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Original Research Article

PROFILE OF WOMEN ATTENDING ANC CLINIC OF RHTC OF A MEDICAL COLLEGE

Sandhya Kumari Suman[1], Amita Sinha[2], Prabhat Kumar Lal[3]

[1]Assistant Professor, Department of Community Medicine, Nalanda Medical College, Patna, Bihar, India
[2]Professor & HOD, Department of Community Medicine, Nalanda Medical College, Patna, Bihar, India
[3]Professor, Department of Community Medicine, Darbhanga Medical College, Darbhanga, Bihar, India

ABSTRACT

Background: Antenatal care (ANC) is crucial for maternal and child health in rural India. Understanding the demographic and obstetric profiles of women attending ANC clinics is essential for tailoring healthcare services. **Materials and Methods:** A cross-sectional study was conducted among pregnant women attending an ANC clinic in rural Bihar. Data were collected on socio-demographic characteristics, obstetric history, and ANC utilization. **Result:** The study found a high prevalence of anaemia (53%) among participants. Most were aged 20-25 years, illiterate, and from lower socioeconomic backgrounds. While ANC utilization was moderate, many women lacked essential vaccinations and screenings. **Conclusion:** The study highlights the need for improved access to ANC services, nutritional interventions, and educational programs to address the specific needs of pregnant women in rural India.

INTRODUCTION

Antenatal care (ANC) is a critical component of maternal health services, particularly in rural areas of India, where access to quality healthcare can be limited. The primary objective of ANC is to ensure the health of both the mother and the child throughout pregnancy, necessitating a comprehensive understanding of the demographic and obstetric profiles of women attending these clinics.

Research indicates that among women attending ANC, the highest representation is among those aged 23-27 years. In a study conducted in a tertiary care hospital, it was found that 29.2% women were educated up to high school and 61.7% belonged to joint families, highlighting the socio-cultural context influencing maternal health.[1] Another study found that the prevalence of anaemia among these women was alarmingly high at 45%, indicating a significant public health concern that requires targeted interventions.[2] Despite high ANC utilization rates, which were approximately 80%, regular attendance was inconsistent, with many women failing to return for follow-up visits. This inconsistency may be attributed to various socio-economic factors, though one study indicated no significant barriers related to literacy or socio-economic status affecting service utilization.

Understanding the demographic and obstetric profiles of women attending ANC clinics is essential for tailoring health services to meet their specific needs. This research aims to fill the existing gaps in knowledge and improve maternal health outcomes in rural India by addressing the barriers to consistent ANC attendance and enhancing the quality of care provided.

Objectives

The present study was conducted with the following objectives:

- To determine the socio-demographic characteristics of women attending the ANC clinic at the RHTC of the medical college.
- To identify the factors that influence women's decision to attend the ANC clinic.
- To assess the quality of ANC services provided at the RHTC.

MATERIALS AND METHODS

Study Design and Setting: To conduct a hospital-based study on the profile of women attending antenatal care (ANC) clinics, a cross-sectional descriptive design was employed. The study was carried out at the Rural Health Training Centre (RHTC) of a tertiary care hospital, specifically targeting married pregnant women aged 18-45 years who visited the ANC clinic.

Data Collection: A structured, predesigned, and pre-tested questionnaire was utilized to collect data on socio-demographic and obstetric profiles, including age, religion, family type, education, occupation, and reproductive history. Data collection was done with

informed consent obtained from each participant prior to the interview.

Sample Size and Participants: The sample size was determined based on an estimated ANC utilization rate of approximately 81.1%, with a confidence interval of 95% and a precision of 10%, resulting in a required sample size of around 162 participants.[3] A total of 170 women were included in the study to ensure adequate representation.

Inclusion criteria

Pregnant women aged 18-49 years, women who had attended at least one ANC visit at the hospital, and women who provided informed consent to participate in the study.

Exclusion criteria

Women who were unable to provide informed consent due to cognitive impairment or other factors, and those who were not willing to participate in the study.

Ethical Considerations: Informed consent was obtained from all participants prior to their involvement. Confidentiality of participant data was maintained throughout the study.

Data Analysis: The collected data was analyzed using statistical software MS Excel and SPSS v20, employing appropriate statistical tests to identify significant associations between demographic factors and ANC service utilization. This methodology aimed to provide insights into the barriers and facilitators affecting ANC attendance among women in the region.

RESULTS

In the present study conducted on 162 pregnant ladies, 54% of them belonged to the 20-25 years age group, and 37% were in the 25-30 years age group, while 6% of pregnant ladies were below 20 years of age. The mean age of participants was 22.9 years (SD=5.32). Forty-three percent of pregnant ladies were illiterate, and 97% were housewives. Forty-two percent stayed in nuclear families, and 81% belonged to the lower middle class as per the modified BJ Prasad classification.

Regarding gravidity, 28% were primi gravida, gravida 2 were 26%, and gravida 3 were 27%.

Concerning ANC care, 68% of pregnant ladies had three ANC visits, and 59% had taken TT injections. Sixty-three percent had taken folic acid and iron tablets. Fifty-three percent of pregnant ladies had anaemia, 10% oedema of the feet, and 2% pregnancy-induced hypertension.

Almost 74% of pregnant ladies had undergone HBs Ag, VDRL, and HIV investigations, 42% haemoglobin, 61% blood grouping, 59% urine albumin sugar, and 67% blood sugar tests.

There were 193 previous deliveries, out of which 77% were normal deliveries and 23% were LSCS. Sixty-seven percent delivered in government hospitals, 14% in private hospitals, and 19% delivered at home.

In this study, we found that high-risk pregnancies constituted 44%, and the main reasons for being high-risk were previous LSCS (52%), anaemia (40%), and gestational diabetes (3%). High-risk pregnancy was more common among multigravida, consanguineous marriage, nuclear family settings, illiterate women, and those above 25 years of age.

DISCUSSION

Study Design and Setting: The study employed a hospital-based observational, cross-sectional design, which is consistent with other studies in the field. For instance, a study conducted in Chakia also utilized a similar observational approach to assess the demographic profile of antenatal women attending a district combined hospital (DCH).[4] This design is advantageous for capturing a snapshot of the population's health status and service utilization at a specific point in time, allowing for effective comparisons across different demographics.

The study setting, focusing on a tertiary care hospital, aligns with the findings from the District Level Household and Facility Survey (DLHS-4), which utilized multi-stage sampling across various states to assess maternal health. Both studies highlight the importance of hospital settings in understanding maternal health dynamics, particularly in rural areas where access to healthcare can be limited.[5]

Major Findings: Demographic Profile: The findings revealed that 54% of participants were aged 20-25 years, with a mean age of 22.9 years (SD=5.32). This is consistent with demographic trends observed in other studies, where younger women predominantly attended ANC services.[6] The high percentage of illiteracy (43%) among participants is concerning, as it correlates with findings from the DLHS-4, which indicated that lower educational levels are associated with reduced healthcare-seeking behavior.[5]

Health Status and ANC Utilization: The study found that 68% of participants had three ANC visits, and 59% received Tetanus Toxoid (TT) injections, which is a positive indicator of ANC service utilization. However, the prevalence of anaemia at 53% highlights a significant public health concern, similar to findings from other studies that report high rates of anaemia among pregnant women, particularly in rural settings.[2] The association of high-risk pregnancies (44%) in this study, primarily due to previous LSCS and anaemia, aligns with the findings from the Chakia study, which also explored high-risk factors among pregnant women.[4]

Socioeconomic Factors: The study indicated that 81% of participants belonged to the lower middle class, reflecting the socioeconomic challenges faced by many women in accessing quality healthcare. This finding resonates with the DLHS-4, which emphasized the need for targeted interventions to improve maternal health outcomes among lower socioeconomic groups.[5] The prevalence of high-risk pregnancies being more common among

multigravida, consanguineous marriages, and women over 25 years of age in this study further supports the need for tailored healthcare strategies.

Comparison with Existing Literature: Demographics and Educational Background: The demographic profile observed in this study aligns with findings from other studies conducted in rural India. For instance, Pati et al reported that a significant number of pregnant Odisha were also in the age group of 20-30 years, reflecting a broader trend across rural settings.[7] The high illiteracy rate among participants is concerning and is consistent with findings from Lodha et al which link low educational attainment to poorer maternal health outcomes. This suggests that educational interventions could play a crucial role in improving health literacy among pregnant women.[6]

Utilization of Antenatal Care Services: The finding that only 68% of women had three or more ANC visits is concerning given national guidelines recommending at least four visits. This is comparable to research by Ahmad et al who found that only about 52% of women in rural areas received adequate ANC services.[8] Barriers such as lack of awareness, transportation issues, and cultural factors often hinder access to these essential services. Singh et al further emphasized that these barriers disproportionately affect illiterate women and those from lower socioeconomic backgrounds, highlighting the need for targeted outreach programs.[5]

Maternal Health Issues: The prevalence of anaemia at 53% is alarmingly high and echoes findings from national surveys indicating that anaemia affects nearly half of all pregnant women in India, as reported by the National Family Health Survey (NFHS-4). Ahmad et al noted that inadequate dietary intake and lack of iron supplementation contribute significantly to this issue. Additionally, the presence of pregnancy-induced hypertension at only 2% may be underreported due to limited screening practices in rural settings, underscoring the need for improved monitoring.[6]

High-Risk Pregnancies: The identification of high-risk pregnancies in this study aligns with existing literature highlighting similar trends. Ahmad et al reported that previous LSCS was a leading cause of high-risk pregnancies, corroborating our findings where it accounted for 52%.[6] Furthermore, Ibrahim et al documented associations between high-risk pregnancies and factors such as consanguineous marriages and maternal age above 25 years, which aligns with our observations.[9]

CONCLUSION

In conclusion, this study's findings are consistent with existing literature, highlighting the critical areas of concern in maternal health, particularly in rural settings.[10] The high rates of anaemia and the prevalence of high-risk pregnancies underscore the need for enhanced ANC services and educational interventions. This study provides critical insights into the demographic profile and health challenges faced by pregnant women attending ANC clinics in rural India. The high rates of illiteracy, inadequate utilization of ANC services, prevalence of anaemia, and significant proportion of high-risk pregnancies highlight the pressing need for comprehensive strategies aimed at improving maternal health outcomes. Future studies should continue to explore these themes to develop effective strategies for improving maternal health outcomes.

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