1.1 Introduction

Maternal health has emerged as global priority because of not only due to huge gap in the status of mother’s well being between the rich and the poor countries but also broadening gap overtime has contributed in most of maternal health care outcomes. In all the World Population Conferences the subject of maternal care was a pivotal point and was advocated as reproductive right of the women. However, it got focussed attention only in 2000 when Millennium Development Goals were declared. Due to a well defined framework of monitoring of performance of each country, there has been probably faster improvement in most of the countries. Globally, the number of women dying due to complications during pregnancy and childbirth has decreased by 34% from an estimated 546,000 in 1990 to 358,000 in 2008, latest report on maternal mortality, released by the UN organization. Though India has seen a dramatic fall in Maternal Mortality Ratio (MMR) by 59% between 1990 and 2008, the country is still home to the highest number of women dying during childbirth across the world.

Taking the human rights approach, a very basic right for women is that of having access to effective health care that ameliorate their risk of any complication and death when they become pregnant, that protects them and prevents them from developing any disease in the first place, and that helps them to maintain their own health as well. Without the benefits that access to health services can bring, by
improving health, other development related outcomes may be compromised. But for millions of mothers around the globe, even across a relatively rich region, access is inadequate for the needs of some groups or may even be unattainable for all practical purposes. Moreover, those in the greatest need often have the poorest access to care – a striking example of unfairness (Hart, 1971). There are disparities in utilization of maternal health care even within states, districts, and cities. Rural women, the urban poor, and women in geographically remote areas report poorer utilization of maternal healthcare services than those in urban areas. The incidence of morbidity is significantly higher in rural than in urban areas, with rates often two or three times as high (DLHS, 2007-08).

In this context, accessibility of public health facilities for quality care become more important as it reflects health system progress, equity towards those who cannot afford it. Historically, improving access to public health services has been a primary strategy for increasing health-service utilization in developing countries. Several studies have stressed the importance of access to health services as a factor affecting the utilization of services (Kumar et al., 1997; Das et al., 2001). Though various health systems co-exist, the public sector plays the pivotal role in working towards the greater accessibility and increasing health equality. Moreover, access to health care not only includes physical proximity and travel time to services, but also involves economic and social access to the services. Most governments declare that their citizens should enjoy universal and equitable access to good quality care. With increasing debate on social determinant of health, WHO (2000) identifies health systems as site for action to promote equity and accessibility of health services and its utilization.
The importance of health care access to health care equity is well established (Gulliford, 2002). It can be defined as the ‘degree of fit’ between clients/patients and health care provision (Penchasky and Thomas, 1981), although often seen as purely supply-side phenomenon, there are always supply-side and demand-side influence over access. Thus emphasizing the combined influence of supply and demand side factors over the extent of access achieved by any health system, the three commonly identified dimensions of access are (Gulliford, 2002; Donabedian, 1973):

**Availability** (sometimes referred to as physical access) refers to whether or not the appropriate health services are in the right place and at the right time.

**Affordability** (sometimes referred to as financial access) refers to the “degree of fit” between the cost of health care and individuals’ and households’ ability to manage these costs and their impacts on household livelihoods.

**Acceptability** (sometimes referred to as “cultural” access) is the social and cultural distance between health care systems and their users, encompassing the fit between lay and professional health beliefs, patient-provider engagement and dialogue and the influence of health care organizational arrangements on patient responses to services. Acceptability also influences opportunities for effective diagnosis and treatment, patient adherence with advice or treatment, and self-reported health status (Gilson and Schneider, 2010).

These access dimensions affect who uses and benefits from health care, and, together with the *quality* of service provision, the impact of health care on health equity. Empirical evidence demonstrates that availability and affordability commonly influence
whether and which population groups use health care more, as well as when groups seek care in an illness episode, with implications for illness severity and treatment effectiveness (Dahlgren and Whitehead, 2007). The need for the health sector to collaborate with and influence other sectors for better health outcomes has posed a challenge to all concerned individuals/groups/institutions. The question to be raised here is whether this can be done through a focus on the health providers and policy makers, or would the focus be on the users. Whereas both sides are important and need to be brought into play, the question remains whether community is to influence the providers and policy makers or vice-versa (Wassan, 2007).

1.2 Role of Health System in Health Care Promotion and Equitable Distribution of Maternal Health Care Services

Lash (2000) suggests that in order to understand the complexities of how people explore their relationship to particular decisions or actions, how and why they weigh up options as they do, we might think of reflexive communities. Reflexive communities reflect the particular ways of behaving, thinking and reaching decisions of individuals or groups, which in turn reflect the social construction of their position in wider society at a particular place and time. Acts within these reflexive communities do not rely solely on the processing of information or the construction and acquisition of knowledge. They reflect something far more complex, emotional, social and practical.

Taking health system as a social determinant, health systems’ elements interact with community and its people in number of ways, these include: being treated with dignity, being attended to promptly, having autonomy, having personal information kept confidential, having a choice of health care provider, having the health care provider
communicate with you in a way you understand, having access to social support during care, and having amenities in the health care environment that are of an acceptable standard and good referral system. Thus, equitable access through health system can be acknowledge only by addressing the questions relating to differential exposure and vulnerability of socially disadvantaged and marginalized population groups and social action taken by the system to empower them. Across settings, women and other socially marginalized groups often experience health care as demeaning and exclusionary, as a result of poor quality interpersonal care. There is also a little evidence that these problems increase the probability of worse outcomes, particularly in relation to chronic care, lower self-reported health status and the denial of dignity and patients’ rights (Gilson et al., 2007).

“Having a health worker with midwifery skills present at childbirth, backed-up by transport in case emergency referral is required, is perhaps the most critical intervention for making motherhood safer.”(Starrs, 1997). This is arguably one of the most influential statements to emerge from the 1997 Technical Consultation on Safe Motherhood. Translated into the action message “ensure skilled attendance at delivery”, it forms the basis of a key proxy indicator for monitoring global progress in reducing maternal mortality (AbouZahr & Wardlaw, 2003). Appropriate delivery care is crucial for both maternal and child health and increasing skilled attendance at birth is a central goal of the safe motherhood and child survival movements. Skilled attendance at delivery is another important indicator in monitoring progress towards Millennium Development Goal 5 to reduce the maternal mortality ratio by three quarters between 1990 and 2015.
Studies advocate that the likelihood of utilization of maternal care is excellent among births to mothers who were visited by a health worker during pregnancy, they also emphasized the importance of and need for subgroup population analysis to delineate the inequity in maternal care (Sunil et al., 2005). In order to promote maternal health care utilization through cash incentives have also been highlighted in recent years, With the increased coverage of in facility delivery and the increased workloads for health personnel, the national and state governments are supposed to intensify efforts to maintain and improve the quality of obstetric care available to women in health facilities to achieve their ultimate goal of reducing the numbers of neonatal and maternal deaths (Lim, 2010).

1.3 Health System in India

India has a mixed system of health care where most of the preventive and promotive care is provided by the government health services and majority of curative care is taken care through private medical practitioners and institutions. The government health system consists of teaching hospitals, district hospitals, Community Health Centres (CHCs), Primary Health Centres (PHCs) and Health Sub Centres (HSCs) which are distributed usually on a population norm throughout the country. Services at the government facilities are mostly free or at a very low charge. Private health services are also available in most parts of the country; they include tertiary care, secondary care and primary care through qualified and unqualified practitioners. The level of care, the quality in terms of qualification and the density of practitioners usually decline as one goes away from metropolitan areas to rural hinterlands (Mavalankar, 1996). Health is a subject of State government according to the Indian Constitution and thus State is
responsible for the delivery of health services. India’s health care system is characterized by a mixed ownership pattern practicing different systems of medicine. There are two major groups in the provision of health care services in the country. These are the public health sector and the private health sector. Recent national surveys have shown that in both rural and urban areas, dependence on private sector for outpatient and inpatient services has substantially increased over the last decade. The private health sector is the dominant sector in the health care system of the country.

1.3.1 The Public Sector- Indian Rural Health Care System

Growth of public health sector, in the country, over the last two-three decades have helped to improve coverage with the implementation of different tiers of public health care starting from village level Health Sub Centres (HSCs), Primary Health Centres (PHCs), Community Health Centres (CHCs) to other higher level facilities, distributed usually on a population norm throughout the country. The health care infrastructure in rural areas has been developed as a three tier.

Each CHC is supposed to cover 100,000 population and provide multi-functional services with 30 inpatient beds. Each CHC is to provide mainly specialized curative services in gynaecology, paediatrics, surgery and medicine. The staffing pattern of the CHC contains 4 specialists, 3 general duty medical officers, 1 x-ray technician, 1 extension educator, 1 ophthalmic assistant, 1 statistical assistant, 16 ward staff and 10 supporting staff and a minimal cohort of specialists medical staff (IPHS for CHCs, 2006).
The PHC norm is that it needs to cover 30,000 rural population (in case of tribal areas 20,000 population). Each PHC is supposed to have a minimum of 6 beds. An average health team at the PHC consists of 2 to 3 physicians known as medical officers, including the Medical Officer as overall in-charge of the PHC and one physician trained in an Indian system of medicine, one male health assistant, and one female health assistant, both of whom are multipurpose personnel providing the link between health workers at the HSC /village level and the physicians, a Block extension educator, a number of female health workers/Auxiliary Nurse Midwives (ANMs) giving nursing care to out-patients and admitted patients, a laboratory technician, a computer/statistician, driver for the transport, store keeper and other ancillary staff and attendants. The PHC is the referral point for emergency cases and complications (IPHS for PHCs, 2006).

Each PHC has a network of HSCs each serving a population of 5,000 (3,000 population in case of tribal areas). It is manned by a team of one male multipurpose health worker and one female multipurpose health worker. The female health worker/ANM provides maternal and child health and family planning services to women. Maternal health services comprise registration of women for ante-natal and postnatal care, distribution of iron and folic acid tablets to pregnant women, advice on diet, immunization of infants and children with BCG, polio, tetanus toxoid, diphtheria and anti-typhoid vaccines, distribution of vitamin A and treatment of minor ailments. Family planning includes motivation, contraception advice and follow-up. The male health worker is expected to prepare and maintain register of vital events and of eligible couples, undertake family planning advice and motivation and the distribution of
condoms among men, take house to house malaria surveillance, immunization etc (IPHS for Sub Centres, 2007).

1.3.2 Emergence of National Rural Health Mission and progress of maternal health care situation

The National Rural Health Mission (NRHM) was launched in 2005 as a part of the National Common Minimum Program. It adopted a systematic approach related to health to determinants of good health such as nutrition, sanitation, safe drinking water. It aims to mainstream the Indian Systems of Medicine to facilitate healthcare. The plan of action includes the increase of public expenditure on health, reducing the regional imbalance in the health infrastructure, risk pooling, integration of organizational structures, optimization of health manpower, decentralization at the level of management of health program and community participation. The NRHM (2005-12) seeks to provide effective healthcare to rural population throughout the country. Under each SC for a population of 1000 there is Community Health Volunteer – who is supposed to promote access to improved healthcare at household level through the female health activist (ASHA).

ASHA is mostly a woman, chosen by the community. ASHA would act as a bridge between the ANM and the village and be accountable to the Panchayat. The ASHA functions includes encouraging acceptance of neo-natal care and immunization, use of weight charts for children up to the age of 6 years, nutrition, health education related to hygiene and infectious diseases, simple curative care, identification of pregnant women and children at risk and collection of information on births, deaths, eligible couples etc. She will facilitate preparation and implementation of the Village
Health Plan along with Anganwadi worker, ANM, functionaries of other Departments, and Self Help Group members, under the leadership of the Village Health Committee of the Panchayat (GoI, 2008).

Figure 1.1 Rural Health Infrastructures, National Rural Health Mission, 2006.

There is a question, as to what extent the NRHM meets the demand side of rural health. One obvious gap as far as the NRHM has been concerned is the issue of neglect of medical care. Even though responding to these public health interventions, many health indicators such as life expectancy and total fertility rate have improved to a great extent, but some crucial indicators like Maternal Mortality Ratio (MMR) and Infant Mortality Rate (IMR) are still at alarming levels at around 212 per 100,000 live births.
and 50 per 1000 live births, respectively, in the 2007-09 (RGI, 2009). Moreover, the decline in these indicators has been very slow. In last 5 years, MMR has declined by 17 percent and IMR by just 13 percent.

Despite a series of national level interventions such as safe motherhood programme, there is still high risk link to child bearing in India. There are several evidences of programs that maximize quality as well as access to services enhance client satisfaction, leading to their greater utilization (Koenig and Khan, 1999). It is argued that access helps determine whether an individual makes contact with the provider, while quality of care influences a client’s decision whether to accept and use the service or to continue using the subsequent services (Bertrand et al., 1995). In addition to expanding health-care facilities and infrastructure, India’s family welfare program has been emphasizing outreach programs, including home visits, mobile clinics, and community-based delivery systems, as mechanisms to increase both the quantity and quality of services (MOHFW, 2005).

Recent findings from a civil society organization indicate that in states with high MMR, pregnant rural women do not receive quality maternal health services, especially if they are from lower income or specific caste groups (CHSJ, 2007). Several previous studies also advocate the likelihood of better utilization of maternal care among women visited by a health worker during their pregnancies; they have also emphasized the importance of and need for subgroup population analysis to delineate the inequity in maternal care (Sunil et al., 2006; Klemick et al., 2009). However, most of the benefits of health funding have been captured by the urban and wealthy population, and access to affordable health care for the rural poor remains inaccessible. Some aspects of
difference in access to health care are inevitable; for example ensuring that 100 percent of the urban population is within five kilometres of adequate health care is always easier than ensuring similar access in rural areas. A lot is already known about inequality in utilization to maternal health care in India (Pathak and Mohanty, 2010; Salam and Siddiqui, 2006; Ram and Singh, 2006; Rawlings and Rubio, 2005; Navaneetham and Dharmalingam, 2002), but the reliable evidences from policy point of view are quite restricted.

Improvements in coverage indicators have shown progress and one of the main reasons is decentralization of management due to NRHM. Apart from coverage through physical access, promotion of maternal health care utilization through cash incentives, have also been highlighted, but with the increased coverage of in-facility delivery, the workloads for health personnel have also increased. It has become difficult to intensify the efforts to maintain and improve the quality of obstetric care available to women in need (Lim et al., 2010). Thus, an extensive network of public health facilities has been established with strong focus on infrastructure development of PHCs and HSCs, along with recruitment of ASHAs. Provision of Rogi Kalyan Samiti (RKS) and Village Health Nutrition and Sanitation Committee (VHNSC), are recognized as the two main instruments to manage health programs by community itself. On the other hand, few incentive programmes have also been introduced which are instrumental in improved utilization of maternal health care, e.g. under NRHM, Janani Suraksha Yojana (JSY) which is conditional cash transfer scheme provides cash to women who give birth in a health facility. This scheme provides an ideal testing ground to examine the effects of financial incentives on health (Devadasan et al., 2008; Malini et al., 2008; Verma et al., 2010). Thus, above described tiered public health system (Figure1.1) coupled with the
services of field based female health workers including Auxiliary Nurse Midwives (ANMs) forms the backbone for delivering free basic and comprehensive emergency obstetric care to the rural poor. Norms for providing maternal health care at each of these tiers were recently revised through the Indian government’s flagship seven-year rural healthcare program, the National Rural Health Mission (NRHM), are also available in Indian Public Health Standards (IPHS, 2006).

1.4 Maternal Health Care in Uttar Pradesh

With a population of 199 million in 2011, Uttar Pradesh is the most populous state in India (ORGI, 2011). Relative to other Indian states, Uttar Pradesh behaves poorly in terms of demographic indicators. Fertility and mortality are higher in Uttar Pradesh than in many other states. In an attempt to improve indicators of reproductive health, the Indian government established the Reproductive and Child Health (RCH) Program in 1997 (Ramarao et al., 2001). The focus of the program is on preventive services, providing essential obstetric services for all and early detection of pregnancy complications. The Indian government has achieved greater success in encouraging the use of antenatal services, although, as noted above, the reliance on home delivery continues (Griffiths and Stephenson, 2001).

Uttar Pradesh (UP) with disproportionately high maternal mortality ratio (MMR) of 359 per 100,000 live births is 1.69 times the MMR of 212 for India as a whole (RGI, 2009). This challenge manifolds with the vast size of the state (70 districts) and a population of close to 200 million, largely poor and rural, with only 59 percent female literacy (ORGI, 2011). Facility survey indicates that emergency obstetric care is unavailable even in the designated rural health facilities (IIPS, 2010). According to
DLHS-3, only 25 percent of pregnant women receive antenatal care with approximately only 3 percent of pregnant women receiving the recommended full antenatal care and 75 percent of all pregnant women give birth at home (IIPS, 2010). In another study based on providers’ and clients’ opinion, various issues and problems associated with health care and family welfare programmes in Uttar Pradesh have been discussed and it has been inferred that public health system is still understaffed and unable to cater the health needs of population (Bhagat, 2009). Uttar Pradesh is a high focus state under NRHM and has made efforts to implement ASHA intervention and JSY, even though the cash assistance is not enough to cover all the expenses for institutional deliveries with women spending a substantial amount out of their own pockets (CORT, 2008). Thus, in order to improve maternal health outcome, an improvement in coverage of the maternal health services has been observed but low utilization of public health facilities remains a major challenge for policy makers and program implementers (Ram et al., 2010).

1.5 Theoretical Models for Health Care Utilization

Much of the research on health care utilization has been implicitly or explicitly influenced by two major and to some extent overlapping models, Health Belief Model targeting behaviour and prevention (Rosenstock, 1966) and Socio-Behavioural Model, targeting specifically illness behaviour and overall use of medical care (Andersen, 1968). The health-seeking behaviour models provide relevant determinants for identifying problematic areas in order to intervene with specific health system strategies (Hausmann-Muela et al., 2003). Some of relevant contemporary models of Health service use are described as follows-
1.5.1 The Health Belief Model (HBM)

According to Sheeran and Abraham (1995 cited in Hausmann-Muela et al., 2003), action in 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; and v) conditions such as socio-demographic and psychological characteristics of the interviewed person. These factors are considered to be transformable through health education/health promotion campaigns, in contrast to structural or cultural factors like poverty, gender, religious norms etc.

1.5.2 The Five A’s Model

This popular model among researchers use different categories which group key factors for health-seeking behaviour into “Five As” -

i) \textit{Availability}: geographical distribution and physical presence of health facilities.

ii) \textit{Accessibility}: include transports, roads etc.

iii) \textit{Affordability}: direct, indirect and opportunity costs of health services.

iv) \textit{Accommodation}: extent of which services meet the expectations of client like opening hours of facility matching the schedule of clients/user.

v) \textit{Acceptability}: relates to socio-cultural barriers.

The model of the “four As” has been widely used by medical geographers,
anthropologists and epidemiologists who mainly emphasize distance (both geographical and social) and economic aspects as key factors for access to treatment (Good, 1987 cited in Hausmann-Muela et al. 2003). The advantage of this model is the easy identification of key potential ‘barriers’ for adequate treatment.

1.5.3 Pathways model

In this model, paths taken from recognition of symptoms to use of 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.

1.5.4 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 behavior are grouped into a logical sequence:

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Predisposing factors  |  Enabling factors  |  Need factors  |  Health service use
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First advanced by Andersen (1968) has been particularly influential since it focuses on three sets of determinants of health service utilization: (1) Characteristics that predispose individuals to use formal health care systems such as age, gender, education, ethnicity, social networks, health beliefs etc.; (2) Enabling resources which
allow individuals to use health care if they so choose, such as money, time, transportation and availability of health services; and, (3) Actual or perceived need for health care. In a way, this is a highly comprehensive model. Virtually any precursors to health care utilization can be fit into this structure.

However, it also directs our attention to individuals, rather than social structure. As Anderson (1995) indicates, “The model of health services’ use initially focused on family as a unit of analysis because the medical care an individual receives is almost certainly a function of the demographic social and economic characteristics of the family as a unit. In the subsequent work they shifted to the individual as the unit of analysis because of difficulties of developing measures at the family level.” Though, research on maternal health care and health care utilization continues to build on this tradition and consequently the focus seems to be on the impact of individuals’ characteristics on utilization of prenatal and maternity care (Obermeyer and Potter, 1991). In areas where substantial regional inequalities have been found, such as in India, attention is also directed at availability of health services to individuals in their communities (Sunil et al., 2006; Stephenson and Tsui, 2002). This focus on health services in local areas is a way of moving beyond the focus on individual determinants of health care utilization. However, it still retains the basic assumption that individuals would use health care services if they knew about the services, could afford them and services are available. Although empirical studies often find that the use of health services depends as much on their availability and accessibility as on the socio-economic characteristics of users, studies of the determinants of the use of maternal health services have focused on individual-level factors, with little attention given to the health infrastructure (Stephenson and Tsui 2002).
Recently, there have been further modification and extension of Andersen’s model over the years to describe healthcare utilization and the following factors were gradually added to the original model (Andersen, 1995): health-service system factors (policy, resources, organization); consumer satisfaction; health status outcomes as influenced by external environment (physical, political, economic) and personal health practices (diet, exercise, self-care etc.). Finally, an emerging variant of the model emphasizes the dynamic and recursive nature of health service use and portrays the multiple influence on health service use and subsequently, on health status.

1.6 Choice of Services and Facility bypassing behaviour

It is generally perceived and observed in developing countries that if primary healthcare facilities are available in close proximity, then it creates a situation where the population is often faced with local primary health providers which are monopolies. Despite this, some individuals choose to be treated in health centres farther away from their homes which incur greater time and transport costs in order to obtain services perceived as better adapted to their needs. Such bypassing of health centres has been shown by Akin and Hutchinson (1999) as being an important phenomenon in Sri Lanka. In the rural district studied, they found that close to two-thirds of individuals seeking treatment bypassed nearer facilities and in particular that the more severely ill patients tend to be more likely to bypass health facilities. Leonard et al. (2002) examined bypassing in 90 villages in Tanzania and found that patients seek higher quality providers with better staff and basic supplies and tend to understand the importance of these factors for their illness conditions.
This behaviour is mostly observed in Sub-Saharan Countries and research has been very limited on this aspect, especially in India. The extent to which patients bypass their local hospital and factors associated with this phenomenon have been studied extensively by analyzing medical claims data, hospital discharge data, or both but use of household survey data to study the extent and reasons of bypassing has not been studied. The use of urban professionals and facilities, in particular, by rural residents raises understandable concerns among policy makers and rural clinicians as it deprives the local professionals and the local community of revenue both directly and indirectly. In the extreme, bypass may result in reductions in the number of health care professionals and the range of medical services offered, or even hospital closures. The phenomenon of justifiable bypass describes the bypass of local hospitals by rural residents with more severe illnesses because the services they require (Radcliff et al., 2003; Basu, 2005). Thus, this study requires an attention towards people perception about the available facility and evaluates the health system efforts to retain them locally.

1.7 Programmes and Policies for Maternal Health Care

In the early 1990s, maternal and child health in India gained greater policy recognition with the launch of the Child Survival and Safe Motherhood programme. In line with international policy at the time, articulated in the International Conference on Population and Development in Cairo, this represented a paradigm shift from an historical focus on family planning to broader issues around reproductive health and safe motherhood. One particularly relevant initiative in the 1990s was the National Maternal Benefit Scheme, an unconditional cash transfer targeted at pregnant women living in households below the poverty line. This scheme laid the foundation of what
was later to become the *Janani Suraksha Yojana (JSY)* (Powell-Jackson *et al.*, 2011). India’s *Janani Suraksha Yojana (JSY)* provides cash to women who give birth in a health facility. Although officially launched in 2005, the level of the *JSY* across districts was incremental, providing variation in its placement. At the same time, much of the health policy environment in India is common within states, which gives us more confidence that district placement of the *JSY* is not acting as a proxy for other policy initiatives. A second advantage of this setting is the narrow focus of the *JSY* on women at childbirth. This provides greater scope for examining unintended consequences of the financial incentives on closely related but non-incentivised behaviours. A third advantage is the scale and coverage at which the *JSY* was implemented.

### 1.8 Rational of the Study

It has been clear that inequitable distribution of public health facilities and poor accessibility in terms of location, social access and economic access, are the two major impediments in the utilization public health facilities. It has been evident from literature that networks of public health facilities is expanding and improves the physical access to services but acceptability of these facilities among the community is another important issue. Thus, real improvement in quality of care along with community acceptability cannot be understood without user perception (Thompson and Sunol, 1995; Donabedian, 1980) as it impacts their ‘health-seeking behaviour’ (National Commission on Macroeconomics and Health Report, 2005).

It is noteworthy that there are individuals, who choose not to use a locally available public health facility, In fact, they travel long distances to use higher level of care or other providers and often end up paying more. Various studies based on
developing countries have explored this phenomenon of bypassing a local health facility (Akin and Hutchinson, 1999; Liu et al., 2008; Parkhurst and Ssengooba, 2009; Kahabuka et al., 2011) but no concern has been identified in Indian literature. It is important to identify those individuals and characteristics of facilities they bypass in order to reshape future programme for improved public health utilization and to retain the community locally.

In this context, a multifaceted need to undertake this research that has emerged. Firstly, the extent to which the changes in coverage that manifest into improved utilization of public health facilities is yet to examine. Secondly, information on the services at the provider-client level remains limited, few evidence have become available only in the last decade, yet a good deal being unexplored and inaccessible to the public health researchers. Thirdly, perception of women and their characteristics which may influence their decision to utilize or bypass a locally available and sufficient enough facility in favour of higher level care or more expensive private health facilities needs in-depth analysis.

At last, a very few limited attempts have been made to assess the impact of a public health program on utilization. Incentives have been long used to encourage the increased utilization of services like family planning, but only for the acceptors. While in recent few programmes, providers also gain incentives for promoting and motivating these programmes. Majority of current evidences are drawn from government reports that examine maternal health aspects descriptively. A very few studies have evaluated the impact of any health scheme on prenatal care, postnatal care, and skilled attendance at birth (Aggarwal, 2009; Lim et al., 2010). But, JSY is one such program, implemented
under NRHM, which provides an opportunity to examine the impact of its implementation on maternal health service utilization. This is also important to understand that whether all components of maternal care have been improved due to JSY implementation or only a few of them changed over time? Thus, an overarching intention to carry this study is to understand and evaluate the impact of several ways of public health access and its implication towards maternal health care outcomes.

**1.9 Research Questions**

On the basis of above background and context of increasing coverage of public health facilities, following research questions have emerged in context of maternal health utilization:

1. What are the determinants of accessing public health facilities for maternal health care issues?

2. Does the behaviour of community affect the behaviour of individuals living in it (specially marginalized one)?

3. What are the barriers in accessing health services from providers’ as well as clients’ perspective?

4. Does health system infrastructure (at local level) facilitate promotion of utilization of maternal health care from public facilities?

5. What makes clients or/and potential users to choose one type of health care service over other e.g. private health care providers over public ones?
1.10 Objectives of the Study

In order to answer above research question a comprehensive study has been carried out required with an overall objective is to examine the role of accessibility of public health system in utilization of maternal health care. Thus, following specific objectives have been addressed in the thesis:

1. To identify the individual as well as contextual determinants of accessing maternal health care services and their utilization.

2. To examine the barriers and facilitator in accessing maternal health services from public health facilities.

3. To understand the facility bypassing behaviour in the community for especially for maternal health care components.

4. To assess the impact of existing health programmes (JSY) in utilization of maternal health services.

1.11 Organization of the thesis

The thesis is presented in seven chapters.

Chapter I Introduction, covers a brief review of available literature, rational of the study, objectives and theoretical model used in the study.

Chapter II Data & Methods provide description of data and methods used to address the objectives of the study and study design of qualitative data has been briefly discussed.

Chapter III Determinants of Maternal Health Care Utilization in Context of Accessibility of Public Health Facilities examine the level and differentials in maternal health care utilization in general and discuss about the study population. Contextual
determinants beyond individual level have also been examined. Access to various public health facilities and programmes has been focused.

**Chapter IV** *Barriers and Facilitating Factors in Utilization of Maternal Health Care* deals with perception of users as well as providers about public health facilities and explores the reasons of non-utilization of maternal health care.

**Chapter V** *Bypassing Behaviour and Access to Public Health Facility* describes the bypassing behaviour of women for available maternal health facilities and discusses common perceptions about public health facilities prevalent among communities.

**Chapter VI** *Impact Evaluation of Financial Incentives for Maternal Health* provides an impact evaluation of latest maternal health care programme available in the villages, on their service utilization.

**Chapter VII** *Summary, Conclusion and Recommendations* from the study have been discussed.