

# Factors Influencing Postnatal Care Service Consumption Among Santal Women

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## ABSTRACT

Postnatal care (PNC) is an important service in the prevention of maternal and child morbidity and mortality, but the utilization of PNC is not equally distributed among the tribal and disadvantaged communities in India. The objective of this study was to explore the utilization of postnatal care among Santal women in West Bengal and to identify the important factors that influence the utilization of postnatal care. A cross-sectional study was conducted among 260 Santal women who had given birth to their babies in the last six months.

The results that were obtained from the study revealed that the utilization of institutional delivery services is high, but the initiation of postnatal care services is very poor. The majority of the women received postnatal care services within two to three days of delivery. However, only a few women received postnatal care services within the first 24 hours of delivery. The low educational status and economic status of the women were the major barriers that hindered the optimum utilization of healthcare services. The women who were involved in domestic work and informal work had poor postnatal care service continuity compared to the women who had high socioeconomic status. The results revealed that there is an increased dependency on formal healthcare providers rather than traditional practitioners. This revealed that the women are gradually adopting institutional maternal care services. The role of ASHAs and ANMs was important in facilitating postnatal care services.

The research also points out the need for an integrated and culturally sensitive intervention that incorporates health education, strengthening referral services, and community-based follow up. Traversing the educational and economic challenges is also important in the improvement of the utilization of postnatal care service among the Santal women.

**Keywords:** *Postnatal Care, Santal Women, Maternal Health, Tribal Women, Healthcare Utilization.*

## I. INTRODUCTION

Postnatal care, which includes a variety of treatments targeted at improving the health and well-being of mother and infant in the postpartum period, is an essential element of maternal healthcare. There has been great strides in improving the health of mothers and children in India, but there are still inequalities in the availability and use of postnatal care services, especially for disadvantaged groups like the Santal women. One of the biggest tribal communities in India is the Santal community, which is mostly located in the states of Bihar, Odisha, Jharkhand, and West Bengal. Postnatal care is only one of many healthcare treatments that Santal women have many obstacles to obtaining, despite their deep-rooted traditional traditions and rich cultural history.

Both the mother's and the newborn's health are paramount throughout the postnatal period, which is usually the first six weeks after delivery. Babies are especially susceptible to a number of health hazards at this time, and mothers are going through a lot of changes on a physical, emotional, and social level. This is the time when you really need good postnatal care in order to deal with any problems that may

arise, encourage breastfeeding, make sure you eat well, and advise you on family planning. There has to be focused interventions to increase access and usage of postnatal care services among Santal women, since research reveal that their consumption is low. To effectively address current gaps in healthcare delivery, it is essential to understand the variables that influence the utilization of postnatal care services among Santal women. The underutilization of postnatal care services among Santal women is caused by a combination of socio-cultural, economic, and geographical issues. Many women avoid getting the medical treatment they need after giving birth because of stigmatizing cultural customs, outdated beliefs, or a lack of knowledge about the necessity of postnatal care. In addition, the lack of healthcare facilities, particularly in rural and isolated locations where many Santal tribes live, makes it even more difficult for these women to get the postnatal care they need.

Postnatal care services provide a range of essential health care services that are aimed at ensuring the physical, as well as the psychological, well-being of the mother as well as the child after birth. It is important to note that although India has made substantial improvements in the health outcomes of mothers and their children over the past several decades, it is important to note that not all women are benefiting from the improvements that are being made. This is especially true when considering the postnatal care services that are available to socially and economically disadvantaged groups, such as the Santal women living in India. The Santal are one of the largest indigenous groups living in India, with a strong sense of cultural identity, traditions, and social practices, mostly living in the states of Bihar, Odisha, Jharkhand, and West Bengal. Despite their strong sense of cultural identity, traditions, and social practices, the women are faced with a range of barriers to postnatal care services.

The postnatal period, defined as the first six weeks postpartum, is recognized as a critical period for both maternal and child survival and health. This is the time when the newborn is more vulnerable to infections and developmental complications, while the mother undergoes considerable physiological, emotional, and social changes. Postnatal care is known to play a very important role in the early detection and management of postpartum complications, promotion of optimal breastfeeding practices, and provision of appropriate nutrition to the mother, as well as education on the care of the newborn and family planning. Nevertheless, the available literature reveals that postnatal care service uptake is low among Santal women, highlighting the need to address the issue with the help of appropriate interventions.

The low uptake of postnatal care services among Santal women is influenced by a variety of factors, including those that are socio-cultural, economic, and geographical. For example, the deeply rooted traditional beliefs, traditional postpartum practices, and lack of awareness about the importance of postnatal care may discourage women from seeking postpartum care. This is further complicated by the physical inaccessibility of postnatal care services, especially in rural and remote areas where most Santal women are located.

The educational level, economic status, and gender dynamics of the Santal community also have a bearing on postnatal care-seeking behavior. Women with lower educational qualifications and economic status often face barriers in terms of affordability, decision-making, and access to information. Gender dynamics in the Santal community, in relation to women, also have a bearing on postnatal care-seeking behavior. Women in the Santal community, with lower educational qualifications and economic status, often face barriers in terms of affordability, decision-making, and access to information.

Interventions that would improve the low level of postnatal care-seeking behavior in the Santal community of Bangladesh would have to be community-centered and culturally sensitive. Interventions that are community-centered and culturally sensitive, and also create awareness among women regarding postnatal risks, would be effective in improving postnatal care-seeking behaviour in the Santal

community. Empowerment of women in the Santal community, through education and community participation, is critical in improving postnatal care-seeking behaviour.

## II. REVIEW OF LITERATURE

Mahmood, Atiyaet al., (2023) Mortality and morbidity rates might rise due to inadequate postnatal care. Using World Health Organization (WHO) standards as a benchmark, this research found that postnatal treatment at Lady Aitchison Hospital in Lahore is currently lacking in quality and identified areas where quality might be improved. This research uses a quantitative approach to gather and evaluate data; it is cross-sectional and descriptive in nature. From January to February of 2022, ninety-six maternity wards at Lady Aitchison Hospital in Lahore were part of the study. Using a systematic proforma, we randomly chose consenting postpartum moms and interviewed them. The results showed that out of 96 moms, 56% were under the age of 25, 39% had completed secondary school, 71% were carrying more than one kid, and 57% were making their first visit. The majority of women said that their medication was supplied promptly (82%), and those who interacted with healthcare providers found their attitude (85%) and the information they gave (83%). Staff members were rated as very satisfying by 90% of the participants. Limited information to moms on newborn care, inadequate examination guidelines and equipment, and inferior interior of hospitals were the primary areas of concern. According to the data from the comprehensive newborn and maternal examination, it was absent in 30–50% of the patients. Nearly 70% did not get any information on neonatal and maternal risk indicators, and just 28% received any information about family planning. It was said that the cleanliness of the restrooms and the ward equipment (air conditioners, beds, etc.) could need some work, and overall, the hospital's infrastructure was not up to grade. According to this research, most patients in underdeveloped nations like Pakistan were happy with the treatment they received from healthcare providers. The hospital's infrastructure is in dire need of upgrading; it might have air conditioning, nicer restrooms, and specially constructed spaces for thorough examinations of the newborn, pelvis, and abdomen. Postnatal care also requires the establishment of standardized protocols.

Parajuli, Bimala et al., (2023) Both the mother and her new family member go through a time of adjustment known as the postnatal period. The postnatal period accounts for a disproportionate share of mother and newborn mortality, making it a crucial time. Finding out why moms seek out postnatal care services was the primary motivation for this research. Methods One hundred sixty-three moms whose infants were eight days old to less than a year old participated in the descriptive cross-sectional research. Interviews were conducted in person utilizing a semistructured schedule and a non-probability purposive sampling method to get the data. The data was analyzed using SPSS version 20, and descriptive and inferential statistics were employed to explain the results. Final Product Full postnatal care services were only obtained by 10.4% of women within seven days after their previous delivery. The following variables were found to be significantly associated with the outcomes: respondents' level of education (p-value = 0.03), abortion history (p-value = 0.005), the significance of prenatal care during the ANC checkup (p-value = 0.001), the location of delivery (p-value = 0.004), the length of time spent in the hospital (p-value <0.001), and health complications experienced during a recent delivery (p value= <0.001).

Abdullahi, Hadiza et al., (2022) Poor maternal and infant health outcomes disproportionately impact low- and middle-income nations. Only over 10% of mothers in underdeveloped nations see a postnatal care (PNC) specialist in the first two days after giving birth. Specifically, we want to see how women in Northern Nigerian rural and urban areas feel about PNC and how often they use its services. Subject and Procedure In order to examine the attitudes and levels of use among respondents from rural and urban populations in Kano state, North Nigeria, a comparative cross-sectional research was conducted. Mothers

who had a live birth in the year prior to the study's start were eligible to participate. We used a multistage sampling technique to choose 130 moms from the two groups. They were asked to fill out semi-structured questionnaires by interviewers in order to gather data. Mothers in both urban areas (93.7%) and rural areas (76.0%) had a positive view about PNC. On the other hand, very few people used the services; only 15.7% of urbanites and 2.3% of ruralites used them. Mothers whose husbands have a bachelor's degree or more are 62% less likely to have a negative attitude about PNC (OR = 0.38, 95% CI [0.15-0.99]), suggesting that the husband's educational level is a predictor of favorable maternal attitude.

Das, Bharati. (2020). When it comes to maternal and neonatal mortality, the postnatal period is still the most crucial. Postnatal care has been the subject of a great deal of research, both in India and elsewhere. But the vast majority of them were just polls of people living in urban slums or rural regions. Finding out how well-informed and how often women in metropolitan areas make use of postnatal care services was the driving force for this research. From February 2019 to July 2019, researchers conducted a prospective trial in a hospital setting. At six weeks of gestation, moms who came in for their kids' usual immunizations filled out a structured questionnaire that gathered data. Out of a total of 214 moms, 52.34 percent gave birth in a medical college or DHQH, while 46.66% gave birth at a private facility. There were 36(16.6%) moms and 33(15.4%) infants with health problems. Postnatal checkups were only received by 2.8% of women. While 151 (70.56%) of cases of varied durations did not take IFA and calcium supplements as prescribed, 128 (60% of mothers) did so. Despite several government programs, a woman's socioeconomic situation, her level of education, and the existence of health conditions affecting either the mother or the infant, the rate of postnatal care was too low.

Nwajagu, JohnKingsley et al., (2017) What we call an infant's "postnatal period" begins an hour after birth and continues for up to six weeks thereafter. Half to three quarters of all maternal fatalities happen during this time, making it a particularly difficult one for the mother, her baby, and their family from a physiological, emotional, and social standpoint. The goal of this study is to determine why women visit postnatal clinics (PNCs). Here are the steps: An analysis of data collected from October 2013 through December 2013 from 188 pregnant women who visited the prenatal clinic at Ahmadu Bello University Teaching Hospital (ABUTH) in Shika, Zaria, was analyzed descriptively. The research used structured questionnaires. The ABUTH, Shika-Zaria Ethical Committee gave its stamp of approval. Data analysis was conducted using SPSS version 16, and descriptive analysis was applied to the findings. The Hausa people made up the bulk. Higher education was attained by 39.9%. Of these women, 77.7% knew about the postnatal care they needed, and 42% were multiparous. Attendance in antenatal clinics (ANC) was 95.1% and prenatal care (PNC) was 74.4% in the past. Higher education (60%), secondary education (28%), and basic education (5%), as measured by educational level, influenced PNC use. A higher percentage of employed respondents (84% vs. 25%) attended PNCs.

Postnatal care is accepted as an important aspect of both maternal and child health services, though its use is not uniform, especially among the marginalized and tribal populations. Studies have confirmed that poor postnatal care is one of the major causes of morbidity and mortality among mothers and their newborn babies. Hospital-based studies have documented deficiencies in the provision of postnatal care, such as the failure to assess the mother and her newborn, counseling on breastfeeding and family planning, and education on the early signs of postnatal complications. There are also structural and infrastructural deficiencies in the provision of postnatal care, such as the lack of well-equipped rooms for examination and the lack of availability of basic equipment. Though the mothers were satisfied with the interpersonal care provided to them, the structural and infrastructural deficiencies point to the need to develop protocols and quality standards.

The pattern of utilization of the postnatal care service shows that a small percentage of mothers follow the recommended pattern of postnatal care visits, particularly during the first week of delivery. There are various factors that influence the utilization of the postnatal care service. These factors include the educational level of the mothers, antenatal history, attendance of antenatal sessions, place of delivery, stay in the hospital, and the occurrence of complications during the process of delivery. The higher the educational level of the mothers, the longer they stay in the hospital, the more they attend the recommended number of visits. Despite the accessibility of health care services, the postnatal care service is not adhered to, indicating low awareness.

Attitudinal studies have also revealed that mothers have positive perceptions and attitudes towards postnatal care services; however, these positive attitudes and perceptions may not always be translated into the actual utilization of the services. Cultural and community perceptions have been seen to have a significant influence on the utilization of postnatal care services. Economic factors and the lack of autonomy in health decisions have also been seen to influence the utilization of postnatal care services.

However, the literature shows that there are a number of important gaps that need to be addressed in order to bring about the desired outcomes. For example, most of the literature has addressed the issue in the context of the urban or hospital-based population, whereas the tribal or rural populations have been neglected. There is a lack of longitudinal studies on maternal-child health outcomes, and very few studies have utilized a mixed methodology to address the issue, which is important to develop effective strategies to improve maternal-child health outcomes.

### **III. RESEARCH METHODOLOGY**

The researchers in this study travelled to West Bengal, India, to do a cross-sectional survey of local residents. January 2022 to December 2022 was the time frame of the study. Participants were informed about the study in their native language and given the OK to take part. Women from Santal who gave birth during the last six months made up the study's population. We interviewed 260 ladies from Santal for this research. An already-designed and -tested semi-structured questionnaire served as the research instrument. A minimum of three postnatal care (PNC) visits were established as the criterion for optimal usage of postnatal services. Microsoft Excel was used for data collection and compilation, while SPSS 23.0 version was used for analysis. Descriptive statistics were used for the statistical analysis.

#### **3.1 Research Design**

This research employed a cross-sectional descriptive study design to examine the factors influencing the utilization of postnatal care (PNC) services among Santal women in West Bengal. The cross-sectional study design enabled the researcher to collect data at a point in time, providing a comprehensive understanding of postnatal care practices, maternal socio-demographic factors, and their associated determinants. This study design was the most appropriate for exploring the associations between maternal factors and the use of PNC services, as well as identifying potential barriers and facilitators in the community setting.

#### **3.2 Study Population and Sampling**

The target population for this study consisted of Santal women who had recently given birth and resided in rural and semi-urban areas of West Bengal. A total of 260 participants were recruited for this study using a purposive sampling technique, ensuring that each woman met the inclusion criteria of having recently given birth and being interested in participating. The purposive sampling technique was chosen specifically for the purpose of gaining an understanding of the perspectives of a marginalized tribal population, for whom random sampling would not have been representative.

### 3.3 Data Collection Instrument

The data was gathered through a semi-structured questionnaire that was pilot-tested for reliability, clarity, and cultural appropriateness. The questionnaire covered areas such as socio-demographic factors, maternal and obstetric history, knowledge and attitudes towards postnatal care, and utilization of PNC services. The structure of the questionnaire allowed the gathering of both qualitative and quantitative data, which would make it easier to conduct an in-depth analysis of the factors that affect postnatal care.

### 3.4 Variables

- **Dependent Variable:** Utilization of postnatal care services, which would be measured by the number of PNC visits made within 42 days of delivery, with three or more visits being optimal.
- **Independent Variables:** Maternal age, education level, occupation, place of delivery, attendance of antenatal care sessions, parity, household income, autonomy in decision-making, and distance to the health facility.

### 3.5 Data Collection Procedure

The data was collected through face-to-face interviews in the participants' native language to ensure understanding and minimize response bias. Prior to the study, all women provided their informed consent. The data collection procedure was conducted from January to December 2022, and measures were taken to ensure confidentiality and privacy throughout the data collection process.

### 3.6 Data Analysis

The data collected was coded using Microsoft Excel and analyzed using SPSS version 23.0. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were employed to describe socio-demographic variables and patterns of PNC utilization. Inferential statistics, including the chi-square test and binary logistic regression, were employed to explore the association between independent variables and the probability of optimal PNC utilization.

### Logistic Regression Equation

The association between independent variables and postnatal care utilization was explained using the binary logistic regression equation:

$$\text{logit}(p) = \ln \left( \frac{p}{1-p} \right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

Where:

- $p$  = probability of optimal PNC utilization
- $\beta_0$  = intercept
- $\beta_1, \beta_2, \dots, \beta_n$  = regression coefficients
- $X_1, X_2, \dots, X_n$  = independent variables (e.g., maternal age, education, parity)

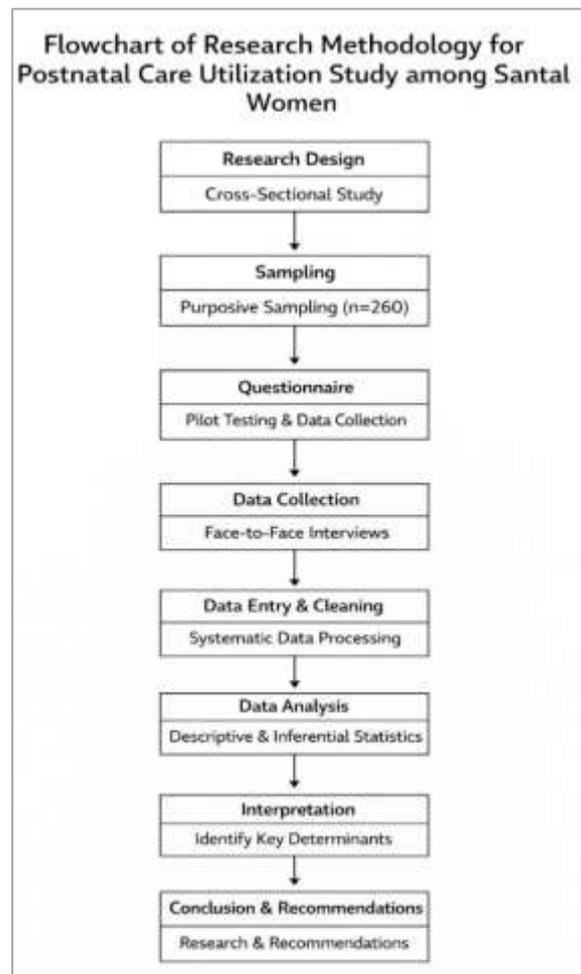
### 3.7 Research Algorithm

The research design can be stated in an algorithmic form as follows:

#### Algorithm: PNC Utilization Study

1. Define the study population: Santal women who delivered within the last six months.
2. Recruit participants using purposive sampling (n = 260).
3. Develop a semi-structured questionnaire tailored to socio-cultural context.

4. Pilot-test the questionnaire for clarity and reliability.
5. Obtain informed consent from all participants.
6. Conduct face-to-face interviews and collect data systematically.
7. Enter collected data into Microsoft Excel and perform data cleaning.
8. Code and prepare the dataset for statistical analysis.
9. Perform descriptive statistical analysis (frequencies, percentages, means).
10. Conduct inferential analysis (chi-square, logistic regression) to identify key determinants.
11. Interpret findings to determine factors influencing PNC utilization.



**Figure 1: Structured Flow of Research Methodology for Postnatal Care Utilization among Santal Women**

Figure 1: The image shows a systematically organized flowchart that explains the research methodology employed to analyze the utilization of postnatal care services among the Santal women. The flowchart explains the systematic approach of the study from the conceptualization phase—a cross-sectional descriptive study design employing purposive sampling of 260 eligible participants, to the development and pilot testing of a semi-structured questionnaire. The flowchart also explains the systematic approach of data collection from face-to-face interviews, systematic entry and processing of data, and systematic analysis of data employing both descriptive and inferential statistics. The final steps of the flowchart explain the interpretation of results to identify the key determinants of postnatal care service utilization, culminating in evidence-based conclusions and recommendations. The flowchart emphasizes a systematic and logical approach that encompasses methodological rigor, clarity, and academic accuracy required for integration into a scholarly thesis.

#### IV. DATA ANALYSIS AND INTERPRETATION

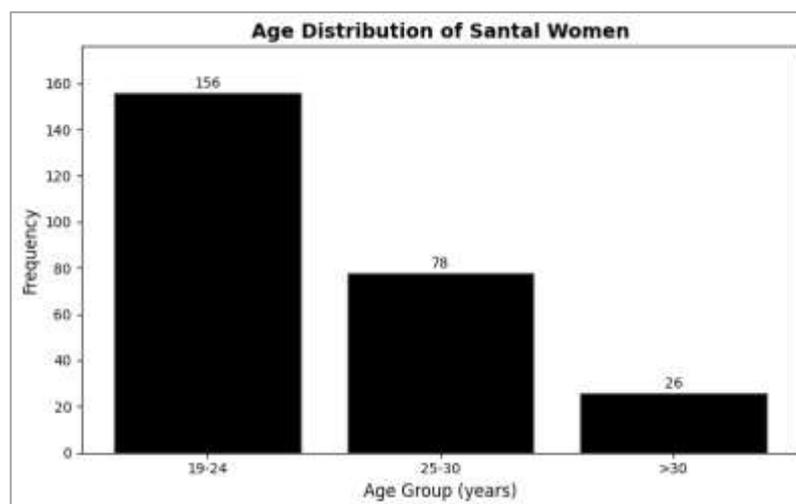
##### 4.1 Socio-Demographic Characteristics of Participants

The research was conducted on 260 Santal women who had given birth in the last six months. The analysis of the age distribution of the respondents showed that 60% of the respondents were in the age group of 19-24 years, followed by 30% in the age group of 25-30 years, and 10% in the age group above 30 years. The age distribution of the respondents shows that the population is dominated by young mothers.

**Table 1: Age of Santal Women**

Particulars	Frequency	Percentage
19-24	156	60.0
25-30	78	30.0
>30	26	10.0
Total	260	100.0

The age distribution of the Santal women who participated in the research is shown in Table 1. Sixty percent of those who took the survey are young adults (between the ages of 19 and 24). The age group of 25 to 30 years accounts for a considerable chunk, making up 30.0%. On the other hand, those older than 30 make up a smaller percentage, at 10%.



**Figure 2: Age Distribution of Santal Women Participating in the Study**

Figure 2: The bar chart illustrates the age composition of the Santal women participants in the study, focusing on the relevant aspects of postnatal care service utilization. Most of the participants (60%) belonged to the 19-24 years age group, thus confirming that the study sample basically consisted of young, reproductive-age women. Women aged 25-30 years accounted for 30% of the sample, while only 10% belonged to the above 30 years age group. The age composition gives a representative idea of the population that is likely to make use of postnatal care services, stressing the importance of analyzing maternal characteristics, socio-demographic aspects, and service utilization patterns in the context of this age group.

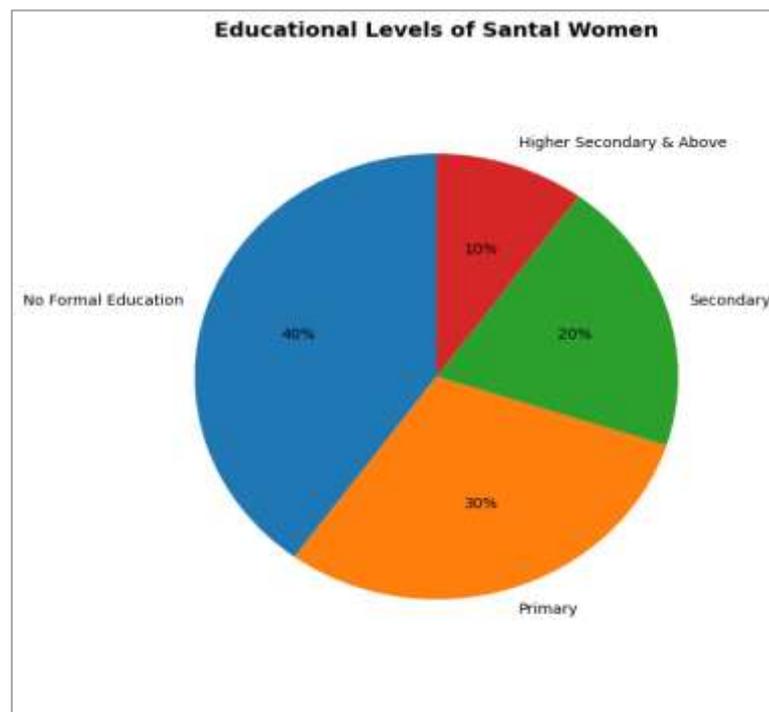
##### 4.2 Educational Attainment

The educational attainment of the respondents was found to be quite varied. More than half of the women (55%) had high school or higher educational attainment, 25% had middle-level education, 15% attained primary-level education, and only 5% were illiterate. This shows that the sample has a high level of educational attainment, which may have a positive effect on the awareness and utilization of postnatal care services.

Table 2: Education of Santal women

Particulars	Frequency	Percentage
Illiterate	13	5.0
Up to primary level	39	15.0
Up to middle level	65	25.0
High school and above	143	55.0
Total	260	100.0

The educational attainment of the Santal women who participated in the research is shown in Table 2. The data shows that there is a wide range in educational attainment. Only 5% of the population cannot read or write, while 15% have reached the elementary school level of education. Among those who took the survey, 25% had completed at least some middle-level schooling. Be that as it may, 55.0% of the population has either finished high school or gone on to get a degree.



**Figure 3: Distribution of Educational Attainment among Santal Women**

Figure 3: The pie chart illustrates the educational attainment of Santal women participating in the study and reveals the existence of large disparities in access to formal education. Close to two-fifths of the sample (40%) reported never having attended school, and another 30% had attended primary education only. However, participation in higher levels of education is very low, with only 20% having attained secondary education, and even fewer (10%) having progressed to higher secondary or higher levels of education. This pattern is indicative of the persisting educational marginalization of the group, which is largely driven by socio-economic factors. From the perspective of maternal health, the results of this study are highly pertinent, as educational attainment is a critical determinant of health literacy, reproductive autonomy, and participation in postnatal care programs. The dominance of low levels of educational attainment in the sample indicates the imperative need for a comprehensive approach that synergistically combines educational progress with maternal health promotion to improve postnatal care outcomes for Santal women.

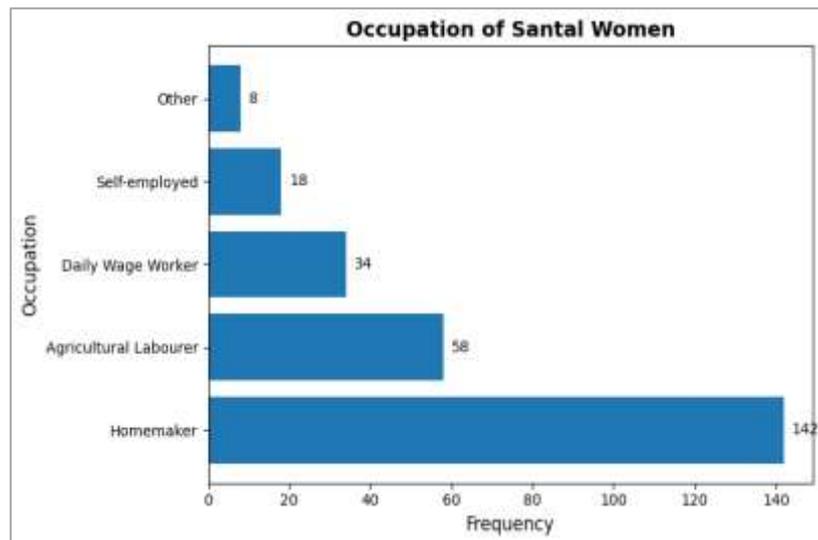
### 4.3 Occupational Profile

The occupational pattern showed that 45% of the respondents were housewives, which is a traditional role in the Santal community. In addition, 30% of the respondents were involved in service-related activities, 15% in agriculture or labour, and 10% in business activities. This indicates a combination of economic activities that may influence access to healthcare resources and autonomy in decision-making.

**Table 3: Occupation of Santal Women**

Particulars	Frequency	Percentage
House wife	117	45.0
Agriculture/ Labour	39	15.0
Service	78	30.0
Business	26	10.0
Total	260	100.0

Table 3 shows the different occupations of the Santal women who were part of the research. Among the respondents, the data shows, is a wide variety of jobs. A considerable number of women mostly involved in household tasks, since 45.0% of the population classifies as housewives. In keeping with the traditional agrarian way of life in Santal villages, a sizeable part, making up 15.0%, is engaged in agricultural work or similar occupations. In addition, 10% are interested in commercial endeavors, and 30% are active in other service-oriented vocations.



**Figure 4: Occupational Distribution of Santal Women**

Figure 4: The horizontal bar chart interprets the occupational distribution of Santal women participating in the study and indicates a dominant presence in unpaid domestic and informal sectors. A huge number of respondents (142) have shown homemaking as their primary occupation, which indicates extremely low presence in secure and income-generating occupations. Agricultural occupation was the second most dominant (58), followed by daily wage (34), which indicates a strong linkage with seasonal and insecure livelihoods. Very few women have shown themselves to be self-employed (18) or engaged in other occupations (8). The employment pattern described above indicates the overall economic marginalization of Santal women and the extremely close linkage between insecure livelihoods and maternal health outcomes. Unstable income and lack of financial independence may well pose significant barriers to the utilization of healthcare services, including postnatal care, which underlines the importance of a comprehensive approach that integrates maternal health programs with economic empowerment programs in tribal settings.

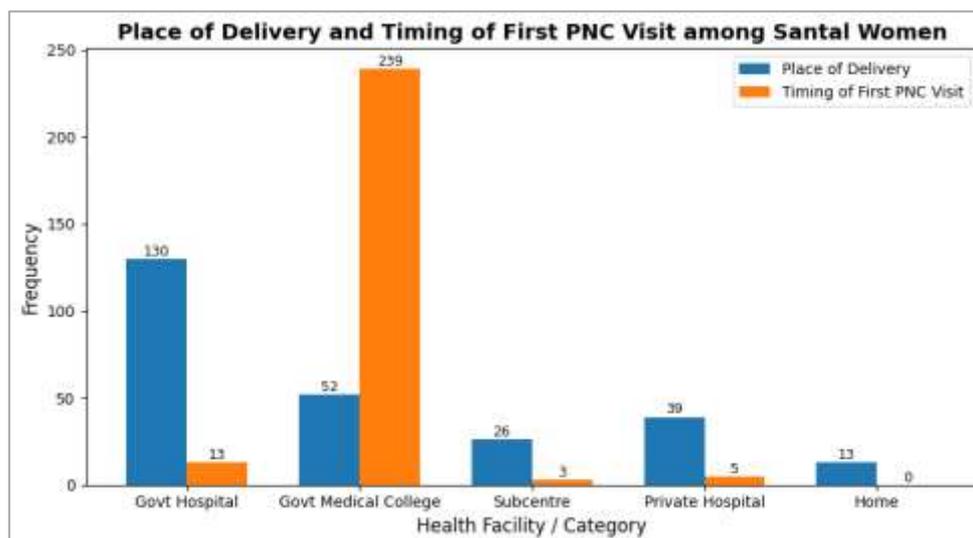
#### 4.4 Place of Delivery and Timing of First PNC Visit

Half of the respondents (50%) were delivered in government hospitals, followed by 20% in government medical colleges, 15% in private hospitals, 10% in sub-centres, and only 5% at home. Regarding the time of the first postnatal care visit, the overwhelming majority (92%) visited within 2-3 days of delivery, 5% within 24 hours, and 1% between 4-7 days. Only 2% did not visit any postnatal care. The above results indicate that institutional delivery has a strong positive correlation with the initiation of postnatal care.

**Table 4: Place of Delivery and Timing of First Postnatal Care Visit among Santal Women**

Variable	Frequency	Percentage
Government Hospital	130	50%
Government Medical College	52	20%
Subcentre	26	10%
Private Hospital	39	15%
Home	13	5%
<b>Total</b>	<b>260</b>	<b>100%</b>
Timing of First PNC Visit	Frequency	Percentage
Within 24 hours	13	5%
2–3 days	239	92%
4–7 days	3	1%
Never	5	2%
<b>Total</b>	<b>260</b>	<b>100%</b>

The following table represents the distribution of Santal women in respect of the place of delivery and the time taken for the first visit to postnatal care. The majority of women (50%) had delivered in government hospitals, followed by 20% in government medical colleges and 15% in private hospitals. Only 10% of women had delivered in subcentres, and a small proportion (5%) had delivered at home, indicating the dominance of institutional deliveries in the study population. In respect of postnatal care visits, the majority of women (92%) had visited the PNC facility for the first time in 2-3 days post-delivery, followed by 5% in the first 24 hours, and 1% in 4-7 days. Only 2% of women had not visited any postnatal care. These observations indicate the importance of institutional delivery in facilitating early postnatal care visits and the potential importance of awareness and accessibility in early postnatal care visits.



**Figure 5: Place of Delivery and Timing of First Postnatal Care Visit among Santal Women**

Figure 5: The clustered bar chart helps to understand the relationship between the place of delivery and the time taken for the first visit for postnatal care among the Santal women. The findings reveal that most of the women delivered in government hospitals (130), government medical colleges (52), private hospitals (39), and sub-centers (26), but a few delivered at home (13). In postnatal follow-ups, most women (239) visited for the first time two to three days post-delivery. However, very few women visited within the first 24 hours of delivery (13) or four to seven days (3), and a few women never visited for postnatal care (5). Although the findings show that most women are actively participating in delivery services, they also show that there are delays in visiting for early postnatal care. The gap between institutional delivery and early postnatal care visits emphasizes the importance of improving postnatal follow-up systems to ensure the health of mothers and children in the early postnatal period.

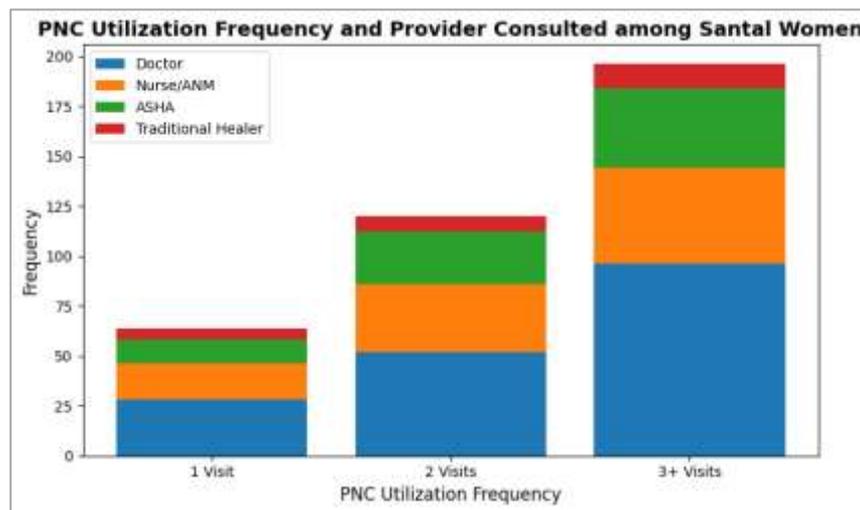
#### 4.5 Utilization Patterns and Consultation Sources

A large number of respondents (87%) had three or more visits to PNC in 42 days, which is a good practice. Only 1% of the respondents had not visited, 4% had visited once, and 8% had visited twice. Regarding the healthcare provider visited, 45% of women visited ANMs/nurses, 35% visited doctors, and 20% visited ASHAs/AWWs. The reason for not completing the visits of PNC was lack of awareness (92%), followed by inaccessibility (6%) and unwillingness (2%).

**Table 5: Utilization of Postnatal Services**

Variables	Percentage
<b>Place of Delivery</b>	
Government hospital	50.0
Government Medical College	20.0
Subcentre of Government hospital	10.0
Private hospital	15.0
Home	5.0
<b>First PNC Service</b>	
Never	2.0
Within 24 hours	5.0
Between 2-3 days	92.0
Between 4-7 days	1.0
<b>Number of Postnatal Services within 42 days of Delivery</b>	
Never	1.0
1 postnatal visit	4.0
2 postnatal visits	8.0
≥3 postnatal visits	87.0
<b>Person Consulted in Postnatal Visit</b>	
Doctor	35.0
ANM/ Nurse	45.0
ASHAs/ AWWs	20.0
<b>Reason for not Receiving ≥2 Postnatal Visit</b>	
Lack of Knowledge/ Not aware	92.0
Not accessible	6.0
Not willing	2.0

Several facets of Santal women's postnatal care-seeking habits are illuminated by Table 4, which displays their usage of postnatal services. Half of the respondents (50.0%) gave birth in public hospitals, while another 20.0% gave birth at public medical schools. Only a tiny fraction of the women (5.0%) decided to give birth at home, while 10.0% went to public hospitals and 15.0% to private ones. When asked when they sought their first postnatal care (PNC) service, 92.0% said it was within two to three days after giving birth, while 5.0% said it was within the first hour. A large majority (87.0%) of mothers obtained three or more postnatal visits within 42 days after birth, whereas a minor fraction (1.0%) did not have any postnatal visits at all. When asked who they saw for postnatal care, 35.0% said physicians, 45.0% said ANMs or nurses, and 20.0% said ASHAs or AWWs. Issues with accessibility (6.0%) and refusal (2.0%) were the most common reasons for not obtaining two or more postnatal visits, while a lack of information or awareness accounted for the majority (92.0%).



**Figure 6: Postnatal Care Utilization Frequency and Type of Provider Consulted among Santal Women**

Figure 6: The stacked bar chart gives an idea about the use of postnatal care (PNC) in terms of the types of healthcare providers consulted by Santal women. Women who have attended three or more PNC visits formed the largest group, and the major source was medical doctors, followed by nurses or auxiliary nurse midwives (ANMs) and Accredited Social Health Activists (ASHAs). Conversely, women who have attended only one or two PNC visits formed the smaller groups, although the trend of healthcare provider use remained the same. The use of traditional healers remained low in all groups, which reflects an increasing trend towards acceptance of the formal healthcare system. This reflects the growing acceptance of institutional maternal healthcare, especially with the growing number of postnatal visits, and the crucial role played by healthcare providers and community health workers in postnatal care. Nevertheless, the irregular number of visits reveals that there are gaps in the continuity of care, which underlines the importance of improved follow-up services and community outreach programs to ensure equal postnatal care for Santal women.

## V. DISCUSSION

The present study provides important insights into the use of postnatal care (PNC) among Santal women in West Bengal, providing an understanding of the way in which socio-demographic variables, educational attainment, employment status, and the availability of health care affect maternal health-seeking behavior. The age distribution of the study participants indicates that the overwhelming proportion of women were young women in the early reproductive years, indicating that postnatal care programs have the potential to create a long-lasting impact on maternal and child health outcomes if effectively targeted during this critical life stage.

Inequalities in educational attainment were determined to be a key structural barrier. The overwhelming proportion of women had not attained any formal education or had attained primary-level education, making them less likely to be aware of health issues and make independent decisions regarding postnatal care. Education has been recognized as a key determinant of maternal health behaviors, influencing awareness of health service availability, perceptions of postpartum complications, and self-efficacy in navigating health care systems. The predominance of low educational attainment among Santal women underscores the importance of culturally informed health literacy interventions that are community-driven.

The occupational trends also reflect the economic vulnerability of the study population. Most of the women were engaged in unpaid housewifery or informal economic activities, such as agricultural or daily wage work, which has low income stability and lacks social protection. This economic marginalization is also likely to restrict the autonomy of women in accessing healthcare and could be a reason for the delay in the use of postnatal services. Financial dependence and competing household responsibilities could also reduce the priority of postnatal care.

Inequality in education was found to be one of the most important structural factors that impact the utilization of postnatal care services among Santal women. A significant proportion of the respondents were either uneducated or had primary-level education, which is a major impediment to the acquisition of critical health information and the capacity of women to make informed decisions about their maternal health. Education is an important factor that determines maternal health practices, including awareness of existing services, early detection of postnatal complications, and the ability to access the healthcare system. The significant proportion of low levels of education among the community members, therefore, indicates a critical need for health literacy interventions that are context-specific and delivered through community channels.

Patterns of employment also reflect the economic insecurity experienced by many women in the study. A large number of the respondents were involved in unpaid domestic work or informal employment, like agricultural work and daily wage employment. These are common patterns of employment that are often associated with economic instability and lack of social protection. Such economic insecurity is also likely to reduce women's autonomy in accessing healthcare and is a factor in the delay in the use of postnatal services. Financial dependence, together with competing demands in the household, may also lower the priority of postnatal care, despite its established importance for maternal and infant health.

Overall, the results show that the use of postnatal care among the Santal tribe is influenced by a set of complex interrelated factors that are educational, economic, cultural, and health system-related. The need for comprehensive interventions that go beyond the provision of healthcare to address empowerment and livelihood development, community participation, and effective referral systems is thus evident. Health education that is culture-sensitive and facilitated by improved infrastructure and follow-up is critical for promoting equal access to postnatal care and for closing the long-standing health gaps among tribal women.

## **VI. CONCLUSION**

There is a complicated interaction between socio-cultural, economic, and healthcare-related variables that affect the usage of postnatal care (PNC) services among Santal women. Low PNC use rates are caused by a combination of factors, including a lack of affordable healthcare options, cultural attitudes that prefer home-based care techniques, and limited access to healthcare facilities. Health education in the community, improvements to physical infrastructure, and healthcare delivery models that take cultural

norms into account are all necessary steps toward removing these obstacles. We can improve maternal health outcomes for underserved communities by making sure all women, including Santal women, have equal access to high-quality postnatal care.

This research study analyzed the utilization pattern of postnatal care services among Santal women in West Bengal, taking into account the importance of socio-demographic factors, educational achievement, employment status, and accessibility of healthcare services in influencing the behavior of mothers in utilizing postnatal care services. The findings reveal that, despite the acceptance of institutional delivery, the continuity and timeliness of postnatal care are not satisfactory. Although most mothers accepted the utilization of postnatal care services a few days after delivery, the utilization of these services in the first 24 hours, which is an important period for the early diagnosis of maternal and neonatal complications, surprisingly remained low.

The findings reveal that the primary hindering factors influencing the postnatal care-seeking behavior of mothers are educational deprivation and economic insecurity. The lack of formal education resulted in the lack of health awareness and decreased the importance of women in healthcare decision-making, while the dependence on informal and unpaid work resulted in economic insecurity and limited their ability to assign importance to postnatal care. However, the growing dependence on qualified healthcare personnel and the declining dependence on traditional healers indicate an increasing trend towards formal maternal healthcare services.

The study also highlights the importance of the role played by front-line health care providers, such as ASHAs and ANMs, in facilitating the use of postnatal care services and enhancing the linkage between health care providers and the tribal population. The availability of health care providers in the community is an important factor in overcoming geographical and social barriers to the use of health care. In light of the findings of this study, there is a need to develop an integrated approach that incorporates health education, women empowerment, and enhanced health care delivery systems to overcome the aforementioned interrelated challenges.

By identifying the critical determinants of postnatal care service use, this study has contributed to the development of context-specific information that can be used to develop strategies to overcome the existing inequities in maternal and child health outcomes in tribal populations. Improving referral practices, strengthening discharge counseling practices, and providing follow-up services in the community are important steps in ensuring that there is equity in the use of postnatal care services among the Santal tribe.

## **VII. FUTURE WORK**

Although the current study provides important information regarding postnatal care practices among Santal women, there are still some areas that can be explored in the future. Longitudinal study designs would be very helpful in understanding the dynamics of care-seeking practices and their relationship with postnatal service use and maternal and child health outcomes. Combining quantitative findings with qualitative research approaches, such as in-depth interviews and focus group discussions, would be very helpful in understanding the underlying cultural beliefs, family decision-making, and experiences that influence postnatal care practices.

Future studies could also increase their geographical locations to other tribes, which would be very helpful to the researcher to conduct comparative analyses and improve the generalizability of the findings. In-depth explorations of community-based interventions, such as health education interventions and ASHA follow-up interventions, would provide important information regarding how to improve service delivery

in resource-poor settings. Furthermore, studies regarding the importance of male involvement, support systems, and new digital health platforms would help to open new doors for improving postnatal care practices.

With the results of this study, future research can be conducted to develop strategies that will ensure continuity of care, improve women's agency, and ultimately improve maternal and child health outcomes in marginalized groups.

## REFERENCES

1. Abdullahi, Hadiza & Usman, Nafisat. (2022). Attitude and utilization of postnatal care services among women of reproductive age in the rural and urban communities in Northern Nigeria. *Calabar Journal of Health Sciences*. 6. 72-79. 10.25259/CJHS\_13\_2022.
2. Adigun, Abimbola & Adigun, Kabiru. (2019). An Analysis of Utilization of Postnatal Care Services Among Mothers in Nigeria. *International Journal of Contemporary Research and Review*. 10. 20691-20699. 10.15520/ijerr. v10i01.651.
3. Amsalu, Getu & Talie, Asmare & Gezimu, Wubishet & Duguma, Abdissa. (2022). Non-utilization of postnatal care and its associated factors among women who gave birth in rural districts of Northern Ethiopia: A community-based mixed-method study. *Women's Health*. 18. 10.1177/17455057221125091.
4. Beyane, Rebik & Mohammed, Hussen & Wudmetas, Abdulselem & Mohammed, Sara. (2018). Assessment of Knowledge and Factors Affecting Utilization of Postnatal Care in Fiche Town. 28-33. 10.11648/j.ijcd.20180102.11.
5. Chinedu, John-Camillus & Igboanusi, Chinedu & Sabitu, Kabir & Gobir, Abdulrazaq & Nmadu, Awawu & Joshua, Istifanus. (2019). Factors Affecting the Utilization of Postnatal Care Services in Primary Health Care Facilities in Urban and Rural Settlements in Kaduna State. 111-117. 10.12691/ajphr-7-3-4.
6. Das, Bharati. (2020). Study on postnatal care in a tertiary care hospital in eastern India and the reality. *International Journal of Community Medicine and Public Health*. 7. 3917. 10.18203/2394-6040.ijcmph20204354.
7. Elias, Kamara & Extension, Kiu Publication. (2023). Utilization of Post-Natal Care Services and Associated Factors among Mothers Attending Jinja Regional Referral Hospital. 3. 177-184.
8. Lwelamira, James & Safari, J. & Stephen, Angelina. (2015). Research Article Utilization of Maternal Postnatal Care Services Among Women in Selected Villages of Bahi District, Tanzania. *Current Research Journal of Social Sciences*. 7. 106-111. 10.19026/crjss.7.1690.
9. Mahmood, Atiya & Eusaph, Amna & Javed, Ayesha & Muzaffar, Arooj. (2023). Exploring areas of improvement in postnatal care services in a tertiary care hospital in Lahore. *Pakistan Journal of Medical Sciences*. 39. 10.12669/pjms.39.3.6780.
10. Nwajagu, JohnKingsley & Ameh, Nkeiruka & Oguntayo, Adekunle. (2017). Awareness and utilisation of postnatal care services among antenatal clinic attendees at ahmadu bello university teaching hospital Zaria. *Nigerian Journal of Medicine*. 26. 112. 10.4103/1115-2613.278282.
11. Parajuli, Bimala & tandukar, Bimala & Bharati, Mamata & Singh, Shreejana. (2023). Contributing Factors on Utilization of Postnatal Care Services among the Mothers of a Rural Municipality.
12. Rahman, Md. Mosiur & Emdadul, Syed & Zahan, Md. (2010). Factors affecting the utilisation of postpartum care among young mothers in Bangladesh. *Health & social care in the community*. 19. 138-47. 10.1111/j.1365-2524.2010.00953. x.

13. Shrestha, Jene & Yadav, Dr. Dipendra. (2021). Barriers to Utilization of Postnatal Care Services: Mothers and Health Providers Perspective. *Journal of Nepal Health Research Council*. 19. 311-315. 10.33314/jnhrc. v19i2.3250.
14. Sithole, Lonjezo & Khaki, Jessie. (2019). Factors associated with the utilization of postnatal care services among Malawian women. *Malawi Medical Journal*. 31. 2. 10.4314/mmj. v31i1.2.
15. Viola, Nankya & Nakate, Zaituni & Nuruh, Ndagire & Obeagu, Emmanuel. (2023). Factors Contributing to Low Utilisation of Postnatal Care Services among Postnatal Mothers at Rwekubo HC4 Isingiro District. 6. 1-15. 10.36437/irmhs.2023.6.3. A.