



## **CHAPTER 7**

#### 7.1 Introduction

Reproductive health problems are an important public health issue in most of the developing countries. The International Conference on Population and Development held in Cairo in September 1994 stressed the importance of women's health, particularly of reproductive problems. India accounts for over a one-fifth of maternal and about a fourth of under-five deaths in the world (UNICEF 2010 & 2012). Promotion of maternal and child health has been one of the most important objectives of the Family Welfare Programme in India. The National Population Policy has also stressed on lowering down the maternal mortality rate and to improve maternal health in general. Despite significant changes in the health system, maternal and child mortality levels remain unacceptably high which continue to hinder national potential to improve life expectancy at a faster rate. The maternal and child healthcare (MCH) outcomes in India are poorer than many developing nations with similar or even lower income per head.

Several studies conducted in India have documented the high prevalence of self-reported reproductive as well as obstetric health problems among women of reproductive age (Bang et al. 1989; Bhatia & Cleland, 1995; Singh et al. 1995). India has made extensive efforts to reduce maternal mortality and to increase access to reproductive health care and in some regions much progress has been achieved.

However, the progress made has been uneven and inequitable, and many women still lack access to maternal and reproductive health care. In India, as in many other settings, social structures prevent women from having access to maternal and reproductive health care. These structures, defined by the WHO as 'social and structural determinants of health', vary between different contexts and influence access to and availability of care differently in different societies (Sanneving et al. 2013). A study conducted by the Indian Statistical Institute, Kolkata clearly pointed out that women in metro cities are also at higher risk of reproductive health problems and there is a need to investigate these issues in detail (Sadhu et al. 2000).

Another study by Sogarwal et al. (2006) has found that the prevalence of reproductive health problems among women is significantly high in Mumbai as compared to the other metros in India. In spite of a high prevalence of reproductive health problems, a large proportion of women in all these cities does not seek any advice or treatment. There is a differential in the utilization of health care facilities and health care provision among rich and poor in the city. The lower socio-economic section were not able to utilize the good and modern medical facilities because of higher cost. National Urban Health Mission as a sub-mission of National Health Mission has emerged to address the health care needs of the rapidly growing urban population, with a focus on the disadvantageous group of the urban area. Therefore, there is a need for a systematic scientific research on the health complications among women from lower socio-economic strata. In the context, the research work has done to access the reproductive health

complications among women from the lower socio-economic strata of Mumbai. The study also tries to bring out the prevalence of obstetric health complications among women, pregnancy outcome and health of the new-born in Mumbai.

Specifically, the main objectives of the study are to see the type of reproductive health complications among women (during pregnancy, delivery and after delivery). Second is to study women's care-seeking behaviour, dietary pattern, and knowledge about complications during pregnancy and childbirth and also to see the level of birth preparedness and continuum of care received during pregnancy. Another objective of the study is to examine the prevalence of chronic diseases (diabetes, hypertension, heart disease, anaemia) developed during pregnancy. However, this particular objective also aims to see the association between chronic disease status of mother and its impact on the health of the new born. This study also attempted to examine the association between health complications of women and new-born and receiving care during hospitalization and patient's satisfaction during hospitalization.

Primary data has collected for the study on the reproductive health complications among women belongs to lower socio-economic strata in Mumbai. A tertiary hospital of Mumbai which is situated nearby the slum areas was purposively selected for the study and information on health complications have collected by interviewing inpatients that came for delivery during the survey period.

The survey has done during the month of January to May 2013 and used statistical methods to show the women's self-reported obstetric health complications during

pregnancy, delivery and after delivery as well as the health status of the new born. To show the variance in health complications among women and new-born a total of 37 cases has been followed-up for one and half month from the first date of interview. The selection of follow-up cases was based on the severity of complications found among women and new-born. For statistical analysis to fulfil the research objectives, various indicators have developed. Indicators such as, having any complications during pregnancy, delivery and after delivery, received ANC during pregnancy, post-natal check-ups, dietary pattern, birth preparedness, continuum of care, new-born danger signs, new-born health complications, essential new-born care, immunization received etc. has been included. Summary of the findings of the study are given below according to the order of chapters.

## **7.2 Summary and Findings**

### **7.2.1 Prevalence of obstetric health complications and ANC received among women**

The obstetrics complications have become a major health issue resulting in poor maternal and perinatal outcome. The prevalence of pregnancy, delivery and post-delivery complications among women has been included in this study. Obstetric complications have found very much common among women those who are from the lower socio-economic strata of Mumbai. However, excessive vomiting is mostly reported by younger women. Although pregnancy and delivery, complications has found higher among younger women while older women mostly report post-delivery complication. Most of the women who have had any

specific pregnancy and delivery complications are in their first parity. One of the studies by Bhatia et al. (1995) found that vaginal discharge is more common in lower socio-economic class. But in our study reporting of complication like vaginal discharge is not much common among women compared to other reported obstetric complications. The prevalence of any complication during pregnancy and delivery is found high among those women who had received more than three antenatal check-ups. This may be because women with more health complications needed more health check-ups and treatment during pregnancy as well as during delivery. Another probable explanation is that women suffering from severe complications opted for health-care services. It is a common behaviour among women, that when complications become more serious or life-threatening than only they visit a health-care facility or consult a health professional. A study on in the state of Assam has also found a similar type of results that complications were more reported by women who received full antenatal check-ups than those who did not (Gogoi et al. 2014). The study also observed that women from lower socio-economic strata has reported of having severe obstetric complications at different phases of child birth were opt for an institutional delivery.

However, educational status of women has found as one of the most important determinants of obstetric health complications. Which may be due to higher educated women were more aware of the probable health complications during the reproductive period. As the attainment of education clears various

misconceptions about many illnesses and encourages preventive practices. These facts have also been observed in a study conducted in India (Parasher et al. 2006).

### **7.2.2 Dietary pattern, preparedness of birth and continuum of care among women**

The dietary pattern, birth preparedness and continuum of care during pregnancy, as well as hospital registration for delivery, have been included in the study. It has found that most of the women had registered at the surveyed hospital as it provides a good facility and cost of hospitalization is low. Most of them reported of receiving antenatal check-ups at the same hospital where they had registered.

Most of the women changed their food habits during pregnancy, and dietary intake during pregnancy has the potential to influence birth outcomes. Women were asked their consumption pattern during pregnancy by food items such as consume more frequently and in larger amounts. Food items like vegetables, pulses, fruits, meat, egg, milk, rice and chapatti in regular basis were included. In our study, we have found that women were followed a moderate diet routine during pregnancy i.e. the mentioned food items were not consumed regularly. Similarly, it has also observed that women who had followed a good diet routine reported less complications compared to those had a moderate and poor diet routine during pregnancy.

More than three-fifth of the total women had birth preparedness for their most recent birth and mostly prepared with decision for receiving ANC, place of ANC and institutional delivery. However, very less number of women were financially

prepared for delivery as they did not save money for this purpose. Saving of money is important especially for women belonging to poor household economic status (Pradhan et al. 2002). Saving money is also needed for women from low socio-economic strata as they need money for delivery (better health facility and health care provider), medicine and child health care. But in our study arranging for transport did not emerge as an important issue.

Finding shows that women in the younger and older age cohort were less in number for any birth preparedness while these age groups were considered to be the crucial time for women that may prone to have more complications during pregnancy and delivery. Likewise, the educational level has shown a positive association with birth preparedness among women in lower socio-economic strata. Because a woman who is educated can make informed decisions about her health compared to her illiterate counterpart (Mpembeni et al. 2007). Birth preparedness helps to reduce the delays that occur when women experience obstetric complications, such as recognizing the complication and deciding to seek care, reaching a facility where skilled care from qualified providers at the health facility. The study reveals that women with any complication during pregnancy were well-prepared for birth compared to those without any complication. Similarly having any complication during delivery is found higher among those were less-prepared for birth. Another study by Moron et al. (2006) found that planning to save money for child birth was associated with using a skilled provider at delivery. Currently, safe motherhood programmes are scaling up birth preparedness and complication readiness interventions to address the first two of



the three delays of birth preparedness, although there are few studies that have looked at the effects of birth preparedness and complication readiness on the use of skilled providers at delivery.

In this study, birth preparedness during pregnancy, different components of antenatal care like blood pressure measured, blood test, ultrasound test, received TT injections etc. and birth weight of the new born were included to measure the level of continuum of care. Result shows that, the good continuum of care has found among the higher educated women and also reported having less obstetric complications during pregnancy, delivery and post-natal period compared to those had received moderate and poor care during pregnancy.

### **7.2.3 Prevalence of chronic diseases among women and its association with health of women and new-born**

Chronic disease has emerged as one of the most serious public health problem while disease prevalence during pregnancy had a greater risk of premature death and long-term illness. However, it is an important determinant of a poor birth outcome like preterm delivery, low birth weight, premature delivery, stillbirths and perinatal morbidity and mortality. One of the studies by Kersten et al. 2014, found that every fifth pregnant woman suffers from at least one chronic disease, and higher prevalence rates have reported in the literature. In an American study analysing women of child bearing age, 26.6% of the participants had one of the more prevalent chronic diseases. We found that about half of the interviewed women (50.3%) had developed any chronic disease during the pregnancy.

Chronic disease prevalence during pregnancy is mostly reported by younger and older women. However, severe anaemia is found as the most common chronic disease during pregnancy. It has also observed that severe anaemia is not only prevalent among pregnant women but before getting pregnant too which continues to be a major public health problem worldwide. It has estimated that more than one-third of the world's women are anaemic; the vast majority of this burden occurs in developing countries (WHO, 1992; Dangour et al. 2001). Meanwhile, it is generally agreed that the prevalence of malaria is higher among pregnant women than other groups, and that can lead to abortion, intrauterine foetal death, premature delivery and even maternal death (Mvondo et al. 1992). The study result shows that malaria prevalent is found among most of the women but not at the time of pregnancy.

Chronic ill status during pregnancy and its association with the health of the new-born has been shown and found a positive correlation between mother's ill health status and adverse health outcome of new-born. A study by Kersten et al. in 2014 has also found that chronic disease among mother during pregnancy has a significant influence on pregnancy outcome. Chronic disease like severe anaemia during pregnancy may lead to adverse pregnancy outcome. It has also come out that baby born with low birth weight, small than the average size and gestational month of delivery is less than seven month by those women who had developed any chronic disease during her pregnancy.

#### **7.2.4 Women and new-born health complications and care during hospitalization**

The first few weeks after delivery is the most difficult time for any women and new-born. For women many changes and adjustments to be made physically, emotionally and socially and many challenges to be faced by her. So, this chapter is particularly dealing with the complications developed by women and the newborn after delivery and the care received by them. Result highlights that about 70 percent of the new-born has developed any complication after birth. The complications were sometimes may be very serious for the health of the new-born. Any type of health complications have mostly found among those with low weight at birth; small size at birth, and those were born before completion of the full gestational age. Although most of them received treatment for their health complications during hospitalization. On the other hand newborn danger signs are very much crucial to the health of the child and early identification of newborn danger signs by caregivers with prompt and appropriate referral serves as backbone of the programs aiming at reduction in neonatal mortality (Bhutta et al. 2005). In the study, poor sucking of the breast has found as the most common danger sign among new-born.

Studies on a few urban slums have indicated that despite the availability of public hospitals, late recognition of neonatal illnesses and delay in seeking medical help were responsible for increased neonatal mortality (Fernandez et al. 2003). We found that adverse birth outcome among new-born such as low weight at birth (LBW), small size at birth and small for gestational age babies received more care.

Earlier studies also supports that LBW infants are at high risk of death, and a package of simple neonatal care interventions provided mostly at home may not improve the outcomes of LBW infants in the absence of advanced medical care (Waldemar et al. 2010). But it has observed that the treatment received for any health complications among new-born is decreases after discharged from hospital and with the age of the child.

It has found that with the decreasing in post-delivery complications, receiving post-natal check-ups has also decreased simultaneously. It shows a negative impact of treatment received by the women once discharged from the hospital. Only half of the total women received any post-natal check-up for their complications. The post-natal check-ups that have received by women were not from the same hospital, but they also visit private clinics or from another hospital that is nearby to them. Regarding satisfaction during hospitalization we found a mix response from the respondents. But most of them agree that the hospital provides a good service at a low cost. As the studied women belong to the lower socio-economic strata and could not access the good facilities provided by the private hospitals.

### **7.3 Conclusion**

Obstetric health complications is one of the major health issues that resulting in poor maternal and perinatal outcome. However, it results in large number of babies with low birth weight (LBW) and premature delivery. So, it is very much important to know about the obstetric health complications among women and its

consequences on adverse birth outcomes. Hence, our study tries to examine the obstetric health complications among women and health of the new-born. Study shows that women from lower socio-economic strata in Mumbai prefer for institutional delivery at government hospital as the poor resource setting (water and sanitation) within the household. Similarly, the low financial condition is the another most common reason for women to come for delivery at the government hospital from the catchment areas. As the targeted population are from the lower socio-economic strata and cannot afford the services that have been provided by the private hospitals because of higher medical cost. However, it has observed that there is a high prevalence of chronic disease and obstetric morbidity among women, and because of that this women may choose hospital for delivery.

As most of the pregnancy has ended with a live birth, but there are few women who had delivered in C-section. Very few of them were reported of delivered stillbirth and those were with any pregnancy complications. Meanwhile, a large proportion of women has obstetric complications and most of them were in their first parity. One of the interesting results has found that women receiving full ANC during pregnancy reported more of having any obstetric health complications. This implies that women received more ANC and visited health care providers those were suffering from more complications that those who does not have. Similarly, dietary pattern during pregnancy has shown a positive association with experiencing any obstetric health complications among women. It has also observed that women who had followed a good diet routine reported

less complications compared to those had a moderate and poor diet routine during pregnancy.

Birth preparedness and Continuum of care has a significant association with obstetric health complications. Having any complication during delivery is found higher among those women were less-prepared for birth. While, birth preparedness is the advanced planning and preparation for delivery and to improve maternal health outcomes. Birth preparedness also includes preparing/planning for accessing post-partum care during the first week after delivery and six weeks after delivery. However, continuum of care guides and tracks patient over time through a comprehensive array of health services spanning all levels of intensity of care and also helps to reduce the burden of maternal and neonatal deaths.

Although, women of reproductive age group with poor diet is the common characteristics that may lead to chronic disease during pregnancy. It is also the leading cause of adverse birth outcome. A significant association has found between mother's chronic ill health status and adverse health outcome of new-born. But at the same it has observed that the treatment received for any health complications among women and new-born is decreases after discharged from hospital.

#### **7.4 Policy Recommendation**

Chronic disease prevalence during pregnancy has found as the most important determinant of poor birth outcome such as, preterm delivery, low birth weight,

premature delivery, stillbirths and child with any health complications. So early detection and treatment for chronic diseases are very much essential to reduce the disease burden and to improve birth outcome. In most of the cases, it has been seen that if the women have any chronic disease during pregnancy opt for institutional delivery and the health of the new-born is found very much poor among them. Therefore, women must be encouraged to make use of the services and go to health providers not only when they feel sick. But counselling to follow a good and healthy dietary routine, birth preparedness, proper examination for any chronic disease prevalence during pregnancy should also give to the pregnant women. Similarly, proper supply of IFA tablet to the pregnant women is also equally important to combat with the iron deficiency during pregnancy. But they go through all the check-ups during pregnancy. Follow up of patients is equally important to know the health status and also to give awareness regarding the consequences related to chronic disease prevalence mainly during pregnancy. Women who remain uneducated about chronic ill health will never be able to make wise decisions in seeking the services that has been provided.

Similarly anemia test during pregnancy should be compulsory for all women as this is an essential care. However, follow-up test is all ANC is required for seeing improvement in Haemoglobin level which is one of the most common complication among women mainly among adolescent girls. So, antenatal care presents an opportunity for early detection and treatment of anemia, and it is important that the health department consider testing pregnant women. Obstetricians will have to recommend a better and more affordable formulation for

iron supplementation. Additionally, culturally appropriate nutritional counselling should be provided during antenatal care. It is also necessary that the health provider should give proper counselling on health complications to the women and on the health of new-born. Similarly, lack of advanced medical facilities and unavailability of senior doctors in the hospital during delivery is also a matter of concern.

### **7.5 Limitation of the study**

There are few limitations in the study that the study did not collect information on any household characteristics. As all the interviewed women were from low socio-economic strata and occupation of wife and husband have given an idea about the economic condition of women. So, the household consumer durables were not included. Although, the causes and reasons for low socio-economic strata cannot be included as it is a hospital based study.