Summary, Conclusion and Recommendations

7.1 Introduction

Throughout the life cycle of women, pregnancy is a condition that carries elevated risk of death as well as risk of complications like obstructed labour, ruptured uterus, postpartum haemorrhage and postpartum infection etc. These are often perceived as normal condition and ailments of women and does not require special attention, though a report on causes of death (RGI, 2009) reveals that second leading causes of death is due to maternal conditions among females. Thus, the toll that unsafe motherhood takes on the lives and health of women, and, by extension, on their families and communities, is especially tragic since it is mostly avoidable (MOSPI, 2011). Government of India has made commitment and is signatory to all International declaration including MDG in 2000. The goal of reducing maternal mortality by 75% by 2015 has been adopted as an International Development Target. For India, data from Sample Registration System (2011) indicate that India has recorded a deep decline of 35% from 327 in 1999-2001 to 212 in 2007-09 for maternal mortality ratio (MMR) and a fall of about 17% during 2006-09. At this historical pace of decrease, India tends to reach MMR of 139 per 100,000 live births by 2015, falling short of achieving MDG goal.

Above situational analysis indicates that every pregnancy deserves special medical attention, as there is always a risk of something going wrong. Many dangers can be avoided if the woman goes to a health centre or to a skilled birth attendant when
she first suspects she is pregnant. She should then have at least four check-ups throughout each pregnancy and also be checked during the 12 hours following each delivery and six weeks after birth. Thus, safe motherhood not only depends on delivery by trained /professional personnel, particularly through institutional facilities but other pre and post natal care, ensuring adequate antenatal care of prospective mothers at health centres and recommended doses of IFA and care received after delivery are important factors that may help improve maternal health and reduce life risk during pregnancy.

The rate of increase in coverage of institutional deliveries in India is rather slow. It has increased from 26% (NFHS, 1992-93) in 1992-93 to 47% (DLHS-2007-08) in 2007-08. Over the period, coverage of deliveries by skilled personnel has also increased by 19 percentage points from 33% to 52% during the same time. Unless improved drastically, the existing rate of increase in deliveries by skilled personnel is expected to take the coverage only to 62% by 2015, which is far short of universal coverage of deliveries by skilled personnel (MOSPI, 2011). The literature on changing patterns of maternal health care seeking has pointed at a fundamental shift from individual to household and community level factors and within the framework of health facility accessibility, whose coverage has expanded at varying pace in all states of the country (Shariff and Singh, 2002; Bhargava et al., 2005; Sunil et al., 2006; Salam and Siddiqui, 2006; Baqui et al., 2008), even within the states there has been variation in coverage and low level of accessibility of maternal health care services (Stephenson and Tsui, 2003; IIPS, 2010).
Despite the fact that individuals’ socio-economic status, community characteristics and familial environment play a pivotal role in determining the utilization of maternal care during pregnancy, one cannot ignore the impact of “motivation and provision” in realizing potential access and utilization of selected health care services for women during pregnancy. Mediating these concerns, accessibility of public health facilities for quality care become more important as it reflects health system progress and equity towards poor 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).

Through expanding network of public health facilities established with focus on infrastructural development of Primary Health Centres and Health Sub Centres, along with commitments of ASHAs at village level, 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 which are directed towards catering health issues including women’s maternal health care needs. Monetary incentive programmes as a tool for financing maternal care have also been introduced which may be instrumental in improved utilization of maternal health care under National Rural Health Mission, this would bring equity in utilization.

Moreover, a examination of barriers as well as factors which impede and promotes maternal health care utilization from both providers’ as well as clients’ perspective has been less explored in secondary data analysis. This study with use of
empirical results using mix of qualitative as well as quantitative analysis complimenting across, bring out these concerns in a holistic manner. Another issue which lacks its place in Indian public health literature is bypassing of available facilities. In order to reshape and operationalize coverage programmes and recruit new sites for facility, it is important to identify those individuals and characteristics of facilities they bypass and prefer private or higher level care for public institution.

Keeping all these gaps into consideration, the present study has been attempted to understand the role of accessibility of public health facilities in utilization of maternal health care services. A qualitative research as part of this study has also been done along with secondary data analysis from District Level Household and Facility Survey (2007-08) to comprehend all aspects of access to public health facilities. Details of each of the objectives as well as data source and method of analysis has been discussed in detail with their respective chapters, however this chapter summarizes and discuss the major findings of the thesis and conclude with the few recommendations emerged from the findings of this study.

7.2 Summary and Discussion

The research protocol has covered all aspects related to public health accessibility in utilization of maternal health care in rural Uttar Pradesh, starting with level, differentials and determining factors in service utilization. Following these determinants, barriers and facilitating factors have been looked at using qualitative data collected at first hand. In order to understand facility preference and choice regarding services, measure of utilization has been analyzed using secondary as well as qualitative information. At last, contribution of a major program for promotion of delivery care
“Janani Surakhsha Yojana” has been evaluated for selected components of maternal health care. In the background of the study, a modified version of health care utilization model envisaged by Anderson (1995) has been observed and helped in order to understand the pathways of access and in turn utilization.

### 7.2.1 Level, Differentials & Determinants

While discussing access of public health facilities, it was thought to underpin the current level and differentials in maternal health care and understand the need for health system support required. To study the overall level of maternal health care, a maternity care index has been constructed and studied. Characteristics of women at individual level and at household level have played a significant role and in conjunction with existing studies on developing counties (Navaneetham and Dharmalingam, 2002; Sheriff and Singh, 2002; Bloom et al., 2001), large variations are found between religion, level of women’s education and household wealth index. Utilization of maternal care services through implementation of Janani Suraksha Yojana, provision of public health facility in village and professional care have played significant role while availability of village health worker- ASHA, Village Health, Nutrition and Sanitation Committee and presence of Rogi Kalyan Samiti are the programs launched by NRHM and do not bring out significant change in utilization.

Each component of maternal health care- antenatal care, safe delivery and postnatal care have been analyzed separately using multi level models at individual, community and facility level. It highlights important similarities in health care seeking behavior, economic factors at individual/household level that largely shape their utilization. However, if a person is living in a better off community, it also promotes
their individual behaviour; it suggests that community affluence is also an important contributory factor. Physical accessibility of delivery care facility in terms of availability may enable the women to go for antenatal care and postnatal care which is important to prevent maternal morbidities and mortality.

Analysis of reasons of non-utilization suggests, that need regarding the medical supervision during pregnancy and child birth is far behind. Among women who are motivated to use delivery care, motivator have been mostly observed as a family members, yet women themselves do not perceive its need or may be reluctant to report their requirement and take it as a normal condition. But there has been a change in value to their lives in family which is reflected in terms of motivation gained by husbands and mothers-in-law.

7.2.2 **Barriers and Facilitators**

Interplay between providers as well as clients (users/non-users) of public health facility enlighten important factors which are based on their perception of facility, behaviour of community and health provider, their interpersonal communication and financial aspects. Findings indicate that financial obstacles, especially indirect costs, time constraints, availability of health care staff and services are barriers which women faces and it influence their access to antenatal care and delivery services. While women who perceive antenatal and delivery care to be relevant, overcome the logistical barriers with the support of family members, most especially with their husbands and mothers-in-law.

Though quantitative data analysis negates the influence of village health workers, but women have reported that consultation with ASHAs has facilitated women’s utilization of institution-based maternal health services as they are acquainted
with the hospital management and formalities at facilities. Non-utilization of maternal healthcare services during pregnancy are not only influence by poor access to care and economic barriers but also by individual knowledge and social networks in the village. Interaction with health workers affect women’s decision to seek care, whereas diminishing role of caste and religion has been observed in utilization of maternal and child health care services. Few economically well off households hold a rigid behaviour and avoid interaction with other caste village health worker and prefer less trained private doctors available in village.

To enable women to demand care, training of health workers and implementation of health camps and supervision of village health plan need to be strengthened. Barriers mentioned according to client/ user’s perspective are numerous like doctors availability, waiting time, timing of facility and other supply side issues which should be complemented by providers’ perspective also. Physician and ANMs working at public facilities have also pointed out many loopholes and; they feel that residing in facility premises is not a good option for their family and personal growth. Hence, most of ANMs and physician at PHCs travel from the nearby cities and town instead of residing in the village. Very low motivation has been observed in newly appointed young ANMs, as they are not well trained, not well acquainted with the work and mostly struggling to meet targets kept by their supervisors. They find this profession quite unattractive but due to lack of other career options they are not able to go anywhere else.

Role of ASHAs need more rigorous assessment to know whether they are able to fulfil their role and responsibility for which they are introduced in the existing public
health system. The finding indicates that though they are introduced in system well on
time and cater the population as per norms but as catalyst their role is very limited and
lacks influence on community even though they belong to the same. People perceive
them as a facilitator and they act accordingly but may be due to lack of training and
communication material on health issues, they have a very limited role. It is evident
from the study that they support the ANMs in providing maternal health care but their
scope to enable women for demanding care is limited.

7.2.3 Choice of Care and Preferences of Facility

The question arise how many pregnant women receive antenatal care and that to from
nearest village level public health facility and where do they go if they are not using this
easily accessible care. Similarly there are number of women who refuse to use antenatal
care but choose to deliver at health facility. In order to understand this complex
behaviour of women (or community where they live), a mixed method approach -
quantitative as well as qualitative has been used. Among 45 percent women who have
received any antenatal care at any facility, around 68 percent have bypassed the nearest
facility. Their place of care has been classified into categories of bypasser and non-
bypassers of nearest available HSC/ICDS. Women as well as community characteristics
have been identified to understand bypassing behaviour and much to surprise, it can be
inferred that community resources do not shape desire to use nearby facility but it is
women’s own experience and motivation which largely influence them to use far away
facility.

It has been found that place of antenatal care is significantly associated with
place of delivery i.e. using higher level of public health facilities for antenatal care has
been consistently associated with lower level home deliveries. Women who prefer private facilities for antenatal care as well as delivery belong to highest wealth quintile and to western region of Uttar Pradesh. Comparing place of delivery for women having no antenatal care to other groups, it may be suggested that antenatal care is still an utmost important factor in determining the subsequent behaviour of women for delivery and post-partum care. Similarly, an important role of household wealth status has been observed in determining the bypassing for institutional delivery. Among the choices between public and private type of care- regional classification of Uttar Pradesh suggests that western region’s women are more likely to depend upon private health facility for delivery irrespective of their wealth status, while in Bundelkhand region less proportion of women from lowest wealth quintile go for private health care and higher proportion of women belonging to highest wealth quintile go for private facility for delivery. Among reasons of bypassing, it may be suggested that women have odd perception of getting better medication and services at other place even if they are from same government facilities, like women prefer to get TT injection at CHCs rather than HSCs even though both offer same TT injection and supporting care.

7.2.4 Impact of Health Program on Service Utilization

The impact of the Janani Surakhsa Yojana (JSY) has been evaluated in terms of institutional delivery but does it also influence other components of maternal care is yet imbed into behaviour of women. An assessment on the selected utilisation outcomes that refer to the antenatal care, institutional delivery, the type of attendant present at the delivery and the postnatal care after the delivery has been done. Presence of beneficiaries of JSY in village refers to the implementation of programme in village.
Using method of propensity score matching and correcting for treatment effects controlling for the existence of confounding factors based on the idea that the bias is reduced when the comparison of outcomes is performed using treated and control subjects who are as similar as possible. It has been observed that the JSY has no impact on antenatal care services. The matched estimates indicate that the JSY, for those women who live in implemented villages, have a significant impact on the probability of women delivering in a health facility. An obvious substitution effect from the reduction in the price of government maternity services have been observed, while analyzing the impact of the JSY on utilisation by type of provider with significant increase of deliveries in public health facility.

7.3 Conclusions

The main objective of this research has been set as the presumption that vulnerability of women during pregnancy can be tackled using two interconnected strategies. The first, is through the understanding of the accessibility of present public health system and its role in maternal health care utilization and the second, through providing the community and providers barriers in utilization of public health services. Recent programs and effort by government, are consistent in adding to the peripheral facilities to extend the outreach of maternal and child healthcare in rural areas. But study point out that these centres remain poorly supervised and inadequately supported by curative and referral care units. Therefore, they could address the preventive and promotive healthcare needs of the population only to a limited extent.

Exploring the utilization behaviour of women and contextualizing relatively easy physical access to defined public health facilities, low level of utilization has been
observed at each level. Other than financial accessibility, acceptability of maternal health services in community emerges as critical avenue for the utilization of both maternal health care services. Barriers mentioned by client/user are numerous like doctors availability, waiting time, timing of facility and other supply side issues which have been complemented by providers as well. The key reason, for not opting for institutional delivery, has been reported as the perception of having ‘normal’ delivery that deters women to avail the services. This finding is concomitant with both the secondary data as well as qualitative exploration.

When it comes to subsequent utilization of all the maternal health care components, in hierarchical way of public health facility available in community, utilization of antenatal care and place of receiving antenatal care shapes utilization of institutional delivery. The study finds that even if the Primary Health Centres are accessible in terms of location, human resources and delivery care infrastructure, they do not cater all the deliveries in their catchment areas. Instead, women bypass them in favour of private facilities or higher government health facilities. This indicates toward crowding at health facilities at one place which may affect the utilization of government facilities due to already prevalent poor perception about the public health facilities. Region to which women belong and reside plays an important role in bypassing for institutional delivery and analysis suggest that western region women are more likely to depend upon private health facility for delivery. On the other hand, in case of other regions, women belonging to highest wealth quintile are in position to bargain for private facility for delivery instead of PHC or other higher level public health care.
Increased access to health care services and financial incentives should translate into better utilization and better health status (Grossman, 1972). However, in case of implementation of JSY, concerns have been expressed that because the programme provides cash benefit to those who deliver in facility and does not take into account pre-natal and postnatal follow ups, there are possibilities of under utilization of services for which the cash rewards have not been given. Study again questions over the role of motivating factors enabling the use of antenatal and postnatal care by village health workers. Qualitative exploration indicates towards the needs to address the issue of responsiveness of health system in the hierarchical way i.e. from local level health worker to well trained higher level health professional.

In general, by incorporating the perspectives of both clients and providers into efforts to improve the accessibility of public health care facilities, policymakers and program managers can develop a deeper understanding of the needs and constraints faced by both groups. Having common goals of improving maternal health care will ultimately lead to greater use and sustainability of health services, and improved health outcomes for women. Physical coverage of services, low perception about health service hinders its use and women may incline to bypass it. The so called ‘continuum of care’ for maternal health may not be achieved without rigorous convergence programming at grassroots level including Janani Suraksha Yojana and other village level programs.

7.4 Recommendations

Based on empirical finding of this study, few recommendations can be made to strengthen public health service delivery system and utilization of maternal health care.
1. Enabling women to demand care during pregnancy through expanding knowledge of need, changing community perception through motivation from village health worker and other governance committee like Mahila Mandals, Village Health Sanitation and Nutrition Committee (VHNSC) etc.

2. Need to strengthen management of public health facilities through Rogi Kalyan Samiti (RKS) and creating awareness among providers to mobilize resources through this committee.

3. Since barriers faced by women can be tackled if their attitude towards facility and need changes, a focus needs to be shifted towards provider's barriers in terms of logistics and outreach services, ANMs needs to be facilitated for transportation and supported by higher level of facility and health personnel in order to maintain documentation.

4. Existing public facilities should conduct few programs at regular interval in their local catering area so as to popularize themselves among community and women which may enhances their usability and retain population locally.

5. Evaluation of programs as well as accessibility of health provider needs to done not only for evaluation impact on outcome in terms of level of utilization but also to understand processes through which it operates.

7.5 Limitation of the study and way to future research

This study tries to capture both aspects of demand and supply in one framework using mix of quantitative as well as qualitative information. Though, due to small sample of qualitative data results may not be generalized as whole. Role of few public health
programs like presence of VHNSC and RKS cannot give clear inferences for utilization due to lack of good quality data or may be under reporting. The analysis has been limited to realized access in terms utilization as the main measure of performance and maternal health care. In addition, judging the success of JSY on the extent to which it influence health seeking behaviour at childbirth need a cautious inference and should be within the limitation of post survey design. This study covered only the early period of the JSY and all indications are that the programme has improved utilization since the household survey.

Future research in different health aspects may be needed to obtain whole picture of utilization of public health facilities. Further empirical studies can be taken up to test the behavioural model of health service use. More close and direct measure to assess the factors influencing relationship between accessibility and maternal health services at environmental and system level are required. In order to capture, full range of health services, utilization behaviour of population with lower accessibility to services, needs to be study separately to understand equity concern.