Pregnancy Experiences: Utilisation Of Antenatal Care Services In Assam, India

Mr. Kailash Jyoti Bora[1] , Dr. Mansy.M[2]

[1]M.A Sociology, 2019- '21Dept. of Sociology, Pondicherry University Puducherry, India.
[2]Assistant Professor Dept. of Sociology Pondicherry University, Puducherry, India.
Corresponding author: Dr. Mansy.M

Abstract

This article analyzes the factors influencing the utilization of antenatal care (ANC) services throughout pregnancy and the way it is managed. Antenatal care from qualified medical professionals gives expectant mothers the attention they need to achieve the best possible health for both the mother and the unborn child during pregnancy. Those care providers are supposed to facilitate women with information and assistance throughout the pregnancy and afterward. ANC services are the initial step in ensuring the health of the mother and child which is one of the basic needs during pregnancy. But for many pregnant women, notably in low- and middle-income countries, where a variety of dietary deficits typically coexist, awareness of healthy pregnancy and dietary consumption of nutritious food are frequently insufficient to meet these needs. Services of medical professionals are either inadequate or inappropriate in many of those regions. By examining the experiences of selected women from the Mountgaon district of Assam, this study looks at the factors affecting the accessibility of antenatal services for women. The study clarifies the lower-than-average use of healthcare services in the targeted area because of the non-availability of facilities, lapse in the proper healthcare management and socio-cultural peculiarities relating to women and their families. The analysis shows the impact of socio-economic and cultural factors on health-seeking

behaviour as well as the usage of the available healthcare facilities.

Keywords: Antenatal care, public health, maternal health, Health care management

1. Introduction

Although it isn't expressly addressed in the Constitution, the right to health is a fundamental human need. Everybody should have access to affordable healthcare whenever they need it, or in countries like India, free of cost. Health is one of the most important factors that have many contributions to human development. According to Amartya Sen (2014), health care promotes economic growth rather than being one it supports. In India, compared to many other nations, very little money is spent on the health sector. Poverty accumulation and persistence are significantly correlated with poor health. If adequate health facility is not accessible to people, they will not be able to come out of poverty. Those who fall into poverty and remain poor also suffer from numerous diseases. Therefore, one strategy for national development is to enhance the health sector (Paul et al., 2019).

India is also one of the most harshly affected countries by maternal death. The current maternal mortality ratio in India is 103 per 100,000 lives. India is one of the developing nations, contributing to around 27 million births annually and 20% of all maternal fatalities worldwide. (Ali and Chauhan, 2020). Eventually, the country placed a significant emphasis on the reduction of maternal mortality.

With the establishment of the First Five-Year Plan in 1951, antenatal care programmes in India got underway (1951–1956). The Third Five-Year Plan (1961–1966) employed auxiliary nurse midwives (ANMs) and health assistants as part of an expanded family planning strategy. This made some antenatal care components available to rural women. The Seventh Five Year Plan (1985–1990) saw the introduction of the Universal Immunisation Programme (UIP), which significantly increased the number of pregnant

women who could receive the tetanus toxoid vaccine (Pallikadavath et al., 2004). When family planning services were incorporated with maternity and child health care during the fifth five-year plan (1976–1979), they became a crucial component of the Indian health system. (Ali and Chauhan, 2020). In addition, The Child Survival and Safe Motherhood (CSSM 1991-92) and Reproductive and Child Health (RCH 1997-2002) programmes were taken further to enhance child survival and prevent maternal mortality and morbidity.

Antenatal care is provided through primary health centres in rural India, either in patients' homes or clinics. Primary Health Centers (PHCs), staffed by medical and other paramedical personnel, are referred to as PHCs. The Anganwadi[1] centers operating under the ICDS Programs also offer prenatal care services to pregnant women (Pallikadavath et al. 2004). “In the five years preceding the survey, only 12% of mothers reported receiving comprehensive prenatal care for their most recent birth, but by the time the study was conducted in 2005–2006 (NFHS–3), that number had risen to nearly 21% (2015–16)” (Ali and Chauhan, 2020). According to the NFHS-5(2019-21), it has increased about to 58.1% which is not satisfactory. Still, almost half of the population had not visited at least 4ANC checkups. The low rate of utilization of antenatal care services is often significantly associated with different socio-economic factors like economic status, place of residence, educational status, exposure to mass media, knowledge of ANC, adequate medical facilities including modern equipment, and availability of skilled health personnel.

In India, early marriage and pregnancy at a young age are threats to maternal health. The National Family Health Survey-(NFHS-5) indicates that 6.8% of adolescent pregnancies occur in India. In some rural areas of India, 27% of women between the ages of 20 and 24 are married before becoming 18 and 8% give birth before turning 18. Because they are biologically unprepared to handle pregnancy and are undernourished, teenage girls are more likely to experience obstetric complications, adverse pregnancy outcomes (specifically, low birth weight, prematurity, births

that are small for gestational age, and neonatal, postneonatal, and infant mortality), and morbidity. According to WHO recommendations, adolescent pregnancy and poor reproductive outcomes can be avoided by generating awareness and preventing early marriages. These issues stress the need to provide girls and women with quality education including health education and make them aware of their rights.

Being one of the states in the North-Eastern region of India, the scenario of the management and utilization of antenatal care services in Assam is substandard which is evident in its maternal and infant death rates. Rural Health Statistics of 2020-21 indicates that Assam is the second-highest infant mortality occurred state in India. The current MMR of Assam is 205 per 100,000 lives. Poor utilization of ANC is the main contributor to the high rate of maternal deaths along with other socioeconomic factors (Kakati et al., 2016). The majority of Assamese people live in rural areas, there is a rigid hierarchy and class structure shaped by tradition and long-standing customs, family, often a joint family, is a strong bonding force, isolation is brought on by distance and there is poor communication and transportation. These are some of the factors that have been linked to the poor utilization of healthcare services by Assamese mothers (Kakati et al. 2016). The NFHS-5 (2019–21) revealed an increase in both the intake of vitamin supplements and the proportion of women who underwent a prenatal checkup in the first trimester. Though these data are saying about the increase in percentage, some categories are still unsatisfactory and sometimes many cases do not come to light and disappear over time.

2. Review of literature

Many studies reveal that in order to reduce maternal morbidity and mortality, low-birth weight and prenatal mortality and prenatal mortality, antenatal care, also is needed (John et al. 2019; Rani and Harvey. 2007). The first step in ensuring the health of the mother and child is antenatal care services. To have a healthy mother and

healthy baby at the end of pregnancy is the main goal of prenatal care (Ojah et al. 2017). Hence, antenatal care is very much necessary for improving the health condition of both mother and the child because during pregnancy a woman experiences various biological and hormonal changes, therefore she needs to be treated with proper medicine, good nutrition, and proper guidance of dos and don'ts. Preventing issues, like anemia, and identifying pregnant women with known complications enable them to receive treatment or be transferred for better prenatal care (Pallikadavath, et al., 2004; John et al. 2019). Baruah and Boruah (2016) found in their study that Anemia was diagnosed in 61.69% of pregnant women overall. According to them, the anemia in pregnancy may be due to hem dilution, poor nutrition, poor absorption, parasitic infestation, and faulty food habits, poor sanitation and social taboos which may lead to high infant mortality, abortion, early birth, and intrauterine growth retardation, etc. They also identified a few sociodemographic characteristics including age, religion, maternal education, husband's education, marital status, employment status, etc. that are related to the use of antenatal care services.

In a nation like India, where newborn and child mortality rates are high and maternal death rates are also high, utilizing antenatal care services and maternal and child health activities was crucial. (Borah and Bora, 2017). If a mother or child would not get proper care during pregnancy there is a very high chance of post-pregnancy complications. However, such services and facilities are not accessible to everyone. There may be various reasons behind the lower rate of utilization of ANC services. The analysis of Kulkarni and Nimbalkar (2008) reveals that the independent and most significant factors impacting the usage of antenatal care among women were their education, religion, healthcare quality and media exposure. The same study shows that compared to women from economically backward households, women from well-to-do households were more likely to have between one and three ANC visits. Compared to women with no education, those with higher education were more likely to attend 1-3 ANC visits.

Similarly, compared to non-media-exposed Indian women, those who were exposed to the media (newspapers, magazines, and television) attended one to three ANC visits (F. A. Ogbo et al., 2019). Higher birth order, teenage and unplanned pregnancy, poorer maternal education, lower income quintiles, lack of involvement of the father in the prenatal visits, and lower wealth quintiles were all linked to reduced likelihood of full ANC usage (G. Kumar et al. 2019). To improve the health of the mother, knowledge, awareness, and motivation about the utilization of antenatal care services are very much needed (R. Kakati et al., 2016).

3. Methods

The study aims to analyse the accessibility and affordability of antenatal care services in the selected area of study. It also tried to find out the barriers affecting the utilization of antenatal care services. This analysis is based on the interviews conducted among the 15 selected women who had children between the ages of 0 and 2 years old using a semi-structured interview schedule composed of open-ended questions. The decision to choose mothers of this age group of children was made since these women have recently given birth and thus have a new experience in antenatal care.

4. Results and Discussion

In a patriarchal society like India, women are getting less importance than men and their issues are also often seen to be neglected by other family members. There are various reasons behind this negligence. This section discusses the kind of ANC services offered and the way it is used and the determinants in the utilization of ANC services.

Out of the 15 respondents, seven of them were in the age group of 18–14 years old, five were in the 25–30 age range, and three were in the range of 31–35 years. More than half of them were from the scheduled caste category, while the remaining respondents are from other backward communities and general categories. Despite the fact that

the infrastructure and amenities of the government hospitals are subpar, the majority of the women gave birth there, while one-third did so at private hospitals. And most of them delivered naturally, while the others underwent a C-section due to various birth-related complications.

4.1. Utilization of antenatal care services

Every new mother should have the opportunity to feel the delight of holding her child for the first time in her arms. Without the proper support, being a mother can be a traumatic and, in the worst scenarios, stressful experience. The World Health Organization (WHO) wants to see a world in which every expectant mother and newborn gets high-quality care throughout the pregnancy, delivery, and postpartum stages (Kumar et al. 2020). The foundations for healthy motherhood can be laid by women's positive experiences during ANC and childbirth., hence, World Health Organization recommended utilizing full antenatal care services, which helps to protect the infant and maternal health both from various complications.

Despite several recommendations from WHO, the accessibility and availability of basic services for pregnant women remains a challenge. In this study, only a few (27%) of the respondents completed their 8ANC visits during pregnancy (G. Kumar et al.2019). Around half of them had less than 4 ANC visits. The proportion of utilizing antenatal care and visits at least 4ANC in Assam according to National and Family Health Survey 5(2019-20) was only 50.7%, which is half of the total population. It has been pointed out that there are various reasons behind the lower utilization of ANC including economic status, educational background, religion and belief system and so on. “Implementing the most recent WHO recommendation of a minimum 8 ANC visits will be a major challenge for the national program in India since the percentage of women with 4 or more ANC visits is significantly lower than the global average of 61.8% (UNICEF, 2019).” All respondents of this study were injected with tetanus toxoid and 87% of them completed 100 days of iron and folic acid tablets. And in the case of the total proportion of consuming 100days of iron folic acid tablets in

Assam according to National Family Health Survey- 5 (2019-20) is only 47.5%. World Health Organization in its recommendation for antenatal care for a positive pregnancy experience (2016) brings out that early registration is very crucial for quality ante-natal care and a positive pregnancy experience, as it will not only help in the early detection of all existing health problems but also predict those which are likely to come up during pregnancy and thereby enable us to treat and prevent them (Kumar et al. 2020). Bella (imaginary name), 30years old respondent shared her experience during pregnancy:

"When I got to know that I am pregnant, I didn't have any idea what to do or what not to do, how to take care of the baby, and so on. My mother and mother-in-law taught me all about pregnancy and antenatal care. They provided me with proper care and nutrition. Proper nutrition is very essential for a healthy baby and also for maternal health. I didn't do any physical activity to maintain health, but I did some household work which is relatively lighter. I was not happy with the facilities provided by the government hospital and my nearest health center where no proper equipment was there and only very less health workers. The condition of the civil hospital was also not up to the mark, rooms were very dirty. During pregnancy, an Asha karm[12] came to my home only once to enquire about my pregnancy and there was no awareness activity or programme which could help us to know about antenatal care".

Many respondents of the study pointed out that most of them had taken proper nutrition during their pregnancy including fruits, vegetables, dairy products, grains, eggs, chicken, fish, dry fruits, nuts, fresh juice, etc, which helped them to get a healthy baby and to restore their health after delivery. Improved nutritional status along with better antenatal care helped them to reduce the incidence of low-birth-weight babies and thus reduce Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR). Antenatal services not only offer medical care but also include advice on a correct diet (Nair et al.2000). Since all of the respondents belong to rural areas, there was the availability

of fresh and healthy food was locally available. Most of them believe that the food available in their village is pure which is free from chemical fertilizers and pesticides and hence their nutrition was proper at the time of pregnancy. However, the medical facilities provided by the government were seen to be unsatisfactory. The condition of government hospitals was substandard. It was accompanied by poor infrastructure, poor sanitation, poor diet provided at the hospital, limited hospital beds, ICU beds, oxygen cylinders, and so on. Along with these problems, the behavior of the nurse and doctors at the government hospitals were not friendly, they very often talked with the patients very roughly. Two of the respondents narrated their experiences in the hospitals during their pregnancy. Elsa (name changed), 30 years old, stated that:

"When I was taken to the hospital (government) and delivered a baby girl, she was well. But after 2 days she was suffering from jaundice and she was taken to the baby care room. I used to check most of the time whether my baby was well or not and I also requested many times to the doctors to give some more attention to my baby which could help her cure quickly. But the doctor didn't give much attention to her and if I asked him about her condition, he roughly replied that 'I am doing my duty, don't try to pressurize me, I have to see other patients also'. And when her condition become more critical, we decided to shift her to a private hospital, but the doctor didn't agree to transfer. At last, we had to tell him that 'if anything happens to the newborn, will you take responsibility'? And then he discharged her but it was too late, eventually, she died."

In the words of another respondent Merida (34):

"I saw a woman deliver a baby in the corridor of the Govt. hospital I was admitted for delivery. In the absence of competent doctors and nurses, I was astounded to see how certain hospital workers and midwives handled her.

These two incidents revealed the reality of mismanagement and negligence in government hospitals, especially in rural

areas. The respondents shared their experience at the private hospitals that, the facilities in private hospitals were relatively better in terms of infrastructure, sanitation, diet provided at the hospital, medical equipment, skilled doctors and nurses and other health workers, etc. The behavior of the doctors and nurses in private hospitals was reported to be good.

The number of respondents who received the benefits of government schemes during pregnancy is very less. Only 27% of them received PMMVY (Pradhan Mantri Matru Vandana Yojana) where they received an amount of 6000 rupees during pregnancy. In order to be eligible for this programme, a pregnant woman must register for it at the Anganwadi Centere (AWC) within four months of conception, go to at least one prenatal appointment, and take iron-folic acid tablets and TT injection (G. Kumar et al.2019). H. Kumar et al. 2020 mentioned in their study that in Mangaluru district of Karnataka state, only 26.6% of people used government schemes. Angadi et al, pointed out that in Karnataka, among the mothers, 57% had used the Janani Suraksha Yojana, 29% had used the Prasuthi Araike Yojana, and 65% had used the Madilu Yojana. (H. Kumar et al. 2020). The present study found that 27% received the PMMVY scheme, but none of them received any other government schemes including Janani Suraksha Yojana, PM Jan Dhan Yojana, Pradhan Mantri Surakshit Matritva Abhiyan and Mamoni; a state-sponsored programme in Assam. In this context, the main reason behind the lower rate of utilizing government schemes is the lack of awareness as pointed out by Tiana (imaginary name), 24 years old woman who went through similar experiences:

“I didn’t receive any benefits from the Govt. and I was not aware of any such schemes. Once I enquired with the anganwadi center, but I didn’t receive any information about the schemes”.

Hence, the government needs to equip health workers, Asha Karmis, and Anganwadi workers who can provide sufficient information to the community about antenatal care services

and government schemes. Availability of adequate and effective infrastructure in hospitals, upgraded machines and equipment for diagnosis and treatment are some of the basic requirements of the people.

4.2 Determinants of antenatal care

Antenatal care is basically an opportunity to improve maternal and child survival and to provide a happy pregnancy experience. Given that it falls within the "1000 days" window, prenatal care is equally crucial to the child's long-term growth and development (G. Kumar et al.2019). As recommended by the WHO, 62% of pregnant women globally had at least four prenatal consultations between 2010 and 2016. However, the WHO has since increased the recommended number of antenatal visits from four to eight (UNICEF,2019). More than 500,000 mothers die each year because of pregnancy and pregnancy-related complications (WHO, 2016). It is possible to prevent a significant number of maternal deaths by providing the right care and management during pregnancy and labour. Maternal mortality rates are high in developing nations like India, where maternal healthcare facilities fall short of expectations. This creates a barrier to improving maternal health (Boruah and Boruah, 2016). In developing countries like India, utilization of antenatal care is determined by various factors including educational qualification, economic condition, transportation, exposure to mass media, and other socio-economic factors.

Women's education was found to be a significant predictor of prenatal care use in several developing countries (S. Pallikadavath et al., 2004). In this study, the majority of the respondents (around 40%) have completed their high school level education and some of them even drop out in the 8^{th} or 9^{th} standard of schooling. 6% of them have completed primary level education, 27% have completed their secondary level education and 27% have completed their graduation. Many studies reveal that the level of education is the key determinant in the use of ANC services. Those with

more education are likely to utilize antenatal care services more. In the current research also, the researcher found that those who have completed their graduation likely have to utilize ANC services more than others, on the other hand, those who have completed their education till high school level are less aware of ANC services. Even most of them are unaware of what is WHO and the recommendations for pregnant women. Numerous pieces of research show a connection between maternal education and prenatal care use in India. According to Bhatia and Cleland (1995), In the Indian state of Karnataka, prenatal care utilisation was influenced by maternal education levels. Similar results were reported by a study that covered the four southern Indian states of Kerala, Tamil Nadu, Karnataka, and Andhra Pradesh. (Navaneetham & Dharmalingam, 2002). In reality, a national study carried out by the Indian Medical Council Research (ICMR) in 90 districts of the nation in 1999 came to the conclusion that improving prenatal care in India requires women to be more literate (S. Pallikadavath et al., 2004).

Another determinant found to be associated with the use of antenatal care services is the socioeconomic status of the family. Maternal mortality is higher in women living in rural areas and among poorer communities (WHO, 2014). Those whose economic conditions are sound and living a higher standard of life likely have to utilize more ANC services. In this study, half of the respondents are from below the poverty line. This status is again associated with their occupation such as agriculture and allied work, daily wage, work in the service sector, business and so on. The majority of the respondents to this research, or 46% of them, were involved in agriculture, 27% in small enterprises, 20% in services, and 7% in jobs paying only a daily income. People with better economic status are likely to utilize ANC services more than the other classes. Similarly, lower-class people due to insufficient wealth and lack of awareness were less likely to use ANC services than the wealthy class. Velma (name changed), 23 years old respondent of the study said,

“Our economic condition is not well. We earn on a daily basis and have to depend on work. If we missed one day of work then we have to face several shortages. I use to go to work every day and during pregnancy, till the 5 months I used to go to work”.

This demonstrates the degree to which respondents felt economically compelled to act in any way because of the poor economic conditions. Women in the greatest income quintile use antenatal care to the fullest extent possible more frequently than women in the poorest wealth quintile. This evidence is consistent with the earlier research's conclusions. In India, women in the highest wealth quintile were also more likely to obtain comprehensive prenatal care than those in the lowest wealth quintile (Ali and Chauhan, 2020).

This study shows that exposure to the media and the use of ANC services are both related. Here, 53% of the women included in the study have access to newspapers and magazines and 80% of them have access to television. Exposure to mass communication channels such as television, radio, and newspaper have an important influence on creating awareness and reproductive health behavior (Kulkarni & Nimbalkar, 2008). Through mass media, people get to know more about antenatal care, different government schemes, postnatal care, and so on. One respondent said that during her pregnancy she didn’t have any knowledge about government schemes related to antenatal care. But through the television, she got to know about PMMVY (Pradhan Mantri Matru Vandana Yojana) scheme where she received 60000/ rupees. It is observed that most of the respondents of this study weren’t aware of using mass media in an effective way. In every state, there was a significantly higher likelihood of women seeking prenatal care if they watched television every week. This was the second most important element that positively impacted antenatal care, behind education (S. Pallikadavath et al.,2004).

Transportation and communication are other major determinants that influence the utilization of antenatal care. A pregnant woman can't walk too long distances and hence proper transportation facilities are a basic requirement during pregnancy. The majority of the respondents of the study i.e.; around 46% associated with agriculture and 7% are daily wage earners and they used to go to the hospital by public transport only. But during the time of the Covid-19 pandemic, public transport was also closed. People without access to private transportation were forced to endure uncomfortable circumstances. Those who have better transportation facilities likely to utilize more ANC services than others.

In India, religion and caste are very significant factors that influence beliefs and social practices associated with pregnancy (Bhatia & Cleland, 1995). Panchamrit[3], saptamrit[4], hudi and kosujal[5] are some of the rites practiced by several people of Assam in connection with pregnancy and childbirth. Hudi is a caste-based ritual followed by the lower caste people as its name is related to Shudra (in Assamese Shudra is called Hudra so the ritual is called 'Hudi'), where their child is purified by a Brahmin. And the rest of the rituals are followed by all caste groups. For many people, these practices are more essential than getting the right medical care. In the words of Elsa (imaginary name):

"I witnessed an incident in my younger age where a baby was suffering from chicken pox and his condition was very critical. But his parents were doing some rituals rather than taking him to a hospital. And at last, when he didn't cure by rituals then his parents took him to the hospital and finally, he was cured of pox".

This incident pointed out the prevalence of beliefs in superstitions in the area and one of the reasons behind this is the lack of education and scientific temperament. In terms of caste, people from Other Backward Classes utilised prenatal care at a higher rate than people from scheduled castes and scheduled tribes (S. Pallikadavath et al., 2004). In this research majority, 53% are from scheduled caste, 34%

from OBC and 13% of them from upper caste. The majority of scheduled caste people have only school education till high school and most of them are engaged in agriculture and allied occupations. Similarly, their utilization of ANC services is also less, which is often associated with a lack of information and non-availability of the services.

Women's work positions and family structure are found to be influential in the use of ANC services. In many villages, joint families exist, where 3 generations live together. Most often the burden of all the household chores falls on the woman, who has to do each and every household duty. They may not have time for themselves. Even during pregnancy, this was seen and in many cases till 5 months of pregnancy, she has to do all the household duties, which may affect the maternal and natal health or both. Similarly, women who are employed are likely to use better ANC than women who are not working. Most of them are more aware of the need to have proper ANC during pregnancy. The role of their higher level of education and exposure in society and mass media had its own influence in this regard.

Early marriage is also linked to lower ANC service utilisation rates. In this research, it is found that 27% of them married at a very younger age. Women who married at an early age are less likely to receive ANC services due to lack of awareness and inexperience. Many of them were too young to even understand the complexities of marital life and pregnancy. And if a teenage girl is married to a joint family, the situation becomes again tougher. She has to manage household duties at a young age and during this time antenatal care is not a concern for most of them. Hence, it has been seen that marriage at proper age is more likely to use ANC services than marriage at an early age. In this study, 2 of the respondents were married when they were studying in the 9^{th} standard, which is both illegal and a threat to their health if she becomes pregnant at such an age. Anna (21 years) went through anxieties but she had a better experience at her husband’s house:

"When I got married, I was very scared about what I will be doing at in law's house. Though my mother taught me what to do and what not to do, my worries were with me. But I am very lucky that I got in-laws like my parents. They were very helpful during my pregnancy and they took care of me, they provide me with good nutrition, took me to the hospital for regular checkups and also shared household duties with me". However, this is not the situation of many other women.

The WHO recommendations state that raising awareness and avoiding early marriages can help prevent pregnancy and poor reproductive outcomes in teenagers. To improve maternal health, the 0bstacles that prevent women from receiving high-quality maternal healthcare need to be identified and addressed at all levels of the healthcare system.

5. Conclusion

This study was conducted in Moutgaon village of Golaghat district, Assam among a total number of 15 respondents having children in the age groups between 0-2 years. The data were collected through a semi-structured interview schedule with open-ended questions to analyze the use of antenatal care services and the determinants of utilizing them in Assam. This study shows that ANC services are not widely used in the area. Recommendations of WHO that 8ANC visits, at least one tetanus toxoid (TT) injection and consuming 100 days of folic acid and iron tablets were not fully utilized by the respondents. Only one-fourth of them completed the recommended 8 ANC visits, while the remaining ones had only gone to 2–5.

A lower rate of utilization of full antenatal care services is not out of intention, there are several factors that keep people away from the services. The utilization pattern is influenced by factors including caste, income, education, and media exposure. The majority of the respondents have incompleted school education and their knowledge and awareness about health care in general is minimal. This analysis shows that most respondents from the scheduled

castes and low-income categories are less likely to utilize ANC services than the women from other categories. The study found that the income of the respondents and their families who are engaged in agriculture is very low. As a result, the entire family, including the children, chose to work rather than pursue higher education. Most of them after high school level end up their education career and started to engage in agriculture or any other way of earning money. Thus, it affected their level of awareness and knowledge about health care including pregnancy-related issues. Hence, their utilization of antenatal care services is also reported to be very less.

Through mass media including newspapers, television, radio, and magazine, people can get to know about antenatal care and services, government facilities and different schemes associated with pregnancy and childbirth. In several parts of the country including the rural areas, people follow various beliefs and practices which are associated with socio-cultural life. Instead of taking the women to the doctor for ANC checkups, they might prioritise performing these rites. So, religion and caste play a significant role in the utilization of antenatal care services.

As informed by a health official in an informal interview, 'health literacy' is extremely crucial for the successful utilization of health care services. Health literacy doesn't indicate only education qualification, but it indicates the awareness and understanding of health-related issues and information. A lower rate of health literacy along with the problems of teenage marriage and pregnancy in riverine areas and the lack of specialists in government hospitals resulted in lesser utilization of health care services.

The state has a responsibility to offer its inhabitants access to high-quality medical facilities. The services provided by the authorities through prenatal and postnatal schemes like the Janani Suraksha Yojana (JSY), Pradhan Mantri MatruVandana Yojana, Pradhan Mantri Surakshit Matritva Abhiyan and LaQshya programs are not sufficient and the majority of the people are not aware of them. Due to a lack of promotion for them and information dissemination

through workers at the ground level, these programmes cannot reach many locations. Regardless of caste, wealth, or other factors, everyone must have access to high-quality healthcare. Only by providing the public health care system with innovative and effective medical devices, modern amenities, infrastructure, and trained medical personnel could that become a reality.

Notes:

1. Anganwadi refers to a kind of rural childcare facility in India.
2. Asha Karmi Karmi works as a health worker at the community level for the Ministry of Health and Family Welfare in India as a part of the National Rural Health Mission (NRHM).
3. Panchamrit denotes a ritual that is celebrated in the 5th month of pregnancy and in which five different types of healthy foods are served to the pregnant lady and give blessings to both mother and child for a healthier life.
4. Saptamrit is a custom to feed the pregnant woman seven different kinds of food in the seventh month of her pregnancy to bless both the mother and the unborn child with a longer, healthier life.
5. Kosujal is performed on the 3rd day of delivery where dishes out of specific leaves are served to the mother for increasing her milk production.

References

1. WHO recommendations on antenatal care for a positive pregnancy
Experience .2016. WHO.,
https://www.who.int/publications/i/item/9789241549912
2. WHO.2014. Maternal Mortality, Fact sheet. https://apps.who.int/iris/bitstream/handle/10665/112318/WHO_RHR_14.06_eng.pdf
3. Borah, Hiyeswar, & Bora, Parash Jyoti (2017). Utilization of Antenatal Care Services in Rural Areas of Jorhat. Scholars Journal of Applied Medical Sciences (SJAMS),5(8C), 3179-3184. http://saspublisher.com
4. Baruah, Anju & Boruah, Beeva (2016). Utilization of antenatal care services and correlates of anemia among

pregnant women attending a tertiary care hospital in Assam, India. International Journal of Community Medicine and Public Health, 3(8), 2142-2149. http://.ijcmph.com

5. Kakati,Rana Barua, Kabita & Borah, Madhur (2016). Factors associated with the utilization of antenatal care services in rural areas of Assam, India. International Journal of Community Medicine and Public Health,3(10), 2799-2805. http://.ijcmph.com
6. Ojah J., Sharma, S., Baishya, A. C. & Barman, P. J. (2017). 'Study on the Utilisation of Antenatal Care Services in Urban Slums of Guwahati (metro) city, Assam. Indian Journal of Applied Research, 7(11).
7. John, A., Binu, V., Unnikrishnan, B. (2019). Determinants of antenatal care utilization in India: a spatial evaluation of evidence for public health reforms. Public Health, 166, 57-64.
8. Pallikadavath Saseendran, F. Marry, Stones, R.W. (2004). Antenatal care: provision and inequality in rural north India, Social Science & Medicine, 60(6), 1147-1158.
9. Ogbo, F.A., Dhami, M.V., Ude, E.M., Senanayake, P., Osuagwu, U.L., Awosemo, A.O., Ogeleka, P., Akombi, B.J., Ezeh, O.K., Agho, K.E.(2019). Enablers and Barriers to the Utilization of Antenatal Care Services in India, International Journal of Environmental Research and Public Health, 16(17), 3152.
10. Kulkarni M.S. , Nimbalkar M.R. (2008). Influence of Socio-Demographic factors on the Use of Antenatal Care, Indian Journal of Preventive and Social Medicine, 39(3-4).
11. Rani, M., Bonu, S., Harvey, S. (2007). Differentials in the quality of antenatal care in India, International Journal for Quality in Health Care, 20(1), 62-71.
12. Kumar, G., Choudhary, T. S., Srivastava, A., Upadhyay, R. P., Taneja, S., Bahl, R., Martines, J., Bhan, M. K., Bhandari, N., & Mazumder, S. (2019). Utilisation, equity and determinants of full antenatal care in India: analysis from the National Family Health Survey 4. BMC Pregnancy and Childbirth, 19(1). https://doi.org/10.1186/s12884-019-2473-6
13. Ali, B., & Chauhan, S. (2020). Inequalities in the utilisation of maternal health Care in Rural India: Evidences from National Family Health Survey III & IV. BMC Public Health, 20(1). https://doi.org/10.1186/s12889-020-08480-4
14. Kumar, H., Chacko, I. V., Mane, S., N. Govindan, N., & Prasanth, S. (2020). Study of utilization of antenatal care services and its determinants among pregnant women admitted in a tertiary care hospital in Mangaluru,

Karnataka, India. International Journal Of Community Medicine And Public Health, 7(5), 1960. https://doi.org/10.18203/2394-6040.ijcmph20202014

15. Antenatal care. UNICEF DATA.2019. [https://data.unicef.org/topic/maternal-health/ antenatal-care/].
16. Nair PM, Chandran A, Sabu A.(2000) The effect of maternal health programmes on infant and child survival in India. Journal of Family Welfare, 46(1), 61-9.
17. Paul Kr. Pranjit , J. K. Sebak, M. Adwaita (2019). An Analysis of Health Status of the State of Assam, India. RESEARCH REVIEW International Journal of Multidisciplinar, 4(3), https://www.researchgate.net/publication/332186937_An_Analysis_of_Health_Status_of_the_State_of_Assam_India
18. National Family Health Survey (NFHS-5) 2019-21. 2021. Ministry of Health and Family Welfare, Govt of India.