2.1. Introduction
This chapter reviews existing literature on dimensions of gender with various aspects of reproductive and infant health. It tries to convey the knowledge, practices, treatment seeking behaviour, role of gender and their association with health outcomes in a systematic way. Results of the existing literature are broadly synthesized into summaries pertaining to different aspects of reproductive and infant health. They include prevalence of different reproductive and infant health problems, health care seeking behaviour, underlying causes of health problems, health outcomes of gender-based violence, gender role in fertility control, accessibility and use of maternal and child health services, decision-making in using maternal and child health services, women and men’s role in reproductive and infant health care. Finally, based on the review of literature, existing gaps in knowledge of the subject are identified to formulate the current study.

2.2. Antenatal and postnatal care and its relation with health outcomes
A retrospective study of antenatal health care in India found that its lack is an important risk factor for maternal death (Bloom et al., 1999). It is estimated that only 44 per cent pregnant women had their ANC during the first trimester of pregnancy, and another 22 per cent had their first visit during the fourth or fifth month of pregnancy. Over half of the mothers (52 per cent) had three or more antenatal care visits. Urban women were much more likely than rural women to have three or more ANC visits. The number of women who had three or more ANC visits ranges from 17 per cent in Bihar, to 27 per cent in Uttar Pradesh to 90 per cent in Kerala, Goa, and Tamil Nadu. Though half of the men with a child under the age three years reported that they had accompanied their wives to the antenatal clinics, only 37 per cent reported being told what to do if the mother had a major complication of pregnancy. Though the place of delivery-abortion has no significant role in case of maternal deaths, antenatal check-up would definitely identify the problem in time and suggest referrals, if required. The relationship of pregnant women with health care use for antenatal, intra-natal and postnatal services is crucial to save the life of mother and the child (NFHS-3, 2005-06). This is important where 90 per cent maternal deaths can be prevented with timely medical intervention. Ensuring quick access to appropriate services
when obstetric emergencies arise is one of the most important aspects of safe motherhood in developing countries (Freedman et al., 2007).

Postnatal check-up is another ignored aspect of health care in India.¹ Almost six in ten women (58 per cent) do not report receiving any postnatal check-up after their most recent delivery. About one-quarter of the women (27 per cent) received a health check-up in the first four hours after delivery, and 37 per cent received it within the critical first two days after delivery. Although the likelihood of a timely postnatal check-up is more in an institutional delivery, it is notable that between 15 and 24 per cent of births even in institutions did not receive postnatal check-ups. Among births delivered at home, only 9 to 12 per cent received a postnatal check-up within two days of delivery. Several states consistently perform poorly, showing figures much below the national average on each of the five safe motherhood indicators. These states include Rajasthan in the north region, Chhattisgarh, Madhya Pradesh and Uttar Pradesh in the central region, Bihar and Jharkhand in the east region, and Arunachal Pradesh, Assam, Meghalaya and Nagaland in the northeast region. Uttaranchal performs poorly on all the indicators except antenatal care. By contrast, Mizoram performs above the national average on the delivery care and postnatal care indicators (NFHS-3, 2005-06).

Ram and Singh (2006), and Bloom et al. (1999) documented impact of antenatal care services on improvement of maternal health care in rural and urban areas of Varanasi district in Uttar Pradesh. Studies reveal that many routine procedures have little impact on reducing maternal mortality and morbidity. It shows that routine antenatal visits may raise awareness about the need for care during and after delivery or give women and their families a familiarity with health facilities that enables them to seek help more efficiently during a crisis (Patel, 1994; Bloom et al., 1999). However, it shows that despite this awareness on safe delivery care, almost 30 per cent of poor to middle class women use untrained assistants during childbirth.

This contradiction between raised awareness and low use of services can be explained. Many studies have found that women are averse to the use of services of health professionals for childbirth because their practices do not correspond to the local

¹ All data reported here are from the GOI, NFHS-3.
expectations. Further, the relationship between the use of antenatal care and safe mother and child outcome has concentrated mainly on the number of visits, whereas the nature or quality of antenatal care has been largely neglected. A study by Abraham and Joseph (1985) found that around 87 per cent of high-risk pregnancies delivered normally and around 15 per cent of high-risk cases were not identified during routine check-ups during pregnancy. Even medical literature shows that a large number of maternal deaths could be prevented by timely medical intervention. Good emergency obstetric and antenatal care goes a long way in reducing fatalities from complications occurring during pregnancy (Roy, 1989; Martin, 1995). The best thing antenatal care could do is to motivate women to opt for safe delivery, i.e., delivery assisted by trained professionals (Mishra, 2008).

Review of literature on maternal mortality in India (Jejeebhoy, 1997) shows that three studies from Andhra Pradesh, Uttar Pradesh and Maharashtra have found that women who had at least one antenatal visit had a higher chance of survival compared with those who did not visit. Fewer than four antenatal visits and the initiation of antenatal care after the first four months of pregnancy could be a great risk factor for maternal mortality (Taguchi et al., 2003). A possible reason for such an outcome could be that knowledge about facilities and contact with health professionals may reduce delays in decision-making about the place of care during an emergency. In Uttar Pradesh around 90 per cent deliveries were conducted at home and nearly half the deliveries were assisted by family members or kin (Rao et al., 2001). The association between antenatal care, institutional delivery and delivery assisted by trained professionals was observed in studies conducted in Ethiopia and India (Kost et al, 1998; Bloom et al., 1999). It is argued that the use of antenatal care services by women may lead them to seek treatment for various complications occurring during pregnancy and after delivery (Sugathan et al., 2001).

Other determinants of the use of safe delivery and other maternal health services are complications faced during pregnancy and delivery, and experience of child loss (Bloom et al., 1999; Griffiths and Stephenson, 2001). This apart, studies have demonstrated a relationship between measures of access to various services and individual health seeking behaviour (Jahn et al., 1998). The presence of a secondary health facility in the community increases the likelihood of receiving antenatal care and of delivery in a medical institution. The number of doctors available in the community has a positive effect on the likelihood of delivering in a medical institution (Stephenson and Tsui, 2002).
These studies help to clarify that ANC use is an important determinant of safe delivery care, after controlling a number of factors known to influence the use of care during pregnancy and child births. Jeejebhoy’s (2002) study helps establish that women who obtain greater antenatal care were more likely to avail safe delivery care than those with a lower ANC care. Thus, an enabling environment that increases the chances of a woman to access and use better antenatal care will help increase the use of safe delivery care.

2.3. RTI/STI among women
Reproductive tract infections (RTIs) are syndromes that cause acute physical discomfort, personal embarrassment and marital discord. RTIs compromise women's ability to achieve and sustain pregnancy as well as to produce healthy children. RTIs have a great impact on a woman's status within her family and community, and more significantly on her physical comfort. Ironically current fears of the spread of AIDS has done more to focus attention on the importance of RTIs in reproductive health than all the data linking bacterial cervicitis and vaginitis syndromes with infertility, ectopic pregnancy, chronic pelvic pain, cervical neoplasia and adverse outcomes of pregnancy (Wasserheit, 1989). A study in Maharashtra showed that 92 per cent of the 650 women examined were suffering from one or more gynaecological and sexual disease related to RTI. Generally the diseases that do not kill are neglected. However, their consequences include difficulty in occupational and domestic work because of chronic backache caused by PID and cervical erosion (present in 30 per cent of women), foetal wastage due to abortions and stillbirths caused by syphilis or chronic PID (38 per cent of the women had bad obstetric histories), neonatal infections from birth canal infections, anaemia due to menorrhagia, marital disharmony due to sterility (7 per cent) and sexual problems (9 to 12 per cent), and anxiety and stress (Bang, 1989).

Women face several physical and social obstacles to preventive and curative measures for RTIs. When they do not show obvious symptoms, the infection is unlikely to be noted. RTIs are rife with stigmas, taboos and threats of social ostracism. Fear is reinforced by low self-esteem, illiteracy and fear of violence from or rejection by the partners, thus preventing women from reporting or discussing them, so that there will be early diagnosis and treatment. Physical and psychological deterrents to care, including strict modes proscribing even married women from discussing sexual problems, can create virtually
insurmountable obstacles to disclosure of RTIs and the gynaecological ailments (Ascadi and Johnson, 1990; Bang, 1989). Women are known to accept vaginal discharge, itching, ulcers, bleeding and discomfort during intercourse, and even chronic pelvic pain, painful urination, etc., which accompany some RTIs, as an inevitable part of their womanhood which have to be endured, along with other reproductive health problems such as sexual abuse, menstrual difficulties, contraceptive side-effects, miscarriages, stillbirths and potentially life-threatening clandestine abortions and childbirths (Mueller and Wasserheit, 1991).

RTIs are both preventable and treatable. If not treated in time and the condition gets worsened, it may lead to complications like infertility, ectopic pregnancy, cervical cancer, foetal wastage, low birth weight, infant blindness, neonatal Pneumonia and mental retardation. They also facilitate transmission of HIVs. (Wasserheit and King, 1992).

2.4. Underlying causes of reproductive and newborn health problems
Studies show that common reasons for reproductive health problems are low social status, low educational level and lack of decision-making power among young rural women. Thus worldwide, health care providers, policy-makers, and donors are recognizing the direct connection between the gender roles of men and women, and their reproductive health. They are particularly concerned about the effect that inequities in gender role have on women's well-being. The ICPD Programme of Action recognizes the importance of gender by stating, "In all parts of the world, women are facing threats to their lives, health, and well-being as a result of being overburdened with work and of their lack of power and influence" (Population Report, JHU, 1998).

The real 'causes' of poor maternal health are rooted in social, cultural and economic barriers faced by females in the third world throughout their lifetime. Malnutrition is far more prevalent among females than the males in the developing countries and the reasons have more to do with gender than with geography. Gender discrimination in allocation of food, as well as in education and in health care, is widespread and a well documented practice in much of south Asia (Ascadi and Johnson, 1990).

The most important period in the life span of women is the reproductive period which extends from menarche to menopause. The intervening period is marriage, pregnancy, childbirth and contraception. However, these conditions are determined by socio-
economic and cultural factors as well as available health care facilities (Koenig et al., 1992). Often men dominate decision-making and so can seriously help or harm women's reproductive health. Safe motherhood consists of ensuring good health for women and their babies during pregnancy, delivery and in the postpartum period. Men play many key roles during women's pregnancy, delivery and thereafter. Their decisions and actions often make the difference between illness and health, and life and death. (Population Report, JHU, 1998). An exploratory study of women’s role in reproductive decision-making in Ekiti, Nigeria shows that they are increasingly taking decisions on matters affecting their daily lives. More women than ever before believed that they could take decisions on family size, when to have a baby and choice of spacing period (Orubuloye et al., 1997).

In Nigeria in the Yoruba tribe there is a strong link between social and economic factors on the one hand and the reproductive health problems confronting women on the other. The culture of male dominance means that women seldom take decisions on matters affecting them. Lack of power leaves women unable to negotiate safe sexual practices or effectively seek care for their health problems, while men's unwillingness to control their sexual behaviour and the high incidence of STDs make women vulnerable to infection by men (Orubuloye et al., 1997). It has been firmly established that decisions regarding treatment are delayed because of cost, and when the decisions are made by a woman in respect of her health or that of her children, she pays for such treatment (Orubuloye et al., 1991). When decisions on treatment are taken by both husband and wife, they jointly pay for it. The result of further investigation on this subject indicates that nearly all the women (95 per cent urban and 90 per cent rural) were involved in the decision to seek treatment when they or their children were sick. All the women considered taking part in the decision as important to them. Some studies have found that women's power increases as their status in the community improves. In Nigeria, for example, Yoruba women who have many children, especially sons, have more say than their husbands about whether or not they will have more children. Among Yoruba women with few or no children, however, their husbands' fertility desires usually prevail.

A study to understand the contextual factors influencing newborn care amongst rural poor in western Uttar Pradesh shows that home deliveries were common and conducted mostly by mothers-in-law or TBAs who felt incompetent to handle complicated labour situations. In rural Indian communities, preparedness for safe delivery and immediate newborn care is
uncommon (Sethi et al., 2005). Traditional birth attendants or grandmothers play a significant role in newborn care (Prakash et al., 1994). Studies have demonstrated that involving grandmothers as community mobilizers resulted in positive changes in nutritional practices (Aubel and Sihalathavong, 2001). In the foreseeable future at least, India is not likely to be in a position to afford institutional care for all births even if this is considered a desirable goal. It can, therefore, be assumed that in the years to come, traditional systems will continue to dominate the rural India (Pachauri, 1993).

A study in India in the 1970s found that for every maternal death there were 16.5 cases of illness related to pregnancy, childbirth and puerperium (Dutta et al., 1980). From one gynaecology clinic in northern Nigeria it is reported that 300 young women a month are treated for the repair of vasico-vaginal fistulae, while in other areas the waiting list is said to be 1000 women (Tahzib, 1989).

Abortion is widely resorted to and many women take recourse to unsafe abortions by untrained persons. In Asia about 20 to 25 per cent maternal deaths are attributed to poorly performed abortions (Khan, 1985; Rochat, 1981). In Africa one of the hospital studies shows that abortion-related deaths are increasing. More than 25 per cent maternal deaths in Lusaka (Zambia) (Rochat, 1985) and more than 20 per cent maternal deaths in Benin City (Nigeria) (Unuigbe, 1988) are due to abortion related complications. A study conducted in Addis Ababa (Ethiopia) revealed that 50 per cent of the maternal deaths resulted from illegal abortions (Kwast, 1986). Induced abortions are often the result of non-use of contraception, contraception failure or unplanned pregnancies. This could have prevented if women were provided freedom of choice about when to reproduce and use contraception. Lack of freedom for women in determining their reproductive health needs is a major barrier to a healthy reproductive life.

2.5. **Gender-based violence and health repercussions**

Violence of different kinds is an important cause of developing health problems among the victims and also not seeking treatment in fear of the unknown. National Family Health Survey-3 (2005-06) states that, 34 per cent women in the age group of 15-49 years have experienced physical violence, and 9 per cent sexual violence. Overall, 35 per cent women in the age group of 15 to 49 years in India have experienced physical or sexual violence. Notably, a large majority of women who have experienced sexual violence, but not
physical violence, have never told anyone about it (85 per cent) and only some of them (8 per cent) have ever sought help.

Gender-based violence (GBV), perhaps the most compelling manifestation of unequal power in sexual relationship, has a multitude of negative effects on women’s sexual and reproductive health (Blanc, 2001; Guedes et al., 2002). Gynaecological problems are the most consistent physical health difference between women who have experienced domestic violence and those who have not, with the odds of experiencing a symptom of gynaecologic morbidity generally three times as high among women who have experienced violence (Stephenson et al., 2006). A study in Uttar Pradesh shows that compared with women whose husbands did not report violence, women whose husbands reported sexual violence and whose husbands reported both physical and sexual violence, had significantly higher odds of reporting symptoms of gynaecologic morbidity (Stephenson et al., 2006). Several studies, including those conducted in Uttar Pradesh, have documented a link between violence and sexual as well as reproductive health. These studies show that violence can indirectly affect fertility preferences and the transmission of STIs through women’s fear of raising the issue of contraception or condom use (Heise et al., 1995; Khan et al., 1996; Bawah et al., 1999).

2.6. Gender role in fertility control

Only a few studies have directly explored the relationship between abuse by an intimate partner and reports of unintended pregnancy, and found a significant association in them (Goodwin et al., 2000; Gazmararian et al., 1995; Pallitto and Campo, 2004). Additional studies have indirectly explored the relationship and found that abused women had higher rates of abortion or unintended pregnancies than non-abused women. However, these studies did not cover control for confounding factors (Amaro et al., 1990; Hillard, 1985; Jacoby et al., 1999; Martin et al., 1999; Stewart and Cecutti, 1993; Yoshihama and Sorenson, 1994). Only one of them provided data from a Latin American country and adjusted for confounders, while also providing an in-depth discussion about the mechanism of male control through which abuse could lead to lack of female fertility control and unintended pregnancy (Pallitto and Campo, 2004). A related study by the same authors found that not only was one’s individual experience of violence associated with a significantly higher risk of having an unintended pregnancy, but also that living in a community categorized as highly patriarchal increased one’s odds of having an unintended
pregnancy by almost four times, after adjusting for individual experience of abuse as well as several other factors (Pallitto and Campo, 2005).

As mentioned earlier, violence or fear of violence has been found to be associated with condom use negotiation. In addition, researchers have shown that women’s use of female-controlled contraceptive methods might be limited by fear of discovery (Bawah et al., 1999; Biddlecom and Fapohunda, 1998) or violent accusations of infidelity (Rao, 1997). These findings provide greater evidence of the mechanism through which women’s fertility control is limited by an environment of control present in abusive relationships.

Other researchers have indirectly provided support for this hypothesized mechanism of male control being associated with violence and lack of fertility control in a variety of international settings by arguing that when women lack autonomy or status, they are either more likely to be abused by their partners (Counts et al., 1999; Heise et al., 1999; Hindin and Adair, 2002; Koenig, 2003; Schuler, 1996; Smith, 1990) or have limited contraceptive use and lack of fertility control (Govindasamy and Malhotra, 1996; Hindin, 2000). It follows that when violence is viewed as a culturally acceptable expression of male control over women, public policies will be lacking or not adequately enforced, and violence and its adverse outcomes will be tolerated as a result.

2.7. Accessibility and use of maternal and child health services
Access to and use of maternal health care delivery services in India is associated not only with a range of socio-economic and cultural factors, but also with the type of health services, implementation of maternal health care programme, as well as differences in availability and accessibility between the States (Navaneetham et al., 2002; Sunil et al., 2006; Shariff and Singh, 2002; Chakrabarti et al., 2007; Pandey et al., 2002; Kavitha and Audinarayan, 1997; Khan et al., 1997; Bhattacharaya and Tandon, 1991). These studies have documented how the use of reproductive health care services is significantly affected by mother’s education and family composition, and creates a demand for maternal care. Husbands’ education is significantly correlated with wives’ health care use. In addition, women’s exposure to information through the radio, television and newspapers (Das et al., 2002) seems to have a positive impact on rates of use for all services.

Economic factors such as wages and income appear to be important only for child delivery services. Access to locally available health services significantly increases the use of
maternity care. Access to health care facilities in terms of distance and who provided health care are major factors that influenced the use of services (Sharrif and Singh, 2002). However, Bhattacharya and Tandon (1991) found that rural women living near a health centre do not necessarily utilize antenatal services. Similarly, studies have shown that even in villages distant from the sub-centre, the rate of acceptance of sterilization was high among those who had received maternal and child health care services (Kumar 1974; Srinivasan and Sugathan 1976). Women who have utilized antenatal care services are more likely to have their delivery in medical institutions and attended by health professionals than those who did not utilize them (Pandey et al., 2002). The use of ANC services in a given population depends upon the availability and accessibility of services, socioeconomic status of households and distance from the health institution (Pandey et al., 2004). Other studies such as those by Kavitha and Audinarayan (1997) highlight how caste differentiation affects use of maternal health care services in India.

Rural women’s use of maternal health services varies from 92.0 per cent in Kerala to 5.7 per cent in Uttar Pradesh\(^2\). Uttar Pradesh has the highest reported maternal mortality rate in India. Studies reveal that less than half of pregnant women there had sought any antenatal care (Rao et al., 2001). Even where care was sought it usually tended to be in the second trimester. The study by Rao et al. (2001) reported that over three quarters of women in Sitapur district and three-fifths of them in Agra district reported no antenatal care, 90 per cent of deliveries in Uttar Pradesh were conducted at home and in nearly half the cases babies were delivered by family members or kin and not by professional health attendants.

A community-based cross-sectional study of RTIs conducted in 1996-1997 among married women aged 16-22 years in Tamil Nadu shows that young married women in the rural Indian community have a high prevalence of RTIs but seldom seek treatment. Fifty-three per cent of women reported gynaecologic symptoms, 38 per cent had laboratory findings of RTIs and 14 per cent had clinically diagnosed pelvic inflammatory disease or cervicitis. According to laboratory diagnoses, 15 per cent had sexually transmitted infections and 28 per cent had endogenous infections. Multivariate analysis found that women who worked as agricultural labourers had an elevated likelihood of having a sexually transmitted

\(^2\)Source: www.cbhidghs.nic.in/hii2003/11.05
infection (odds ratio 2.4), as did those married for five or more years (2.1). Two-thirds of symptomatic women had not sought any treatment, the reasons cited were absence of a female provider in the nearby health care centre, lack of privacy, distance from home, cost and perception that their symptoms were normal. The low social status of women, especially of young women, appears to be a significant reason for their low rates of treatment for these conditions (Jasmin Helen Prasad et al., 2005). According to World Health Organization young women are particularly susceptible to STIs because they have fewer antibodies to fight pathogens and greater cervical ectopy (Ibid. and WHO, 1997).

2.8. Decision-making to use maternal and child health services

Studies find that couples’ decision-making power (DMP) is an important determinant of the use of maternal and neonatal health care services (Becker et al., 2006; Dudgeon et al., 2004; Chapagain, 2006; Hussain, 2003). Married women’s DMP in various household decisions and processes (for instance, whether or not to buy household items; what to do if a child becomes ill; whether or not to buy medicine for a family member who is ill; what to do if a pregnant woman becomes ill) has been documented in detail by Stan Becker et al. (2006). The decision of both wife and husband is vital especially in certain cases such as agreeing on an emergency plan during pregnancy, delivering in a health facility, and having a postpartum check-up within four weeks of delivery (Becker et al., 2006).

Some studies demonstrate how education and employment are vital constituents of DMP, especially for women and how they have a positive impact on the use of maternal health facilities. They show that if both partners are educated and if the woman is employed, both of them were significantly more likely to participate in the final decision-making regarding maternal health facilities compared with couples without education or employment (Becker et al., 2006; Chapagain, 2006). This indicates that education and women’s wage earning status are key determinants of their DMP within the households and thus help refine recent research on the measurement of new constructs for women’s status (Beegle et al., 2001; Jejeebhoy, 2002; Kishor, 2000; Mason, 1986). It is documented that educated mothers with full or partial mobility, complete decision-making autonomy for their own health care use, and with egalitarian attitudes towards children are more likely to prefer institutional delivery. Further, they use maternal and neonatal health care when needed compared with uneducated mothers with lesser autonomy of mobility and decision-making powers (Yesudian, 2008).
The influence of women’s economic status on decision-making was explored in India in Tamil Nadu and Uttar Pradesh. Bossen (1984) documented how employed women enhanced their standing and power in conjugal relations. In addition, his study showed that a woman was more likely to have greater DMP if she had an educational level equal to that of her husband. Similarly, the educational level and occupation status of husbands too seemed to have a significant relationship with the use of maternal health services.

Bossen’s (1984) study of women’s DMP in India is similar to the findings of an ethnographic case study of maternal and neonatal health programme in western Guatemala (Becker et al., 2004). It found that husbands were the principal decision-makers in getting their wives to a biomedical care setting for obstetric emergencies, and observed that mothers-in-law and traditional birth attendants had considerable influence in the negotiation surrounding whether to seek skilled care. Guatemalan men were still generally considered the main decision-makers, especially when the decision involved expenses (Carter, 2002). In a study of wives’ reports on their spouses’ involvement in pregnancy and birth, when the decision was being made related to an emergency situation that necessitated immediate funding for either transport or biomedical care, Carter (2002) found that wives considered their husbands to be the primary decision-makers. Similarly, a study in Benin found that encouragement of biomedical health-seeking behaviour during pregnancy and hospital delivery by a public health programme led paradoxically to less DMP by women. This was because these medical services had higher associated economic costs that still largely fell in the realm of male decision-making (Sargent, 1989). The DMP of women as measured in this study was significantly related to the household having a plan for what to do in case of emergency during the last pregnancy, delivery and postpartum, but was not associated with the place of delivery or having a postpartum check-up.

There is growing recognition that gender differences in reproductive and child health decision-making is strongly attributable to unequal power relations between men and women, and traditional gender roles that ascribe specific roles and responsibilities to them. This inequality is reflected in the process and extent to which women use reproductive health services. Many studies emphasize it. Dudgeon and Inhorn’s (2004) study highlights men’s dominant role in deciding the use of contraception and abortion facilities. Similarly,
according to Chapagain (2006), husbands’ domination is evident in directing wives to use contraceptives, select the type of contraceptive, terminate contraceptive use, and in making-decisions regarding when and how to seek antenatal care service. However, DMP in reproductive health does not flow in a unilateral direction. A study in Nepal found that despite unequal conjugal power relations, wife and husband jointly made reproductive health decisions. Among the couples who were currently practising family planning, a majority of wives (66 per cent) and husbands (69 per cent) reported that the final decision for accepting the contraceptive method was made jointly. About one-fourth of the wives reported that their husbands made the final decision. However, only 16 per cent of husbands perceived the decision to be theirs alone and 16 per cent of husbands reported that the final decision was made exclusively by their wives. Ten per cent of the wives agreed that it was exclusively theirs. Though the study revealed that 75 per cent wives and 84 per cent husbands reported being involved in contraceptive decision-making, participation in the decision to use antenatal care services was significantly higher among wives (Chapagain, 2006). This finding shows that women may exercise different degrees of power or decision-making. While they might have the power to decide about a particular issue, they might be completely powerless to act in another. Thus, power is both relational as well as contextual.

Anthropological studies have examined the ways in which culture and social organization may influence contraceptive patterns and men’s influences on them. For example, researches in Ghana (Ezeh, 1993) and Nigeria (Bankole, 1995) suggest that men may have a significant influence over women’s contraceptive decisions. In Zimbabwe men report making final decisions in contraceptive use, even while women are held responsible for obtaining contraceptives (Mbizvo and Adamchack, 1991). Studies document that men may directly affect women’s decisions about abortion. They may provide or withhold economic and emotional support either for an abortion or for parenting, or they may actively or passively impose their desires for or against an abortion on their partners. Men’s influences may be less direct, and may involve other areas of reproductive health. For example, women in the United States with abuse histories are less likely to involve their partners in abortion decisions and have different reasons for seeking abortion than non-abused women (Glander, et al., 1998).
Studies on abortion (Carter, 1995; Ginsburg, 1989; Clain, 1982; Hughes, 1993) have focused on women’s abortion decisions, access and experiences, and men’s influences on abortion choices and outcomes. Browner’s work on reproduction (Browner, 1979, 1986, 2000; Browner and Perdue, 1988) has explored how men influence their partner’s reproductive decisions and options. Her study of clandestine abortion in Cali (Colombia) revealed not only the high percentage of intentional abortions (an estimated one-third to one-half of pregnancies in Latin America), but the important role men play in decisions about abortions. Browner argues that men strongly influence their partners’ abortion decisions – women who were told directly or perceived that their partners would abandon them, sought abortions more frequently and with more resolve (Browner, 1979).

2.9. Women’s role in reproductive health care

Women play an important part in maintaining the health care system through their caring work at home, in the family, in the neighborhood and in the health professions as nurses, midwives, physicians, etc. At present more than ever before, health services depend on the caring work of women, and their skills and capacities. Yet, the development is not matched by women's participation in the health care decision-making (Malini, 1996 and 2011).

There are three fundamental ethical principles in women's right to reproductive freedom. These are liberty, which guarantees freedom of action; utility, which defines moral rightness by the greatest for the greatest number; and justice, which requires that everyone has equitable access to necessary goods and services. In this framework, governments have an obligation to provide information and services to women to exercise their right to reproductive freedom (Macklin, 1989).

Feminist argument for reproductive freedom is based on the rights to equality, self-determination and human dignity. Women have internalized pain and suffering emanating from sexual and reproductive roles. They are considered to be the very essence of womanhood. Poverty, unhygienic living conditions and several socio-cultural taboos cause health problems and a 'culture of silence'. Reproductive tract infections (RTIs) are common among the third world women and they have serious consequences for men and children as well. Illnesses and deaths due to complications of pregnancy, childbirth, unsafe abortions, diseases of reproductive tract and effects of harmful contraceptives are major causes of ill-health of women.
Cultural restrictions on a woman's personal freedom dramatically limit her access to health care. Women's mobility under these conditions is severely restricted. Having male doctors and health care workers limits women's ability to avail of their services. Male dominance in sexual relations and non-access to contraception makes them have no control over their pregnancies and childbirths, and on contracting diseases. Over and above this, the government policies and indifference to the health of women compound the problems.

In several developing countries women are the targets of population control policies and the effort to reduce the infant and child mortality. Consequently, family planning programmes as well as programmes for child survival do not attend to the needs of women. Inadequate antenatal care, poor and unhygienic attention at childbirth and unsafe abortions continue in spite of known risks. There is a lack of affordable health care infrastructure and services too. It is reported that women in Africa have 1:21 chance of dying due to pregnancy-related causes, whereas for women in Asia it is 1:54, in South America 1:73, in North America 1:6366 and in Europe 1:9850 (Starrs, 1987).

2.10. Men’s involvement in reproductive health care
Role of men’s involvement in the use of wives’ maternal health care such as antenatal care, postnatal care and specifically participation in contraceptive use and postpartum care is increasingly being recognized as important determinants of reproductive health. The need for reaching out to men through reproductive health programmes was affirmed at both the ICPD and the Fourth World Conference on Women held in Beijing in 1995 (United Nations, 1995; Khorram and Wells, 1997). Studies from different parts of the world have shown that reproductive health programmes are likely to be more effective for women when men are involved in some way (Gordon, 1995; Mbizvo and Bassett, 1996). They further reveal that although men have limited knowledge, they are the key decision-makers for women’s choice of health care services (Murthy, et al., 2002). This was affirmed by the study conducted by Singh et al. (1998) in five districts of Uttar Pradesh. It focused on husbands’ reproductive health knowledge, attitudes and behaviour, noting that men had little knowledge about female obstetric, reproductive or sexual morbidity. On the other hand, where men had access to information on reproductive health, the outcome for women was positive. Bhalerao et al. (1984) found that in Mumbai compared with women whose husbands did not attend an informational session at the antenatal maternal health clinic, women whose husbands attended it visited it more. Similarly, other studies show a
direct link between men’s involvement and fertility levels and contraceptive use. For instance, when men are actively involved and informed, fertility tends to drop and contraceptive acceptance increases (Becker, 1996). An analysis of male involvement in family planning in five generations of an extended family in South India revealed that the sharpest drops in fertility occurred when men were most involved in family planning decisions (Karra et al., 1997).

In India, where women’s autonomy is particularly low, educating and involving men in reproductive health matters may be the only effective means of influencing change in the health outcomes of women and girls. Practices that contribute to poor female health status such as the preferential allocation of food and health resources to boys are deeply rooted in cultural norms and persist despite changes in factors known to contribute to improvement of women’s status. For example, mothers’ selective discrimination against girls of higher birth order was observed in Punjab across all educational levels (Gupta, 1987). Results of the inter-generational study of a South Indian family demonstrated that male involvement was not dependent on better inter-spousal communication, but rather that the participation of men led to progressive changes in the social roles of spouses over time (Karra et al., 1997). This finding suggests that involving men in reproductive health interventions might help foster a better understanding between husbands and wives.

The recent call for a gender-based programme of research and services is based on an increasing awareness of the inter-dependence of female and male health status. If the needs of men with respect to reproductive health education and services are not considered, progress toward better health for people of both sexes will be hampered (Basu, 1996; United Nations, 1995). A gender based programme of research that takes both female and male roles into account will benefit the social and physical health of the entire family and contribute to the empowerment of women (Bruyn, 1995; Hardon, 1995).

2.11. Men’s attitude towards women’s role in society
In North India, the patriarchal, patri-local kinship system allocates power within the household based on members’ age and gender. Men and older kin have authority over women and younger family members. Because most married women live in some type of an extended household that involves one or more of their husband’s elderly family members, wives are usually dependent on a number of people for decision-making,
especially if the decision involves going outside the household or spending money. Husbands’ attitudes about the social norms of wives’ behaviour may be directly related to the nature of communication that exists between couples. For instance, 37 per cent of husbands in a study agreed, “My wife would have a difficult time negotiating with me about using a method of family planning” (Singh et al., 1998). Studies show that women in Uttar Pradesh were dependent on their husbands and older household members for decisions such as seeking health care (Singh et al., 1998; Dasgupta, 1995; Jeffery et al., 1989). This dependence, coupled with the fact that men have limited knowledge on women’s reproductive health, can have dangerous consequences for women. If individuals who have the power to make decisions do not understand when medical attention is needed, women may not get the care they need in time to save their lives.

Many of the men in Uttar Pradesh who reported some type of reproductive morbidity did not seek treatment, even after marriage (Singh et al., 1998). Inhibitions on discussing STD symptoms are probably exacerbated both by a lack of understanding of the possible dangers of keeping silent and by the traditional norms concerning women’s social role. Apart from women’s being vulnerable to sexually transmitted diseases that may or may not be treated, the low level of information among husbands about serious conditions that can arise during pregnancy and childbirth means that many women are unlikely to receive treatment for these conditions. This situation has implications for the growing AIDS epidemic in India, now spreading from high-risk groups to the general population (Pais, 1996). In areas of India where AIDS is thought to be highly prevalent, one study found that only one of every six women surveyed had even heard of the disease (Balk and Lahiri, 1997).

In societies where men generally control resources and exert control over women’s mobility, the latter may face manifold problems using reproductive health services. They may find it difficult to make choices that are appropriate for their situations. However, to assume that men’s inaction and disengagement with reproductive health is purposive will be self-defeating. Men’s disengagement with health does not mean that men are purposely denying women’s health care, but rather their ignorance of women’s reproductive health may lead them to have incorrect assumption and make uninformed decisions (Helzner, 1996).
2.12. Women’s empowerment and its relation with health outcomes

Empowerment and its linkages with health outcomes have been intensively debated, and have been analyzed through various indicators that make an impact on the health and well-being of mother and child. They include autonomy, mobility, decision-making, sexual and other forms of violence, and its relationship with health care use for antenatal, intra-natal and post-natal services.

Several studies in India explore the relationship between women’s autonomy and health outcomes. Bloom et al. (2001) conducted a series of studies in Varanasi city (Uttar Pradesh) to understand the dimensions of women’s autonomy and their relationship to maternal health care use. They studied middle-income women and focused on socio-economic-demographic determinants of women’s autonomy in three areas: control over finances, decision-making power, and freedom of movement (mobility). These studies show that most socio-economic indicators have strong influence on both women’s decision-making autonomy and on use of maternal and child health care. These studies show that when age, education, household structure, and other factors were controlled, women with closer ties to natal kin were more likely to have greater autonomy than those who did not have them.

An analysis of health seeking behaviour during pregnancy and childbirth suggests that certain dimensions of women’s autonomy may be more important to health outcomes than others. Freedom of movement or mobility had a strong effect on the use of maternal health care, even after being controlled for socio-demographic factors (Yesudian, 2008). As compared with women with lower mobility, those having greater mobility utilize “full” antenatal care and prefer institutional delivery and have access to “full” postnatal care. These findings underscore the importance of examining the different dimensions of women’s autonomy separately to understand the factors affecting health outcomes (Bloom et al., 2001).

Bloom et al. (2001) and Yesudian (2008) reveal that though age, household structure and education had a positive relationship with antenatal care use, freedom of movement was the only measure that demonstrated a statistically significant relationship. Further, these
studies demonstrated that women with greater freedom of movement obtained higher levels of antenatal care and were more likely to use safe delivery methods. The influence of women’s autonomy and specifically freedom of movement appears to be a more important factor in health care access than the more commonly acknowledged determinant education.

Some scholars (Woldemicael, 2007; Jejeeb hoy 2002) argue that current research and policy discussion on maternal and child health primarily tend to focus on female education and employment with little attention to women’s decision-making autonomy. Jejeeb hoy (2002) notes that women’s autonomy on various reproductive matters like contraception, fertility and spousal communication are influenced by individual partners’ views. Her study exploring rural women’s autonomy in Uttar Pradesh and Tamil Nadu documents the patriarchal structures in both the states. It shows that there is a tacit agreement between women and their husbands regarding women’s autonomy within the home. Where disagreements were expressed, husbands were more likely to project a comparatively liberal picture of their wives’ autonomy than their wives. This can be inferred because men tend to provide more “acceptable” responses than women. This study underscored the importance of cultural contexts and their effect on perceptions of autonomy and its impact on reproductive outcomes.

Studies like those conducted by Mathews et al. (2006) and others (Kishore, 2000; Hobcraft, 2000; Balk, 1994; Govindasamy and Malhotra, 1996) indicate that most autonomy indicators are important predictors of maternal and child health care use and in some cases significance is lost when socio-economic indicators are held constant. The strong positive effect of women’s sole decision-making in visiting family or relatives on use of antenatal care and child immunization is particularly impressive. On the other hand, the loss of significance of other dimensions of women’s decision-making when socio-economic factors are controlled indicates that some health care seeking behaviour are more dependent on socio-economic factors like education and employment. These studies show that most socio-economic indicators have a strong influence on both women’s decision-making autonomy, and on use of maternal and child health care. Women’s reports of their decision-making power were significantly related to households having a plan for what to do in the case of a maternal emergency. But they were associated neither with the place of childbirth nor with having a postpartum check-up. Husbands’ reports of wives’ decision-
making power was negatively associated with the likelihood of having the last birth in a health facility. These findings suggest that ‘women’s autonomy’ and ‘socio-economic indicators’ should be analyzed separately as well as collectively in order to arrive at a complete understanding of the determinants of the use of maternal and child health care and its relationship with these variables.

2.13. Empowerment of women: From concepts to practice

The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment. National Family Health Survey-3 (2005-06) documented that women are most likely to make the decision about purchases for daily household needs mainly by themselves. However, this decision is made mainly alone by only one-third of all currently married women. Only 27 per cent of currently married women make decisions about their own health care primarily by themselves and only 11 per cent make decisions about visits to their own families or relatives by themselves. Women are least likely to make decisions mostly by themselves about major household purchases.

The importance of good health and education to a woman's well-being - and that of her family and society - cannot be overstated. Without reproductive health and freedom, women cannot fully exercise their fundamental human rights such as those relating to education and employment. Yet around the world, the right to health (especially reproductive and sexual health) is far from a reality for many women. According to the World Bank, one-third of the illnesses among women aged 15-44 years in developing countries are related to pregnancy, childbirth, abortion, reproductive tract infections, human immune-deficiency virus and acquired immune deficiency syndrome (HIV/AIDS). Women's disproportionate poverty, low social status and reproductive role expose them to high health risks, resulting in needless and largely preventable suffering and deaths. Many of the women and girls who die each year during pregnancy and childbirth can be saved by relatively low-cost improvements in reproductive healthcare and yet high levels of maternal mortality persist (UNFPA).

Developmental concepts of population, health and nutrition are increasingly recognizing that gender, or the socially defined roles and status of women and men in societies and the relative power women and men have associated with their roles, is an important
determinant of reproductive health of men and women. Gender analyses have shown that reproductive health problems and services affect women and men differently. As family planning programmes expand to include more components of reproductive health, many people are seeking to do so in a gender perspective. Trying to meet practical needs for health care of both men and women, their strategic needs are a part of taking a gender perspective in reproductive health programmes (Interagency Gender Working Group, 2004).

A growing body of research indicates that women’s empowerment has a beneficial influence on women’s health-promoting behaviour such as contraceptive use as well as other maternal and child health issues. A qualitative analysis from rural Bangladesh highlights the tenacity of certain social norms and illustrates the negative influence of poverty and gender inequality on the aspirations, strategies and decisions of women in one generation and the behaviour and health outcomes of women in the next. Despite their own empowerment, mothers-in-law are often helpless, unwilling or unable to support their daughter-in-law’s mobility and employment when faced with resistance from sons who espouse conservative ideas about women’s social position. A mother’s or mother-in-law’s empowerment in some spheres of life may not be sufficient to overcome male dominance and societal pressure and realities, despite her hopes for her daughter or daughter-in-law (Interagency Gender Working Group, 2005).

2.14. Infant and maternal mortality scenario and programmes
Currently of every 1000 live births in Odisha, about 56 do not survive beyond one year. This situation is worse in rural areas, where 59 infant deaths occur per 1000 live births. Among them, about 37 in total and 39 in rural die within first 28 days of their life (AHS, 2012-13). The sample registration system (SRS, 2014) shows that about 51 infant deaths in total and 53 deaths in rural areas occurring in a year. Similarly, of 100,000 live births, AHS (2012-13) highlights about 230 maternal deaths and SRS (2012) about 235 maternal deaths every year. Since 1947, though India has made improvement in many health indicators, much progress has not been seen in maternal and infant health services.

Infant mortality rates are more than twice as high for children whose mothers did not receive any maternity-related care, compared with children whose mothers received it. (Asia-Pacific Population and Policy, 2001). Indian women also tend to have closely spaced
pregnancies. Some 37 per cent of births occur within two years of the previous birth, endangering health of both the mother, infant and older siblings (World Bank, 1996). Infant mortality is particularly high for children whose mothers are less than 20 or more than 40 years’ old, for children whose mothers have already had many births, and most strikingly for children who are born less than 24 months after a previous birth (Asia-Pacific Population and Policy, 2001).

Despite several initiatives by the Government of India under its Reproductive and Child Health (RCH) programme, both IMR and MMR continue to be unacceptably high. Thus quality improvement strategies emerged with National Rural Health Mission (NRHM) which was launched in 2005 as India's flagship health programme to carry out fundamental reforms in the country's basic healthcare delivery system, integrating all existing RCH programmes. Subsequently, in 2013 National Urban Health Mission (NUHM) was integrated under a broader umbrella of National Health Mission (NHM) to improve RCH services in the urban areas. The Indian Public Health Standards (IPHS) established norms for revamping primary health infrastructure and services. Standard treatment protocols and training modules were developed to address critical gaps in skill sets, such as skilled birth attendance, emergency obstetric care, integrated management of neonatal and childhood illnesses and home-based newborn care for community health workers. Monitoring and evaluation mechanisms were strengthened, including community based monitoring for greater transparency and accountability.

Improving the maternal and child health and their survival are central to the achievement of national health goals under NRHM as well as the Millennium Development Goals (MDG) 4 and 5 (reduce infant, child and maternal mortality). In the past ten years, innovative strategies evolved under the national programme to deliver evidence-based interventions to various population groups. In order to bring greater impact through the RCH programme, Government of India has recognised that reproductive, maternal and child health cannot be addressed in isolation as these are closely linked to the health status of the population in various stages of life cycle. It is also acknowledged that gender inequalities, illustrated by the skewed child sex ratio, shape women’s daily lives while playing a major role in determining their health and well-being as also the health of their children. Achieving MDG 3, the empowerment of women, is therefore key to achieving MDG 4 and 5. With this background the Reproductive, Maternal, Newborn, Child and
Adolescent Health (RMNCH+A) approach was launched in 2013 to address the major causes of mortality among women and children as well as the delays in accessing and utilizing health care and services. The RMNCH+A strategic approach has been developed to provide an understanding of ‘continuum of care’ to ensure equal focus on various life stages. World Health Organization (2013) estimated that in India approximately 190 women died of pregnancy and childbirth-related complications per 10000 live births, and 41 infants died per 1000 live births. Taking into account the progress made so far in maternal and child health, the nation has set goal to reduce IMR to 25, MMR to 100 and TFR to 2.1 by 2017.

2.15. Research gap
Many studies show an understanding of the different aspects of reproductive and infant health. But transformation of knowledge into practice by addressing the deep-rooted social norms is always a challenge. The existing studies highlight the prevalence of different reproductive and infant health problems, their causes and treatment seeking behaviour in general. It also explains the role of women and of men to some extent. However, there is limited research done relating to the issues focusing on women at a younger age. Similarly, young women’s magnitude of involvement in reproductive and infant health care decision is thinly layered out. Further, gender responsiveness towards reproductive and infant health care practices with a qualitative perspective is hardly covered in any of the studies.