

# A Review on Antenatal Care in Developing Country Like India

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## ABSTRACT

Antenatal care is the ‘care before birth’ to promote the well-being of mother and fetus, and it is essential to reduce maternal morbidity and mortality, low-weight births and perinatal mortality. The care for the mother during pregnancy, during delivery, and after delivery is important for the wellbeing of the mother and the child. Maternal health-care varies within developing countries, which shows differences between affluent and poor women, and between women living in urban and rural areas. Health care service provision in India is very diverse, with rural services achieving considerably less coverage than their urban counterparts. It was found that following factors affects the antenatal care utilization maternal education, husband’s education, marital status, availability, cost, household income, women’s employment, media exposure and having a history of obstetric complications. If a woman visited health centre three or more than three times, her chances were 31 percent higher to deliver in an institution. Poorer women may prefer home-based delivery care. Lack of affordability might explain the large poor–rich inequalities in professional delivery attendance within urban and rural areas. Traditional beliefs and ideas about pregnancy also influence on antenatal care use. Older women would have accumulated knowledge on maternal health care and therefore would likely have more self-confidence on pregnancy and childbirth and thus, may give less importance to obtaining institutional care. Incomplete access and underutilization of modern healthcare services are major causes for poor health in the developing countries. There is a need of enhancing community awareness about the

importance for educating women about early detection of complications during pregnancy and promptly seeking care, and about the importance of giving birth in a health facility.

**Keywords:** Antenatal Care, Developing Countries

## INTRODUCTION

Antenatal care is the ‘care before birth’ to promote the well-being of mother and fetus, and it is essential to reduce maternal morbidity and mortality, low-weight births and perinatal mortality.<sup>1</sup> The care for the mother during pregnancy, during delivery, and after delivery is important for the wellbeing of the mother and the child. All pregnant ladies are recommended to go for their first antenatal check-up in the first trimester. Pregnancy is a crucial time to promote healthy behaviours and parenting skills.<sup>2</sup>

A significant component in this continuum of care is compelling ANC. The objective of the ANC package is to prepare for birth and parenthood as well as prevent, detect, alleviate, or manage with the three kinds of medical issues during pregnancy that influence mothers and babies

- Complications of pregnancy itself
- Pre-existing conditions that deteriorate during pregnancy
- Effects of unfortunate ways of life<sup>3</sup>

The age, literacy of the mother, Social Economic Status, and type of family significantly influence ANC service

utilization<sup>4</sup>. ANC additionally furnishes women and their families with appropriate information and advice for a healthy pregnancy, safe labor, and postnatal care, including care of the newborn, promotion of early, exclusive breastfeeding, and assistance with deciding on future pregnancies in order to improve pregnancy outcomes. ANC improves the survival endurance and health of babies directly by reducing stillbirths and neonatal deaths and indirectly by providing an entry point for health contacts with the woman at a key point in the continuum of care

The fundamental components of an engaged way to deal with antenatal consideration

- Identification and observation of the pregnant woman and her expected child
- Identification and management of pregnancy-related complications, particularly pre-eclampsia
- Identification and treatment of underlying or concurrent illness
- Screening for conditions and sicknesses like anemia, STIs (especially syphilis), HIV contamination, psychological wellness issues, or potentially indications of stress or aggressive behavior at home
- Preventive measures, including tetanus toxoid injections, de-worming, iron and folic acid, consumption
- Advice and support to the woman and her family for creating healthy home behaviours and a birth and emergency preparedness plan to:
  - Increase awareness of maternal and newborn health needs and self-care during pregnancy and the and the post pregnancy time frame, including the requirement for social help during and after pregnancy
  - Promote healthy behaviours in the home, including healthy lifestyles and diet, safety and injury avoidance, and support and care in the home.
  - Support care seeking behaviour, including identification of danger signs for the woman and the newborn as well

as transport and funding plans in case of emergencies

- Promote postnatal family planning/birth spacing.<sup>3</sup>

The World Health Organization (WHO) recommends a minimum of four antenatal visits, comprising interventions such as tetanus toxoid (TT) vaccination, screening and treatment for infections, and identification of warning signs during pregnancy.

Globally, complications during pregnancy, childbirth, and the postnatal period have been the leading causes of death and disability among reproductive age women. Maternal deaths can be reduced if women can access quality medical care during pregnancy, childbirth, and postpartum.

In India, both child mortality (especially neonatal mortality) and maternal mortality are high. Seven out of every 100 children born in India die before reaching age one, and approximately five out of every 1,000 mothers who become pregnant die of causes related to pregnancy and childbirth.<sup>5</sup>

## RESULT AND DISCUSSION

In developing Countries it was found that following factors affects the antenatal care utilization maternal education, husband's education, marital status, availability, cost, household income, women's employment, media exposure and having a history of obstetric complications.

### Antenatal Visit and Institutional Delivery:

Maternal health-care varies within developing countries, which shows differences between affluent and poor women, and between women living in urban and rural areas. Health care service provision in India is very diverse, with rural services achieving considerably less coverage than their urban counterparts<sup>6</sup>. India's maternal and child health programmes have not promoted institutional

deliveries. The social, family, and community context and beliefs affect health during pregnancy either positively or negatively. The National Family Health Survey-III found that the coverage of institutional delivery is low at the national level and two out of five of all births took place at home. If a woman visited health centre three or more than three times, her chances were 31 percent higher to deliver in an institution.<sup>7</sup> The other factors that influence are mother's age and education and child's birth order also have strong effects on the likelihood of institutional delivery.<sup>5</sup> The best thing that antenatal care could accomplish is to influence women to have an institutional delivery with a trained attendant at birth, a factor known to promote child survival and decrease maternal mortality.<sup>8</sup>

#### **Antenatal Care: Rich Vs Poor**

Health care sector in India is very diverse, with rural services achieving considerably less coverage than the urban areas.<sup>6</sup> In India, many rural women are unwilling to invite health workers into their homes. Poorer women may prefer home-based delivery care.<sup>9</sup> Lack of affordability might explain the large poor-rich inequalities in professional delivery attendance within urban and rural areas. The Family Welfare Programme (FWP) in rural areas of India, maternal and child health services are delivered mainly by Government-run primary health centres and subcentres.<sup>9</sup> Older women would have accumulated knowledge on maternal health care and therefore would likely have more self-confidence on pregnancy and childbirth and thus, may give less importance to obtaining institutional care.<sup>10</sup> The education of the mother showed a positive relationship with the use of routine antenatal health care service.<sup>11</sup> The private health sector in India is very strong; charitable or mission institutions also play an important role, but private delivery care is accessible only by higher socio-economic groups because of the expenses .ANC

coverage is lower among women who need it the most: those who are poor, less educated, and living in rural areas.<sup>6</sup> Utilization of maternal services in rural areas are mainly driven by socio-economic factors like education, income, family status .The knowledge and awareness regarding pregnancy care is low in rural women in India. In rural India pregnancy is considered as a natural state of being for a woman rather than a condition requiring medical attention and care.<sup>3</sup> Indian government has started the Pradhan Mantri Matru Vandana Yojana (PMMVY), It is a conditional cash transfer scheme In this scheme the pregnant woman is eligible if she registers her pregnancy at the Anganwadi centre (AWC) within four months of conception, shall attend at least one prenatal care session and is taking Iron-folic acid tablets and TT(tetanus toxoid) injection.<sup>12</sup>

Zoe Matthews et al did a study in rural districts of Karnataka regarding "Antenatal Care, Careseeking and Morbidity in Rural Karnataka, India: Results of a Prospective Study", A recent antenatal care trial showed that four visits can produce maternal and child health outcomes that are just as favourable as more frequent antenatal contact regime. Health care service provision in India is very diverse, with rural services achieving considerably less coverage than their urban counterparts. In rural Karnataka, only 26 per cent of births are institutional and antenatal care is not universal. The most thorough aspect of antenatal care is routine preventive provision, including tetanus toxoid immunization and the distribution of iron and folate supplements, though the level of compliance with iron supplementation among this highly anaemic population is in doubt. The current level of delivery planning is minimal and very little advice is given to pregnant women about aspects of pregnancy such as food intake, activity, danger signs in pregnancy, postnatal checks and breastfeeding.<sup>2</sup>

M. Rani et al did a study on “Differentials in the quality of antenatal care in India”. Lower than desired quality of antenatal care was observed in both north and south Indian states, though the quality was significantly better in south India compared with north India, especially among the disadvantaged women. Poor quality of antenatal care is likely to reduce its utilization. Most of the studies in India and in other developing countries have attributed socio-economic differentials in antenatal care utilization to a combination of poor access to health services, low education levels and poor demand. The women in south India utilized antenatal care significantly more than those in the north India for all the utilization indicators, with sharpest differences observed for ‘four or more antenatal visits’ The relatively poorer quality of antenatal care received by the poor and illiterate women especially in north India confirms the ‘inverse health care law’, where persons who need it the most get the least. The India’s National Rural Health Mission (NRHM), launched in 2005, should lay greater emphasis on improving the quality of antenatal care, among other things, to increase utilization of antenatal care and achieve better maternal health outcomes.<sup>4</sup>

K. S. Sugathan et al did a study regarding “Promoting Institutional Deliveries In Rural India: The Role of Antenatal-Care Services”. India’s maternal and child health programmes have not aggressively promoted institutional deliveries, except in high-risk cases. Mothers who received antenatal check-ups are two to five times more likely to give birth in a medical institution than mothers who did not receive any antenatal check-up. Mother’s age and education and child’s birth order also have strong effects on the likelihood of institutional delivery. It is well established that giving birth in a medical institution under the care and supervision of trained health-care providers promotes child survival and reduces the risk of maternal mortality. Child Survival and Safe

Motherhood (CSSM) and the Reproductive and Child Health (RCH) Programmes aim at expanding existing rural health services to include facilities for institutional delivery. The likelihood of giving birth in a medical institution depends on many factors, including urban/rural residence, mother’s demographic and socioeconomic characteristics, and availability and quality of health services. By concluding the study they suggests that it is possible to promote institutional delivery by promoting antenatal check-ups and associated counselling.<sup>5</sup>

Priyanka Dixit et al did a study on “Estimating the impact of antenatal care visits on institutional delivery in India: A propensity score matching analysis” Literature asserts that prenatal care is an imperative factor for subsequent health care utilization. The National Family Health Survey-III found that the coverage of institutional delivery is low at the national level and two out of five of all births took place at home. If a woman visited health centre three or more than three times, her chances were 31 percent higher to deliver in an institution. Others who did not make any ANC visit were having significantly less chance to reside in urban areas and they mainly belong to the eastern region followed by the central region, come from the poorest and poorer households and were mainly less educated.<sup>9</sup>

Adil H. Ibnouf et al did a study in Sudan regarding Utilization of antenatal care services by Sudanese women in their reproductive age. Utilization of routine antenatal health care services was approximately 5 times and application of TT-vaccination was 3.7 times higher in urban women as compared to women in rural areas. Socio-economic conditions of a household may influence healthseeking behavior. Women living in worse conditions consult private health services less and rely more on governmental health services than those living in better circumstances. Younger women are more likely to accept modern health care, as they are likely to have greater exposure to modern medicine

and have more schooling than older women. Older women would have accumulated knowledge on maternal health care and may give less importance to obtaining institutional care. Mother's education showed a nearly significant positive relationship both with the use of routine antenatal health care service.<sup>10</sup>

Gunjan Kumar et al did an analysis on Utilization, Equity And Determinants Of Full Antenatal Care In India: Analysis From The National Family Health Survey 4. Antenatal care (ANC) is an opportunity to promote a positive pregnancy experience and improved maternal and child survival. Antenatal period links the woman and her family to the Healthcare system and promotes higher utilisation of essential services like breastfeeding and nutritional counselling, post-partum family planning and childhood vaccination. Latest research has shown a lower still birth rate, among women with a minimum of 8 antenatal visits. In India, the proportion of pregnant women receiving the minimum 4 antenatal visits has increased from 37.0 to 51.2% during 2006–2016. By concluding the article they found that Full ANC utilisation in India was inadequate and inequitable.<sup>12</sup>

Mengesha Boko Geta et al on his study “Early Initiation of Antenatal Care and Factors Associated with Early Antenatal Care Initiation at Health Facilities in Southern Ethiopia”. Antenatal care (ANC) is care given to pregnant mothers to timely identify and mitigate pregnancy related problems that can harm mother or fetus. The care that was given to the mother during pregnancy, during delivery, and after delivery is important for the wellbeing of the mother and the child. All pregnant ladies are recommended to go for their first antenatal check-up in the first trimester to identify and manage any medical complication as well as to screen them for any risk factors that may affect the progress and outcome of their pregnancy. Inadequate access and underutilization of modern healthcare services are major reasons for poor health in the Developing countries.

Health professionals and care providers should provide full information and advice and appropriate care about early ANC for every eligible mother.<sup>13</sup>

Nomita Chandhiok et al did a study on “Determinants of antenatal care utilization in rural areas of India: A cross sectional study from 28 districts (An ICMR task force study)” Promotion of maternal and child health has been one of the most important components of the Family Welfare Programme of the Government of India and the National Population Policy-2000. Maternal care includes care during pregnancy and should begin from the early stages of pregnancy. One of the most important components of antenatal care is to offer information and advice to women about pregnancy related complications and possible curative measures for early detection and management of complications. Awareness of care during pregnancy and knowledge of pregnancy related complications were associated with increased utilization of antenatal care services. In conclusion there is a need for improving community awareness on maternal health and for motivating women to utilize maternal care services.<sup>14</sup>

Barun Bhai Patel et al did a study on pune Maharashtra regarding on “A study on knowledge and practices of antenatal care among pregnant women attending antenatal clinic at a Tertiary Care Hospital of Pune, Maharashtra”. The maternal health status of Indian women was noted to be lower as compared to other developed countries. Promotion of maternal and child health has been one of the most important components of the Family Welfare Programme of the Government of India. It was found that almost all the variables such as age, education, occupation, parity, type of family, and socioeconomic status (SES) had a significant association with awareness about ANC. Appropriate antenatal care (ANC) is one of the pillars to reduce mother's mortality and infant mortality. We also found a significant association between Socio-economic status and awareness about

almost all the factors of ANC. While concluding the article it is essential to have Specific intervention program need to be planned and conducted to improve their maternal health practices and eventually improve the health status.<sup>15</sup>

Heba H. Hijazi et al did a research on Jordan regarding “Determinants of antenatal care attendance among women residing in highly disadvantaged communities in northern Jordan: a cross sectional study” Millions of women in developing countries are more likely to experience life threatening and pregnancy-related complications because of a lack of access to adequate and good-quality antenatal care (ANC). Indicators of adequate care, as recommended by the World Health Organization (WHO), include providing pregnant women with four antenatal visits, of which the initial contact should be scheduled during the first trimester of pregnancy. ANC is a key strategy for reducing maternal morbidity and mortality directly by affording increased chances of the timely identification of high-risk pregnancies. The study suggest that the degree to which women feel that they are respected, informed, and engaged in their care has potential favourable implications for ANC.<sup>16</sup>

## CONCLUSION

Antenatal care is a key strategy for reducing maternal mortality, but millions of women in developing countries do not receive it. The problem of antenatal care in developing countries may be considered from two aspects: (a) areas where antenatal facilities are absent or are inadequate, and (b) areas where antenatal facilities are adequate but for some reasons are not adequately utilized. The most of the study shows that the incidence of neonatal complication is higher among the women's with incomplete adherence to antenatal visit .Various studies conducted worldwide and in India have recognized socio-economic factors and service delivery environment as important determinants for the use of

maternal health services. The following factors affects antenatal care utilization: maternal education, husband's education, marital status, availability, cost, household income, women's employment, media exposure and having a history of obstetric complications. Traditional beliefs and ideas about pregnancy also had an influence on antenatal care use. ANC make sure that the well-being of the mother and fetus through early detection of risks in pregnancy, prevention of pregnancy, and labor complications and make sure the safe delivery of mother and child. Incomplete access and underutilization of modern healthcare services are major causes for poor health in the developing countries. The present level of delivery planning is minimal and very little advice is given to pregnant women about aspects of pregnancy such as food intake, activity, danger signs in pregnancy, postnatal checks and breastfeeding. There is a need of enhancing community awareness about the importance for educating women about early detection of complications during pregnancy and promptly seeking care, and about the importance of giving birth in a health facility.

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