Chapter 2

Review of Literature

The purpose of literature review was to identify studies that had examined an association between antenatal care, delivery care and postnatal care and various socio-economic and demographic factors. Research studies were searched through review articles, peer reviewed journals, bibliographies of reviewed articles, university libraries, electronic databases, reports, documents, reports and studies pertaining to maternal healthcare.

Equity in health implies that fair opportunity should be given to all to realize the full potential and health differentials should be bought to lowest possible level (Whitehead M, 1990). The other issue which is related to equity is accessibility. Access has been defined as availability of health facilities and personnel, various costs of using these facilities and personnel, actual use of health services, use of health services relative to some measure of apparent need of the population of these services (Anderson and Aday, 1978). As, rights based approach in relation to health include human dignity, attention to the needs and rights of vulnerable groups and ensuring that health systems are made accessible to all and there should be no discrimination on the basis of sex and gender roles (WHO, 2000). But right to health and right to health care differ from each other as the former talks of it as a basic right barring the personal behavior but the latter defines it as access to services which may or may not result in a positive health outcome (Aday and Anderson, 1981). The access to health care plays a key role as utilization of health services leads to better health outcomes.

Inequity is multidimensional but it is majorly observed in three groups namely people living below poverty line, marginalized groups (SC/ST’s) and women (India Health Report, 2003).
2.1 Defining Equity: In Access and in Outcomes

Equity is a value-based concept and though equity and equality sound synonymous but conceptually they are different. Equity refers to fairness, unjustness and impartiality whereas; Equality focuses on equal sharing and treating everyone on the same level (Braveman & Gruskin, 2003).

Equal opportunities in accessing healthcare can potentially result in equity in health outcomes but the two are not co-terminus. Equity of access can be achieved if services are distributed on the basis of need (Aday and Aderson, 1981) whereas Equity in health outcomes can be achieved if the proper channel for provision is made from entry into the system to provision of health personnel (Anderson and Aday, 1978).

The question is how to assess the notion of justice when it comes to social inequalities in health. Fabienne (2001) has distinguished justice on the basis of two approaches namely direct and indirect. According to direct approach, justice is defined only with respect to the health outcomes whereas indirect approach links health equity with social inequality. Sen (2002) argues that health equity is a broad and multidimensional aspect as it not only is concerned about the distribution aspect of healthcare but also achievement of health and one’s capability to achieve good health.

A predominant view among economists is that utilization is a good indicator of equity (Culyar, Doorslaer and Wagstaff 1992; Cuyler and Wagstaff, 1993). If we consider healthcare utilization as a measure of equity then we have to interpret it in terms of receipt of services and if we can also consider it in terms of opportunity for access.

Issues of equity and access have been discussed a lot over past decade. There are diverging views about equity in the context of the health care. Some argue that equity is about ensuring that health care provision corresponds to need, regardless of socioeconomic status, race or gender. Others suggest that equity is about ensuring minimum standards of healthcare for all. Some of the researchers have argued that equity is essential for eliminating gender-based discrimination and injustice in the provision of health care. Sen, Ostlin and George (2007) have focused on fairness
issues and acknowledging the differences. They argue Gender equity in health calls for different treatment among women and men that is sensitive to the differential needs necessitated by their biological differences and which leads to rectification of socially determined discrimination.

A lot of health economists have opined as to how equity can be assessed. For utilization, equity is interpreted as equal treatment for equal need, or unequal, but equitable treatment for unequal need (Wagstaff, Paci and Doorslaer, 1991).

Proponents of using access as a measure of equity criticize the utilization based approach on the basis that it does not consider people’s preferences and that the assessment of equity may be biased based on the assumption that people with the same need ought to consume the same amount of care (Mooney 2009). Instead they suggest that access is best interpreted as equality in opportunity to use health services which may lead to different patterns of use for equal need, and define access to mean opportunity to use as opposed to use (Mooney et al. 1992).

The underlying tenet of our research is to assess equity in terms of allocation as per need i.e. persons with equal needs treated the same, those with different needs treated differently and we are considering utilization of maternal healthcare services as an indicator of accessibility of healthcare.

To enhance the equity of access (Quayyum et al., 2013) conducted a study in Rural Bangladesh which looked at the impact of the impact of intervention on utilization of maternal healthcare services. They found out that there was a significant increase in the utilization of trained attendants for home delivery in the intervention areas compared to the comparison areas and the change was found to be pro-poor. Also, utilization of postnatal care services was also found to be pro-poor. Utilization of ANC services provided by medically trained provider did not improve in the intervention area. However, where the intervention had a positive effect on utilization it also seemed to have had a positive effect on equity.
A study by (Goland, Hoa, & Malqvist, 2012) on Vietnam suggests that large inequities exist between different segments of population though the country has succeeded in reducing maternal mortality in the last decades. Women from poor households were at three fold risk of not taking any antenatal care and six times more likely not to deliver with skilled birth attendance. The link between ethnicity and non utilization of maternal healthcare services was even stronger within non-poor group.

A study on turkey has investigated household, social and individual level determinants for utilization of maternal healthcare services and found that educational attainment, parity level, health insurance coverage, ethnicity, household wealth and geographic region are statistically significant factors that affect the use of health care services (Celik, Hotchkiss, 2000)

A study based on inequities in maternal healthcare utilization in Gujarat shows that structural determinants such as caste, wealth and education are all associated with access to maternal healthcare services. Also, there is a significant relationship between being poor and access to less utilization of ANC services independent of caste or place of residence (Saxena et al., 2013)

A study conducted by Gupta et al. (2007) in Chandigarh, India suggests that there exists a large difference among various population groups with respect to reproductive and child health service coverage. For achieving MDG’s in all population groups, special interventions should be undertaken in priority basis to bridge the gap.

A study based at Kenya (Magadi et al., 2000) found that even if healthcare services are easily accessible socio-cultural factors at community level determine the utilization of services

Few studies suggest that the effects of inadequate access to services on utilization of services are greater than the effects of socio-economic factors (Sawhney, 1993) and that as access to public health facilities improve, the effects of socioeconomic factors on utilization of services become less important (Govindasamy and Ramesh, 1997). Other studies argue that lack of motivation is the major factor in non-utilization of
services and that provision of services alone cannot overcome lack of motivation or demand for services (Ray et al., 1984).

Determinants or correlates of utilization can emanate from demand or supply side.

2.2 Demand side Determinants

Demand side determinants are individual and household level factors that affect the utilization of services.

The theoretical framework by Thaddeus and Maine (1994) states that distance, cost and quality alone cannot determine the decision making process. There are socio economic factors such as women’s education and wealth status, distance to health centre, availability of staff and equipment in health centre which are crucial factors behind maternal morbidity and mortality.

The household socio-economic status and mother’s education were the most important factors associated with the use of Antenatal Care and skilled attendance at delivery. The community level variables were only significant for Antenatal Care and skilled attendance at delivery but not for Post Natal Care in Madhya Pradesh. (Jat, Ng, & Sebastian, 2011)

Women’s age at child birth appears to be a related factor to the use of maternal healthcare services. In a study based on India (Bhatia and Cleland, 1995) found that mothers younger than 18 were less likely to use antenatal services compared to women above 18 years of age. (Magadi et al., 2007) found that in Nigeria, teenagers have three times lower odds of delivery care use compared to women aged between 35 and 49 years and two times lower odds of delivery care use compared to women aged between 20 and 34 years. While some studies such as (Chakraborty et al., 2003) suggests that women’s age can also indicate women’s knowledge of healthcare services and can have a positive effect on utilization of maternal healthcare services

A study based on north-eastern states of India suggests that for better maternal health care utilization, policies should be directed towards the vulnerable group i.e. women representing the SC/ST background because high percentage of population belongs to
scheduled tribes in the north-eastern states. The result showed that education of both
the woman and her husband plays a vital role in utilization of maternal health care
services. Other variables that can have significant impact on availing of the maternal
health care services are media, autonomy enjoyed by women and their occupational
status (Chakrabarti and Chaudhuri, 2007).

A study based on Uttar Pradesh suggests that women’s autonomy plays an equally
important role in maternal health care utilization as women’s educational status. The
analyses show that women with greater freedom of movement are more likely to use
safe delivery care and obtain higher levels of antenatal care. So, policies directed
towards maternal healthcare utilization should not only focus on education of women
but also on improving their status in family by giving them control over finances,
freedom of movement and decision making power (Bloom, Wypij, & Dasgupta,
2001).

A study based of rural India based on National Family Health Survey-2 (1998-1999)
has tried to investigate whether women's autonomy (measured in the 3 dimensions of
decision-making autonomy, permission to go out, and financial autonomy) was
associated with the use of adequate prenatal, delivery and postnatal care. The finding
suggests that women's autonomy was associated with greater use of maternal
healthcare services, particularly prenatal and postnatal care. Also, the effect of
women's autonomy on maternal healthcare care use varied according to the region of
India examined (North, East and South) such that it was most consistently associated
with maternal healthcare use in South India, which also had the highest level of self-
reported women’s autonomy (Mistry, Galal & Lu, 2009).

The dimension of women’s autonomy that influences their health seeking behavior
has similarly been measured by direct sets of indicators. Freedom of movement and
women’s decision – making power are the factors that have been considered as
measures of female autonomy related to maternal health care utilization in Indian
context (Bhatia and Cleland, 1995). Research in South Asia by (Jejeebhoy, 2000) has
shown the importance of taking account of contextual factors influencing autonomy
when studying the effects of women’s empowerment.
The utilization of maternal healthcare services also depends on geographical and topographical characteristics of a state. The number of women utilizing antenatal services is less in Uttarakhand which is a hilly area in comparison to Jharkhand and Chhattisgarh (Pandey, Roy, Sahu and Acharya, 2004). According to the study (Bhattacharya and Tandon, 1991), mother’s educational level has a positive impact on utilization of maternal healthcare services. Visit of a health worker has a significant positive impact on the utilization of full antenatal and postnatal care services among women (Sunil et al., 2006).

Bhatia and Cleland (1995) suggested that for improving maternal health services women should have adequate knowledge of health-care seeking behavior during the reproductive process and its determinants.

It is well recognized that mother’s education has a positive impact on health care utilization. In a study based in Peru by (Elo, 1992) using DHS data, found quantitatively important and statistically significant effect of mother’s education on the use of prenatal care and delivery assistance. In another study (Becker et al., 1993) found mother’s education to be most consistent and important determinant of the use of child and maternal health services. it is argued that women who are educated are more aware of health problems, know more about the availability of health care services and use this information more effectively to achieve better health status. Mother’s education may also act as a proxy variable of a number of background variables representing women’s higher socio-economic status, thus enabling her to seek proper medical care whenever she perceives it necessary.

According to (Caldwell, 1981), education gives women opportunities for paid work, which contributes to greater household income and in turn affects the use of healthcare services.

Another study was conducted to determine the effect of demographic, economic and program factors on the utilization of maternal health services in rural areas of Jhang district, Pakistan. It suggests parity and education had the largest impact on institutional delivery. Women were substantially less likely to deliver at a health facility after their first birth; women with primary or higher education were
much more likely to have an institutional delivery. Age, autonomy, household wealth, proximity to a health facility and exposure to mass media were also important factors of institutional delivery (Agha & Carton, 2011).

A study has shown that birth order has a positive effect on utilization of maternal healthcare services in Kerala than in any other state (Navaneetham & Dharmalingam, 2002). In Tanzania, a study found that women with parity of two or more had 69 percent lower odds of delivering at a health facility than women of parity one (Rockers et al., 2009)

Not only women’s education, a study shows that husband’s education has a significant influence on the adequacy of maternal healthcare utilization in India. Maternal care usage was measured by a composite index based on responses of both antenatal and delivery care and categorized from poor to excellent and husband’s education was found to be linked with excellent maternal healthcare use (Sunil et al., 2006).

A study by (Kavitha and Audinarayan, 1997) showed that caste is an important determinant in utilization of antenatal care services. In India, caste plays a major role in governing the status of household in a society (Yadav, 2002)

A study conducted in rural North India suggests that there is a caste divide as majority of traditional birth attendants called Dias belong to the lower caste and trained birth attendants such as nurses or doctors belong to upper caste. For providing maternal healthcare services both the caste groups have to be in contact with each other, upper caste health providers prefer to cater to upper caste women and lower caste women choose to utilize services offered by traditional birth attendants for the sake of avoiding embarrassment of caste discrimination (Saroha, Altarac & Sibley, 2008).

Pallikadavath et al. (2004) found that Muslim women utilized these services more than others whereas, there was low utilization of services among scheduled castes and scheduled tribes. A study observed that Muslim women give birth outside medical facilities more often than Hindu women. But nothing has clearly emerged in India on utilization of healthcare services based on religion.
Women’s involvement in gainful employment not only increased their financial ability to use quality health services but also gave them autonomy to participate in decision making process regarding healthcare issues in the household (Chowdhary et al., 2007). Another study found that women who have a job that paid them in cash were more likely to utilize healthcare services during their pregnancy (Chakraborty et al., 2003). On the contrary, a study based in rural Tamil Nadu has shown that working women use these services less than non working women as they cannot afford to sacrifice a day’s wage.

Other factors such as economic status of women of the household also affect the utilization of antenatal care services and delivery care (Pandey et al., 2002). A study was conducted on Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh using National Family Health Survey (1998-99) found that higher social and economic status is associated with increased utilization of antenatal care including blood pressure measurement, blood test and urine test, but the obstetric physical examination depends on education of women and their husbands. Women from poor and uneducated backgrounds with at least one child are less likely to receive antenatal care services (Pallikadavath et al., 2004)

Srivastava and Das (2005) have studied utilization by Using RCH, Round I, phase II involving four states namely Gujarat, Tamil Nadu, Punjab and Orissa. The study shows that incidence of safe delivery is much higher in the southern and western states (Tamil Nadu and Gujarat) as compared with northern and eastern states (Punjab and Orissa). The study reveals some of the factors governing utilization are education of women, education of husband, standard of living, pregnancy related problems and delivery related complications.

There is consensus among studies regarding the positive impact of antenatal care attendance on delivery care use. it has been suggested that one of the advantages of antenatal care is to influence women to seek care for child birth because antenatal care can raise awareness about the importance of care at delivery . Further antenatal care makes women more familiar with health facilities which enables them to seek care more efficiently for child birth (Abou – Zahr & Wardlaw , 2003).
Using the data from six African countries, Stephenson and colleagues (2006) demonstrated that women who had at least four antenatal visits were most likely to give birth at a health facility. According to them, counseling during pregnancy during antenatal care, increased comfort with the health system or greater confidence in health facility may explain the observed association. Likewise, research conducted in Rwanda reveals that the number of antenatal visits is an important determinant of delivery use. In fact, women who did not attend antenatal care were less likely to use health care services for child birth compared to women who had taken antenatal care (Chandrashekhar et al., 2010). Magadi and colleagues show that women who did not receive antenatal care or who did not have adequate antenatal care were less likely to delivery at a health facility. They argue that antenatal care is an important entry point for delivery care. In India, (Bloom et al. 1999) have argued that adequacy of antenatal care was positively associated with trained assistance at delivery and delivery at a medical facility.

2.3 Supply Side Determinants

Utilization of healthcare services is possible only if healthcare services are available for access. Healthcare facilities in terms of proximity and providers of healthcare play an important role in utilization of services.

A study based on Andhra Pradesh, Karnataka, Kerala and Tamil Nadu found that variations in use of services were primarily related to availability and access (Navaneetham & Dharmalingam, 2002).

Access to health facility has shown associations with the utilization of services. Improved access to health services had a strong impact on the use of prenatal care and delivery assistance by a trained health provider in Nepal (Hotchkiss, 2001)

Utilization of healthcare services also depends on access to health facility. However, (Bhattacharya and Tandon, 1991) found out that even if rural women are staying near health centre still they do not utilize healthcare services. But women who utilize antenatal care services are more likely to deliver at health institutions and attended by
health professional than those who did not utilized these services (Pandey et al., 2002).

Women who lived near a village health worker/nurse were more likely to receive adequate and early antenatal care visits than women without a village health worker (Nielsen et al., 2001). Also, study by (Griffith & Stephenson, 2001) suggested that availability of healthcare workers in the local community encouraged women to use ANC services. The opening time of the service was important for urban slum resident women in Bangladesh (Chowdhury et al., 2003), whereas long waiting time was also a barrier to utilization.

A study on Kenya by (Magadi et al., 2000) has found that distance to health facilities has an impact on the use and frequency of antenatal care. Women living 10 kilometers away from a health facility were less likely to utilize antenatal care than those living within a 10 kilometer distance from health facility. The availability of health services at the community level has a positive influence on the utilization of maternal services.

In Tanzania, a study based on proximity to health facility highlighted the importance of healthcare accessibility in explaining variations in utilization of maternal healthcare services at the aggregate level. The study suggests that women living far from the health facility have 62 percent lower odds of delivering in health facility than women living near to the health facility (Rockers, et al, 2009).

A study based on National Family Health Survey (1998-99) investigates four south Indian states (Andhra Pradesh, Karnataka, Kerala and Tamil Nadu) and four north Indian states (Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh). The study found significant socio-economic differences in the quality of care in both North and South India but more in north India and there is a positive association between quality of care and utilization of antenatal care services (Rani, Bonu, & Harvey, 2008).

A study by (Mistry, Gala & Lu, 2009) found that development of village level factors i.e. by investing in rural economic development, primary health care access and basic infrastructure such as electrification and paved roads leads to better utilization of maternal healthcare services.
A Study by Prinja et al. (2012) based in three districts of Haryana namely Ambala, Hissar and Narnaul suggests that referral transport service has the impact on increasing institutional deliveries. However, there is a need of adequate supply of basic and emergency obstetric care at hospitals and health centres. A study on rural India has also shown that visit of health worker during pregnancy has a positive effect on utilization of maternal healthcare services (Sunil et al., 2006). Another study based on Nepal has shown that services are utilized twice as high if health facility is in the community and also if there are regular visits by health workers (Acharya and Cleland, 2000).

Inequity and better utilization of maternal healthcare services can be better addressed through female participation in the political process. In India, one of the biggest achievements of 1990s has been the constitutional amendment of 1990 which states 1/3rd reservation of seats for women in the Panchayat. As per (PRIA, 2001) 8, 00,000 women have been elected at different levels of Panchayati Raj institutions (PRIs). The amendment has been applauded as it has given a platform to women where they have voice in political and economic decision making at the village level (Singh, 1994). These amendments have given women the authority to consider and participate in the process of formulating policy and in the implementation of development programmes that impact the daily life of people (PRIA, 2002).

Political participation by women can affect things both from the supply and the demand side. Therefore, decentralization or political participation of women becomes a mediating variable.

A study conducted by (Sathe et al., 2013) in Sangli District of Maharashtra in India found that gender of Sarpanch is not a significant causal factor in explaining the availability of public services on average, but the availability of basic services is higher in villages with female sarpanch in comparison to male sarpanch.

Visaria and Bhat (2011) have examined the extent of decentralization in rural areas of Gujarat. They found that in district Kutch some PRI women members were actively participating as member of VHSC in ensuring immunization and organizing reproductive health camps.
But on the contrary, Bryld (2001) has argued that as women lack autonomy so there is a need to increase awareness among people for decentralization to work and unless reservation is backed by education, networking and training it will not succeed in reaching the neediest.

A study conducted by Jain (1996) described that most of the women are elected to the PRIs because of the status of their husbands, fathers or sons and they often act as proxies for men in the councils.

Chand (1997) states that women were able to get 1/3rd representation in the PRIs but there has been no real change in the pattern of women leadership as the old social, cultural, economic and political structures have remained unchanged. According to his study, the role of women members in Panchayati Raj is controlled by the male members of their families, particularly by their husbands. The study attributes this behavior to the lack of education, political and social awareness among women on the one hand and traditional feudal and male dominated social context of rural Haryana on the other.

Shanta (1999) carried out a comparative study of women leadership in the PRIs of states namely Haryana, Kerala and Tamil Nadu. Like other states, most of the women representatives in the PRIs of Haryana belong to the middle and upper middle age groups. But unlike other states women leaders of Haryana are mostly married, having lower level of education and are mostly from joint family set up.

Singh and Bhan (2001) discussed the provisions of constitution especially 73rd amendment act, 1992 which provides reservation to women in PRIs. The author further highlighted that in Haryana, the majority of women do not participate in the functioning of Panchayat Raj. The major obstacles in women’s full participation in politics are universal social attitude that has valued women principally as mothers and wives. Most of the rural women are illiterate and they are not aware about their rights and how to exercise them.

Singh (2001) states that though women in Haryana have been able to get representation in village panchayat but it has remained formal on account of proxy
system. They are generally represented by male members of their families. Singh has suggested that the women officials of the Department of Development and Panchayat, Women and Child Development should encourage the women representatives to participate in the meetings themselves. The proxy system should be ended; otherwise the very purpose of reservation would be defeated.

Panwar (2001) argues that women sarpanches in Haryana have not played an effective role in the PRIs because of their total absorption in domestic work. Only those who were relatively free from this obligation have been able to function effectively. According to Panwar, it is not the education alone that determines the role of women; along with it political awakening is a precondition for their participatory role in democracy. The support of Mahila Mandals and other organizations is important in this context. The women sarpanches who get the chance of outside exposure could perform better. Most of the women sarpanches are not aware of their powers, duties and schemes of the government. Therefore, there is a need for imparting the requisite training to them. The NGOs can also play an important role in this context.

Singh (2002) discovered that only women of middle, upper middle and old age groups were allowed to contest elections. The younger women are not permitted because of the conservative culture of Haryana. He also found out that 2/3rd of the women members belong to joint families. Almost all the women members were married. It appears that either unmarried women are not allowed to contest or they get married before attaining the eligible age for contesting elections. Few of them have attained higher levels of education. None of them had previous in the PRIs or other organization. He concluded that unless the base is changed, superstructure changes would be ineffective.

This literature review has highlighted the importance of individual, household and community level factors that affect the use of maternal healthcare services. And also, utilization rates can be improved at the village level if women participate in the political process.