAC's Manoshi Programme in Korail slum for interview and other participatory exercises. The purpose of data collection was clarified to the women in advance so that they feel free and at ease to participate. On the whole respondents of the study were found to be well responsive and cooperative.

3.6 Processing of Data and Analyzing Tools

Qualitative data analysis was developed from the study themes and subsequently data compilation was done under different themes. For example, the different themes are: experiences to health care seeking behavior during delivery period with respect to

complication, family structure, number of living children, mother's age at birth and barriers in accessing formal delivery care services.

For the analysis of quantitative data both bivariate and multivariate techniques were used. For the analysis of data both the independent and dependent variables were categorical. For example, independent variables were categorized as follows: (i) mother's age with three categories (≤ 19 , 20-29, 30+), (ii) mother's education with three categories (no education, primary education, secondary and above), (iii) mother's occupation with two categories (house wife and paid work), (iv) husband's education with three categories (no education, primary education, secondary and above), (v) husband's occupation with two categories ((a) rickshaw puller, day labor, garments' worker, rickshaw mechanic, service holders, business, small trader and (b) others), (vi) place of delivery for the previous last child with three categories (home, delivery center and hospital, and home delivery at village), (vii) birth attendant to the previous last child with two categories ((a) relative, mother/mother in laws, sister/in laws, TBA and (b) SBA and doctor), (viii) number of living children with three categories (one, two, three and more), (ix) family structure with two categories (nuclear and extended), and (x) duration of migration with three categories (less than four years, five to nine years and more than ten years). While the dependent variable place of delivery is categorized as (home and village = 0, delivery center and hospital = 1).

3.7 Ethical Consideration

This study had ethical approval from the Director of Manoshi project, BRAC. In each case, a written consent form was read to the prospective participant (majority being illiterate) in the presence of a witness, with clarifications made where needed. After being sure that the participant understood the contents well, and that she had no obligation to participate, and that even if she refused, it won't affect her receiving BRAC inputs in any way, only then she was included in this study. The individuals were identified by code numbers and all data were used for solely research purpose. Confidentiality of the data was maintained throughout the relevant project periods and analysis. Furthermore, throughout the data collection due respect was paid to people's values, attitudes and beliefs.

3.8 Limitation

There are several limitations of the study. In this research work Bengali format of questionnaire was used to collect data then it was translated into English, so there was a chance to lose the exact meaning of information. Moreover, the sample size was limited, consisting of one hundred and sixty which was divided into two categories (eighty from institutional delivery and eighty from home delivery) but among these only one hundred and thirty six WRA's (seventy one from institutional delivery and sixty five from home delivery) was covered for survey because of time and cost constrain. It cannot be assumed that the results can be generalized to all of Dhaka's nearly 5000 Slums. Though the qualitative data provide more comprehensive information than the quantitative data but still only skim the surface of how participants really perceive their situation and their relation to the skilled birth attendant. There is also possibility of biased answering although utmost care has been taken for questioning as objectively as possible.

On the other side, during the collection of qualitative data through in-depth interview and group discussion slum evacuation was going on. That is why, respondents were reluctant to speak anything which will be written on the prescribed paper format (semi-structure questionnaire and check list) or recorded (in tape). In this situation author collected the data in a note book and after the field survey data was entered in to computer.

CHAPTER FOUR: FINDINGS DISCUSSION AND ANALYSIS

4.1 Results of the Bivariate Analysis

The results of both bivariate and multivariate analyses are presented in this chapter. The distribution of currently married women by predisposing factors (mother's age at birth, mother's education, number of children ever born, previous birth giving place, prior experience with complication, family structure and migration status) affecting health care seeking behavior, particularly with respect to birth delivery - whether this was assisted by traditional birth attendants or skilled birth attendants and place of delivery- at home or at a delivery center, are presented in table 4.1.

Characteristics of Study Population by Predisposing Factors

Characteristics presented in table 4.1 show that, more than half of currently married women were between age 20 to 29 years, 18% and 19% were respectively in age < 19 and above the age of 30 years. Forty one percent of currently married women had never been to school, but more than one-third of respondents attended primary school and 24% had some secondary and higher education. The table also shows that, more than two-third of women was engaged in domestic work or housewives and 32% engaged in any paid work. But conversely, more men were currently jobless but were previously engaged in some kind of paid jobs, mostly as rickshaw pullers, daily laborers, boatmen and garment workers, accounting 63%. The rest were currently engaged in service, business, and small trading. In this study it is also observed that education level of women is lower than that of their husbands. For example, 38% of husbands compared to 41% of their spouses were illiterates. Almost the same proportion (35%) of women and their husbands have completed primary education. But proportionately more husbands (27%) than their spouses (24%) received secondary and higher level of education.

4.1 Biosocial and economic characteristics of currently married women of reproductive age at Korail Slum

Characteristics	Number	Percent
Woman's age		
<19	24	18
20-29	86	63
30 +	26	19
Woman's education		
No education	56	41
Primary	47	35
Secondary and above	33	24
Woman's occupation		
House wife	92	68
Paid work	44	32
Husband's education		
No education	51	38
Primary	48	35
Secondary and above	37	27
Husband's occupation		
No occupation*, rickshaw puller, day labor, garments worker, rickshaw mechanic	86	63
Service, business, small trader and others	50	37
No of living children		
1	60	44
2	47	35
3 and more	29	21
Family Structure		
Nuclear	68	50
Extended	68	50
Place of delivery for last child		
Home	45	33
Delivery centers and hospital	71	52
Home delivery at village	20	15
Birth attendant for last child		
Relative, mother/mother in laws, sister/in laws, TBA	61	45
SBA, doctor	75	55
Place of delivery for the previous last child		
Home	47	62
Home delivery at village	22	29
Delivery center and hospital	7	9
Birth attendant for the previous last child		
Relative, mother/mother in laws, sister/in laws, TBA	66	87
SBA, doctor	10	13
Duration of migration		
Less than 4 years	48	35
5 to 9 years	72	53
More than 10 years	16	12

Note: Analysis was based on 136 currently married women. But in cases it may be fewer than 136 cases due to non-response to any of the predictors (independent variables) used in this analysis

*No occupation: i.e. during the time of survey they were jobless but previously they worked as rickshaw pullers, day laborers, garment workers, rickshaw mechanic and so on.

Another finding is that, among the currently married women 44% had one child, 35% had two while 21% had three and more children. Half of currently married women belonged to nuclear family and rest of them were from extended families. It is also found that, for the previous last child, 62% deliveries took place at home, 29% at the village and only 9% at the delivery centers and hospitals. Eighty seven percent births were assisted by relatives/mother/mother in laws, sister/sister-in-laws and TBAs and only 13% births were assisted by medically trained persons, either doctors or nurses or SBAs. In contrast, for the last child 52% deliveries were at the center and hospital and one-third took place at home and only 15% were at the village. In addition, in terms of delivery assistance, three-fifth of the deliveries were assisted by medically trained persons, either doctors or nurses, SBAs and about two-fifth of last births were assisted by relatives, mother/mother in laws, sister/sister-in-laws and TBAs . Thus a substantial improvement was observed in the health care seeking behavior during delivery period for the last child than for previous last child.

In case of migration status, around one-third of the respondents had been living in this slum for less than four years, about half of them were in between five to nine years and 12% of them were for more than 10 years.

Distribution of Health Seeking Behavior by Predisposing Factors

Table: 4.2 presents the percentage distribution of place of births by predisposing factors such as women's age, education, number of children ever born, place of previous pregnancy termination, family structure, migration status and other socio-economic factors like women's occupation, husband's education and occupation. Women's age is one of the important factors related to the selection of place of delivery. This is also supported by data. Younger women are more likely to deliver their babies at delivery centers/hospitals than older women. Older women are more likely to deliver at home. This is expected because the younger women are likely to be more educated and therefore more informed of the importance of institutional delivery than the older women who are likely to be more inclined to traditional values and practices like home delivery. This is also supported by data (see Table 4.2). Fifty percent of adolescent women (aged less than 19 years) and 57% young adult women (20-29 years) delivered their babies at delivery centers and hospitals compared to only 38% of elderly women aged 30 years and above. Conversely, proportionately more of the elderly

women delivered at home compared to younger women. 58% of older women compared to (25% to 28%) of younger women.

As expected women's level of education is positively related to institutional delivery. It is found that, as the level of education rises, delivery in health facilities also rises. For instance, 48% of children of mothers with no education were delivered at a health facility, compared to that of 61% of children of mothers who have completed secondary or higher education. Same pattern has also been observed in case of husband's education. Delivery at health facilities rises with husband's education. Educated husbands tend to chose health facilities more frequently for their wives delivery than their counterparts with little or no education. For example, 35% of husbands with no formal education, compared to 68% of husbands who completed secondary or higher education chose health facilities for their wives' delivery.

Moreover, there is a positive association between giving birth in a health facility and mother's occupation. It is found that, 59% of mothers who were engaged in any paid work compared to 49% mothers who were engaged in household work delivered their babies at a health facility. Consistent with this finding it is also found women who are engaged in household works are four times more likely to deliver at their village home than those who are engaged in paid jobs. These findings are also in the expected direction because mothers who are engaged in paid jobs are more likely to be educated and better exposed to the need for institutional delivery than their home maker counterparts.

Husband's engaged in white collar occupations (service, business and small traders) are more likely to chose institutional delivery compared to those who were engaged in blue collar occupations (rickshaw puller, day labor, garment worker and rickshaw mechanic) because the blue collar workers were likely to be less educated than the white collar workers. Data tend to support this postulated hypothesis. For example, 47% of blue collar workers compared to 62% white collar workers chose institutional delivery.

Table: 4.2 Percent distribution of live births by place of delivery, according to background characteristics

Characteristics	Place of delivery			Total cases
	Home	Delivery centers/hospitals	Home delivery at the village	
Women age				
<19	6(25%)	12(50%)	6(25%)	24 (100%)
20-29	24(28%)	49(57%)	13(15%)	86(100%)
30 +	15(58%)	10(38%)	1(4%)	26(100%)
Woman's education				
No education	22(39%)	27(48%)	7(13%)	56(100%)
Primary	15(32%)	24(51%)	8(17%)	47(100%)
Secondary and above	8(24%)	20(61%)	5(15%)	33(100%)
Woman's occupation				
House wife	29(32%)	45(49%)	18(20%)	92(100%)
Paid work	16(36%)	26(59%)	2(5%)	44(100%)
Husband's education				
No education	25(49%)	18(35%)	8(16%)	51(100%)
Primary	12(25%)	28(58%)	8(17%)	48(100%)
Secondary and above	8(22%)	25(68%)	4(11%)	37(100%)
Husband's occupation				
No occupation, rickshaw puller, day labor, Garments worker, Rickshaw mechanic	35(41%)	40(47%)	11(13%)	86(100%)
Service, business, small trader and others	10(20%)	31(62%)	9(18%)	50(100%)
Place of delivery of the previous last child				
Home	23(49%)	24(51%)		47(100%)
Delivery center and hospital	2(29%)	5(71%)		7(100%)
Home delivery at village	7(32%)	7(32%)	8(36%)	22(100%)
Birth attendant of the previous last child				
Relative, mother/mother in laws, sister/in laws, TBA	27(41%)	31(47%)	8(12%)	66(100%)
SBA, doctor	5(50%)	5(50%)		10(100%)
No of living children				
1	13(22%)	35(58%)	12(20%)	60(100%)
2	17(36%)	25(53%)	5(11%)	47(100%)
3 and more	15(52%)	11(38%)	3(10%)	29(100%)
Family Structure				
Nuclear	11(16%)	47(69%)	10(15%)	68(100%)
Extended	34(50%)	24(35%)	10(15%)	68(100%)
Duration of migration				
Less than 4 years	11(23%)	25(52%)	12(25%)	48(100%)
5 to 9 years	30(42%)	35(49%)	7(10%)	72(100%)
More than 10 years	4(25%)	11(69%)	1(6%)	16(100%)

Note: Analysis was based on 136 currently married women. But in cases it may be fewer than 136 cases due to non-response to any of the predictors (independent variables) used in this analysis

The type of delivery place during delivery varies with number of living children they have. Women who have 1 or 2 living children are more likely to have institutional delivery rather than those who have ≥ 3 children. This may be due to the fact that women with 1 or 2 living children are likely to be more in the young age and educated than women with 3 or more children. Therefore, the former are more likely to deliver at institution than the later. This is also supported by data. For instance, 58% of one-parity women had their delivery at institution; on the other hand, 38% of three or more parity women had their delivery at institution.

Place of delivery of the previous last child has effect on the place of delivery for the last child. This is expected as past experience guides present behavior. It is shown that, the women who have chosen institution for their previous last child delivery did not go to village home for their last delivery. This is also true for use of birth attendant for the previous last child, those who have taken assistance from SBA or doctor they did not prefer to take assistance from relative, mother/mother in laws, sister/in laws and TBA.

Family structure is found to be an influential factor for determining the place of delivery. Women who are from nuclear family prefer institutional delivery than women from extended family. For instance, 69% of women from nuclear family, compared to only 35% of women from extended family have had their deliveries at a health facility.

Data shows no strong relationship between migration status and place of delivery. Women who have been living in slums for less than 5 years are equally likely to deliver their babies at a health facility/hospital as their counterparts who have been living in slums over five years, except for those who have been living in slums over 10 years, who overwhelmingly delivered their babies at health facilities. But no reliability can be reposed in this finding as this is based on fewer cases of women.

From the above findings it can be said that women who are from nuclear family, with secondary and above education, engaged in paid work, first time pregnant and those who used delivery center for their previous last child tend to deliver more at health facilities than their counterparts who were from joint family with less than secondary education, home makers and had home delivery for the previous last child.

4.2 Results of the Multivariate Analysis

We have so far assessed the relationship between independent (i.e., pre-disposing) and dependent (i.e., place of delivery) variables at bivariate level, which failed to assess relative net effect of each of the independent variables on dependent variable. This is proposed to be done here using a binary logistic regression model and findings are presented in Table: 4.3. The dependent Variable is "Place of delivery" (Institution=1, Home=0). The Categorical variables included in the regression were complication during delivery period, family structure, women's age, occupation and education, husband's occupation and number of living children.

Table: 4.3 Binary logistic regression estimates of the effect of demographic and socio-economic characteristics on use of institution based delivery among respondents of korail slum, Dhaka, Bangladesh

Variables	Beta (Co-efficient)	Relative risk
Woman's Age		
≥30®	-2.159+	0.115
≤ 19	-0.717	0.488
20-29		
Woman's occupation		
House wife ®		
Paid work	0.753	2.123
Woman's education		
illiterate ®		
literate	1.171+	3.225
Husband's occupation		
Rickshaw puller, Labor, Garments worker®		
Service, business, small trader	0.95	2.586
No of living children		
3 and more®		
1	1.843+	6.315
2	1.824+	6.199
Complication during pregnancy		
No®		
Yes	5.815***	335.222
Family structure		
Nuclear®		
Extended	-3.509***	0.03
Constant	-1.164	0.312
Level of significance : <0.001***, <0.01**, <0.05* & <0.10 +		

Source: Author's compilation based on statistical analysis

The regression analysis shows that respondents who had faced complications during pregnancy period were 5 times more likely to seek institutional delivery compared to those who did not face any complication. This finding is also statistically significant (co-efficient 5.815). As hypothesized earlier, the mothers belonging to extended families were significantly (co-efficient -3.509) less likely to seek institutional delivery compared to mothers who were from nuclear families. As expected, the educated mothers were significantly (co-efficient 1.171) more likely to use institution based facilities during delivery period than those of non- educated mothers. As hypothesized earlier, women engaged in paid work were found to be more inclined for institutional delivery that those engaged in household works. But this difference was not found to be statistically significant. As expected regression results also show husbands engaged in white collar occupations are more inclined to have their wives deliver their babies at a health facility compared to their blue collar counterparts. However this was not found to be statistically significant. Contrary to expectations, regression results show that younger mothers, particularly adolescent mothers are found to be statistically less inclined to have their babies delivered at health care facility or delivery center compared to their older sisters. However, mothers with one or two children were significantly more likely to seek institutional delivery than those who had three or more children.

4.3 Result of Qualitative Study

Results of the quantitative analyses (bivariate and multivariate) were discussed in the previous section. In the quantitative analysis the factors that found significantly influence the decision making of the urban slum women to go to delivery center during delivery period has been identified. Among them, the most important factor is slum women's experience of delivery complication during previous pregnancies followed by other factors like family structure, women education mother's age at birth, previous birth giving place and number of living child.

However, while the quantitative analysis provide the magnitude of the effect of a variable, will not provide causal mechanism or relationship between variables. The qualitative analyses complement the results of the quantitative analysis. In an integration of both qualitative and quantitative research analysis will be enriched magnitude of the effect of a variable. Thus in the present section the findings of the quantitative analysis on the basis of qualitative answer

will be explained. While taking qualitative survey (In-depth interview and group discussion) besides the main variable some other concepts related with the barriers in accessing formal delivery care services also come in the spot light. Besides, the results of the quantitative analysis will be highlighted those concepts.

4.3.1 Experiences with Complication and Health Care Seeking Behavior during Delivery Period

An experience with complication is very significant issue to determine where to have the delivery. If the mother experienced any kind of pregnancy related complication, she herself made the prior contacts with the SS/SK of Manoshi or the dai (traditional birth attendant). They are aware that complication at any stage may be life threatening that is why they feel it is better to maintain communication with knowledgeable person who knows regarding delivery process. In that case they prefer the staff of delivery center. They always try to carry on the instruction of SK and PO.

Statement of a respondent (woman)

I had experienced edema during the time of five month of pregnancy. One day I had vaginal bleeding. Immediately I informed it to my sister-in-law (Brother's wife). My sister-in-law shared the incident with my mother. Then my mother went to SS house and told her the details. After hearing the total condition SS discussed with SK over phone. SK came at home and examined the total condition and advised to refer to DMC.

(In-depth interview, age 19, education till five classes, housewife)

At the time of doing study it has been observed due to lack of nutrition knowledge they were suffering from anemia, being patient of anemia it is high risk to be a mother. As postpartum hemorrhage is a common incident, so for anemia patient it became life threatening. That type of mother did not take any risk. During the visit by the SS they were informed to have delivery at delivery center, as in case of emergency they can refer to the DMC. By considering this situation they prefer to DC for delivery.

4.3.2 Family Structure and Health Care Seeking Behavior during Delivery Period

In the previous chapter it is seen that, family structure has a significant role on health care seeking behavior. Now in this section it will be discussed how this mechanism works. In this study family structure has been divided into two categories; one is nuclear and another is extended family. In nuclear family the family members are husband and wife with their unmarried children. Husband and wife both is the decision maker. In Korail it has been found that, the women who lived in nuclear family have made prior contacts with SS and SK. On the other hand from the mother of extended family they were very much depends upon in-laws decision. Mother-in-laws think it is unnecessary to go to DC for delivery. They first try themselves or by the TBA once they failed than they think about going to DC. This indicates that, they give first priority to have the delivery at home. For performing delivery at home, they collect blade, thread, and towel and arrange boiled water and sometimes call the local dai or they themselves try to perform the delivery.

Statement of a woman

My cousin is a SS of Manoshi. She informed the SK regarding my pregnancy. SK visited regularly to my house and convinced me to make delivery at the delivery center. One day I felt labour pain around 8 am. I called my cousin. Around 8:55 we reached DC and delivered a boy child.

(Age 17, education up to class five and garments worker, from nuclear family)

4.3.3 Number of Living Children and Health Care Seeking Behavior during Delivery

Number of parity is also a factor to understand their health care seeking behavior. For the first time conceive they become more worried about their delivery. In that situation they usually prefer the DC. However who have experienced more than one normal delivery at home feel it is unnecessary to go to DC for delivery. They also mentioned that, there is no special facility (medical doctor and surgery facilities) so why would she go to delivery center. It is better to remain at home whatever happens that happen at the presence of her relatives. They believe everything is the wish of Almighty Allah; human being has no control over their fate.

Statement of a respondent

I was worried because it was my first pregnancy. I shared my anxiety with my sister-in-law (Brother's wife) and she told me that it is very risky to have the baby in that early age, even I could die. She also suggested to have the delivery at DC. At 7 months, I went to the clinic to examine the position of the baby with my husband. After 7 days of EDD I felt labor pain and after two hours it became severe. My father, mother and husband took me to the delivery center.

(In-depth interview, age 16, education till class 6, housewife)

4.3.4 Mother's Age at Birth and Health Care Seeking Behavior during Delivery Period

Mother age at birth is also an important factor to determine the view regarding delivery care. Mothers under 19 years and in case of first time pregnancy usually become very worried. They feel a woman may develop complication at any time, so they should deliver their child at a delivery center.

Statement of a mother

When I realized that I am pregnant, I talked with the SK. SK told me details about the probable complications that might happen at the delivery period and what to do. I got courage and took the mobile no of SS and SK. SK also assured that the delivery is totally free of cost. I shared with my husband about every detail that I had learned from DC. Few months later I felt labour pain and it started at about 10 am. After noon it became severe. Local dia came to help me but I told my husband to make a phone call to SK. My husband phoned to SK, she came to home and accompanied me to go to DC. At 2:30 PM I delivered a girl child normally.

(In-depth interview, age 19, studied up to class five, house wife)

Therefore, in this qualitative part it is seen the mechanism how, when and why they seek care from a delivery center during the time of termination of pregnancy. Now it will be described why women do not want to go to any institution for delivery.

4.3.5 Barriers in Accessing Formal Delivery Care Services

Though DC is situated at their door steps but all women are not taking this service. Some women claim it is unnecessary to go to a delivery center because they have no surgery

facilities. They are not able to manage the adverse situation. We can arrange the same facilities at home. We can call the same Dai to come at home who perform the delivery at delivery center. In case of any complication DC staff just refers to the DMC.

Other factor which is also come out through this study for not to go at delivery center that there is no provision to inject saline. Usual practice at home dai use saline to stimulate labour so that delivery can perform quickly though there is a risk to use the saline that the chances of vaginal tears but the dai did not maintain those rules. Dai claim that they do not want to use saline at home delivery but they are bound because of guardian pressure.

Statement of SBA

Usually there is no provision to use saline at delivery center. Moreover, normally we do not want to use it but when we perform delivery at home then we have to use it. As we reside at that community so when they come to DC they create pressure to use injection and saline. But we did not do that. And that is why they feel reluctant to come at DC.

(SBA of delivery center, group discussion)

In this slum area, girls strictly maintain purdah. They also think going outside during pregnancy period is a matter of shame not only that their male guardian do not let them go outside. If they want to go to delivery center the mother-in-laws shows denial attitude. They mean that, everything goes right at home delivery.

Statement of a woman

I am a mother of one child. I reside beside the delivery center. My first delivery happened at home by local dai who is now working at delivery center. I came to know there is no surgical facility at DC. Even at DC they did not push any injection or any kind of medicine.

Sometimes they send the patient some other hospital unnecessarily. Thus, I did not feel the necessary to go to delivery center as there is no special arrangement like other private clinic has. We can arrange the same facilities at home. We can call the same Dai to come at home who perform the delivery at delivery center.

(In-depth interview Age19, house wife, from extended family)

Another main issue is they have a misconception regarding DC. It is the place of surgery but how they manage the surgery without any medical staff. In addition they said we often see people go to delivery center but back from DMC. They thought DC act as an agent of DMC. Another main point is, they have a fear, and if they go to the delivery center they perform some operation by which they lose their reproduction capacity.

Statement of a respondent

I am a mother of three children. I heard, at delivery center they have done surgery though there is no doctor or surgical instrument. I am afraid how they can do the surgery without proper arrangements. I have seen some people went to delivery center and came back from DMC crying, because she delivered a dead child. So what is the benefit if the child is dead? It is better to go to DMC directly, and not waste time at DC. In addition, at delivery center the kind of operation they perform can reduce reproductive capacity of the mother.

(In-depth interview, age 27, house wife, illiterate)

From these case studies it becomes clear why the slum women are reluctant to have delivery at institution.

CHAPTER FIVE: CONCLUSION

Health seeking behavior during delivery time has significant impact on women's lives as well as their children's lives in future. Various factors are accountable for health seeking behavior of women during delivery time. The way of responding to practice of institutional delivery or seeking care from various sources birth attendants like TBA, mother or other relatives depend on their bio-social and economic characteristic. Mother's age at birth, mother's level of education, number of children ever born, previous birth giving place, prior experience with complication, family structure, migration status are the common determinants in this issue.

This study is aimed to explore the health seeking behavior during delivery time among the women of urban slums, where institutional delivery facilities are available at their door steps, which adds an extra dimension to the understanding of the matter.

However, the study found that, the delivery centers were attractive to the slum residents. Residents prefer delivery centers because of its free services and for its referral linkages. On the other hand, some people do not rely on the delivery centers because the centers cannot provide medical support. The respondent's perception is that those arrangements for vaccination and full time services by a female medical doctor may increase the use rates of delivery centers. Beside this, if service providers inform mothers and fathers about what kind of services are provided at the center, it would motivate the respondents to use the delivery centers more often. Good performance of health service providers, SS and SK can influence the use of delivery centers and play significant role to decrease the maternal and neonatal mortality.

CHAPTER SIX: RECOMMENDATIONS

There is a need to increase knowledge and awareness among women and families that pregnancy is a normal event but can sometimes be precarious for the woman and the baby. It is important to make them aware regarding danger signs during delivery, requirement of using health services (ANC, delivery care) and also for birth preparation to plan for clean and safe delivery. Considering community demand and the key findings, the programme should consider the following issues.

Lots of malpractices are still found to prevail in this community regarding child birth. To reduce the negative outcome of this type of traditional practices, substantial strategies have to be taken and implemented through government organization and other nongovernment organizations like Manoshi.

Community people's choice should be given priority to improve the health services condition of the concerned community by ensuring proper training to all TBAs, who are available in this slum to make them skilled birth attendant. Moreover, to improve the existing service at DC, a paramedic should be involved.

To make sure the quality of service, continuous supervision is needed. As the mobility rate is high within this community for that reason proper documentation is required to know the use rate of delivery centers and to ensure a comprehensive care of the mother a strong relation between health providers and the family members is mandatory. Because, the mother alone cannot ensure good care of her pregnancy period without the family members support.

Awareness should be build regarding the necessity of institutional delivery. Therefore, information should be disseminated not to the mothers only but also to other family members, because the mother alone cannot make the decision where to go to delivery without family support.

In addition to that, the importance of institutional delivery needs to be focused at multiple levels; community, family, and individual. Community level interventions could include mass media campaigns (through radio, TV, and/or drama), promotion of role models from the community and formation of community groups. Family and individual level interventions could include group discussions and personal counseling. These messages should be

reinforced during home based ANC visits, especially with influential family members. As well, the messages should be disseminated in women's groups, husbands' groups, and other community groups with community leaders. The programme could also use ritual events for increasing interaction with the community and ensuring context specific appropriate messages.

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