

ORIGINAL ARTICLE

Prenatal and Postnatal Health-Seeking Behaviour among the Muria Tribe of Bastar Region in Chhattisgarh, India

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ABSTRACT

Maternal health-seeking behaviour is influenced by cultural beliefs, healthcare accessibility, and traditional norms, particularly among tribal communities. This study explores prenatal and postnatal health-seeking behaviour among the Muria women in Gunpur village of Bastar district, Chhattisgarh. It also examines the cultural influences shaping their maternal healthcare choices.

Using a mixed-methods approach, data were collected through interviews, focus group discussions, observations, and case studies with a purposive sample of 70 ever-married women, including pregnant and postpartum women (up to two years).

The study found that prenatal check-ups were commonly availed, and healthcare functionaries, particularly Anganwadi Workers, played a significant role in maternal care. However, institutional deliveries were notably low, with the majority of births occurring at home, primarily assisted by untrained traditional birth attendants. Cultural beliefs, including the influence of family deities and spirits, played a crucial role in shaping childbirth practices and contributed to the preference for home births. Despite a high prevalence of delivery-related complications, medical intervention was sought in only a few cases, with many women relying on traditional birth attendants and home remedies. Postnatal care remained inadequate, and only a small proportion received assistance from healthcare workers. Common postpartum complications, such as excessive bleeding and persistent back pain, were frequently reported, yet institutional healthcare was rarely sought, with traditional healing practices being the preferred option.

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The findings underscore the urgent need for enhanced maternal healthcare interventions, a stronger role for trained health functionaries, and greater awareness of the benefits of institutional deliveries and postnatal care in tribal communities.

KEYWORDS

- Muria Tribe • Maternal Health • Health-seeking behaviour • Prenatal care
- Delivery • Postnatal care

INTRODUCTION

Prenatal and postnatal healthcare play a vital role in enhancing maternal health outcomes. Therefore, only providing and delivering healthcare services might not be sufficient; it is also important to ensure that these treatments are accepted, through Primary Healthcare initiatives. Identifying the women who are at risk of non-use of health care services can help in designing interventions to enhance maternal health (Kolay & Bairagy, 2014). Engaging in early and regular prenatal care enhances the likelihood of a healthy pregnancy, as it enables healthcare providers to monitor maternal and foetal health, promptly addressing potential complications (National Institute of Health, 2017). Additionally, prenatal care plays a significant role in reducing risks during pregnancy and increasing the chances of a safe and healthy delivery. Regular prenatal visits allow healthcare professionals to monitor the pregnancy and identify any problems or complications before they become serious (Madell, 2015). Moreover, postnatal care is crucial for monitoring the mother's recovery and the newborn's health, ensuring any issues are promptly addressed. This comprehensive approach to maternal health care is essential for reducing maternal mortality and morbidity rates (World Health Organization, 2019).

In India, maternal and child healthcare services are notably underutilized among tribal women. Several factors contribute to this underutilization, including adherence to traditional practices, limited access to nutritional diets, and a lack of accessible and well-equipped medical facilities. These challenges are exacerbated by extreme poverty, geographical isolation, and suboptimal healthcare infrastructure. In 2020, India reported the world's second-largest share of maternal deaths. Tribal communities in India face a substantial health burden, contributing to over 50% of the country's maternal deaths and infant mortality rate (IMR) (Madankar

et al., 2024). Institutional delivery plays a crucial role in reducing neonatal and Maternal deaths. Institutional childbirth was shown to be protective against newborn death only for underprivileged mothers who experienced obstetric problems during delivery (Altman *et al.*, 2016). The socioeconomic standing of the tribal community further hampers the adoption of safe reproductive practices (Kolay & Mahant, 2015).

Maternal healthcare among the Muria tribe of Bastar, Chhattisgarh, remains a challenge due to cultural beliefs, limited healthcare access, and low dependency on professional healthcare services. This study explores prenatal and postnatal health-seeking behaviour among Muria women, identifying factors influencing their healthcare choices.

Objectives

1. To examine the prenatal health-seeking behaviour among pregnant and postpartum women up to two years postpartum.
2. To explore the influence of cultural and traditional norms on maternal healthcare choices.

MATERIALS AND METHODS

Gunpur village was randomly selected from Gunpur Panchayat for the study. It was specifically chosen due to its interior location and the predominance of its traditional culture. An interview schedule and questionnaire, observation (participatory & non-participatory), Focus Group Discussion (FGD), and case studies were used as tools for the collection of data. For the present study, the purposive sampling method was used in which samples of 70 ever-married women, including pregnant and postpartum women up to 2 years, were interviewed. The study was conducted proportionately in different hamlets of Gunpur village of Bastar district of Chhattisgarh. The village was selected based on the following reasons:

- It is located far from the district headquarters, Jagdalpur, resulting in minimal urban influence.
- Concentration of tribal population, i.e., Integrated Tribal Development Project (ITDP) area, where more than 50% tribal population is present.

RESULT

Limited healthcare infrastructure affects service accessibility. Despite inadequate access to healthcare facilities, prenatal care is largely facilitated by the efficiency of Anganwadi Workers (AWWs) and healthcare functionaries, who visit the majority of homes during pregnancy. However, delivery and postnatal care remain particularly inadequate across the studied Muria communities. There is a strong reliance on traditional birth practices and home remedies, often leading to insufficient management of complications. Delivery and postnatal care are typically sought only in cases of severe illness, reflecting the prevailing belief that childbirth is a natural process requiring minimal medical intervention (Kolay, 1997).

Table 1: General Information of the Muria Women

General Information	Category	Respondents (n=70)	
		No.	%
Age Group	14 - 15	11	15.71
	16 - 17	23	32.86
	18 - 19	24	34.29
	20 - 21	9	12.86
	22 - 23	2	2.86
	24 - 25	1	1.43
	26 - 27	0	0.00
	28 - 30	0	0.00
	Above 30	0	0.00
The last baby delivered in the past two years	Yes	48	68.57
	No	22	31.43
Current Pregnancies	Yes	22	31.43
	No	48	68.57

The above table holds general information on Muria women, including age group, number of postpartum (up to 2 years) women, and the number of pregnant women during the present study.

The above data delineates that age at marriage among Muria women is ranging from 14 to 25 years. The highest prevalence is in the 18–19 age group (34.29%), followed by the 16–17 years (32.86%). In Gunpur village, 68.57 percent of respondents gave birth in the past two years, while 31.43 percent were pregnant during the study.

Table 2: Utilization and Attitude Towards Health Care Service

Health Care Variable	Responses	Respondents (n=70)	
		No.	%
Visit to healthcare facilities in the past 6 months	Yes	15	21.43
	No	55	78.57
Received services from AWWs	Yes	64	91.43
	No	6	8.57
Public perception of AWWs services	Positive	62	88.57
	Negative	8	11.43

Table 3: Utilization and Experience of Visiting a Health Care Facility

Health Care Variable	Responses	Respondents (n=15)	
		No.	%
Experiences of Health Care Facility Visits	Satisfactory	11	73.33
	Not satisfactory	4	26.67

Table 2 shows 78.57 percent of the respondents did not visit formal healthcare centres like PHC (primary health centres) or dispensary in past six months. However, 21.43 percent noted occasional visits for check-ups, medication, and immunisation.

The majority (91.43%) of pregnant and post-partum women have agreed to receive services from AWWs. Overall, 88.57 percent of the respondents have a positive view of the services. Among those who accessed healthcare services at healthcare facilities, the majority (73.33%) reported satisfaction, as reflected in the data from Table 3.

According to table 4 the 87.14 percent of women registered for pre-natal or antenatal services during pregnancy, the majority (49.18%) registered in the 1st trimester, followed by 39.34 percent who registered in the 2nd trimester, and 11.48 percent were not registered in any month during pregnancy. A majority of respondents (75.71 percent) reported that

healthcare functionaries (private/public) visited their homes during the prenatal period.

Table 4: Prenatal Health Care among Muria Women

Prenatal Health Care Variables	Category	Respondents	
		No.	%
Register for Prenatal services during pregnancy (n=70)	Yes	61	87.14
	No	9	12.86
Time of Register During Pregnancy (n=61)	1 st trimester	30	49.18
	2 nd trimester	24	39.34
	3 rd trimester	7	11.48
In-house healthcare service (N=70)	Yes	53	75.71
	No	17	24.29

Table 5: Pre-natal Services Received during Current Pregnancy or Last Pregnancy of Muria Women

Antenatal Services	Responses	Respondents	
		No.	%
ANC Checkup (n=70)	Yes	63	90.00
	No	7	10.00
TT immunisation (n=70)	Yes	67	95.71
	No	3	4.29
Iron & folic acid tablet (n=69)	Yes	55	79.71
	No	14	20.29
Body weight (n=67)	Yes	60	89.55
	No	7	10.45
Blood pressure (n=65)	Yes	41	63.08
	No	24	36.92
Abdominal check-up (n=61)	Yes	48	78.69
	No	13	21.31
Visit to health functionary (n=69)	Yes	67	97.10
	No	2	2.90

* The difference in "n" above is because, in this case, n represents the number of respondents who know a particular type of antenatal service.

From the above table, it may be concluded that most of the pregnant women (90.00%) are receiving antenatal care during pregnancy. A large proportion of women, that is, almost 95.71 percent, are getting immunised for TT, either through Anganwadi Workers (AWWs) or ANMs or Govt. hospital. Most of the women (79.71%) consume Iron & Folic acid

tablets during pregnancy. Above 75% percent of expectant women were measured for body weight, blood pressure, and abdominal check-up. Most of the pregnant women (97.10%) have paid visits to health functionaries.

Table 6: Delivery Practice among Muria Women

Delivery Practice Variables	Category	Respondents (n=48)	
		No.	%
Place of Birth	Home	39	81.25
	PHC/SC	3	6.25
The person who conducted the delivery	Govt. Hospital	6	12.50
	TBA	2	4.17
	Untrained TBA	31	64.58
	Mother-in-law	4	8.33
	Elderly ladies	2	4.17
	LHV/ANM	4	8.33
Complications during delivery	Doctor	5	10.42
	Yes	32	66.67
Source of treatment after post-delivery complications	No	16	33.33
	Govt. Hospital	6	12.50
	PHC	4	8.33
	Private Doctor	1	2.08
	Home remedy	14	29.17
	Dai	21	43.75
Specific diet during delivery	No Treatment Sought	2	4.17
	Yes	21	43.75
	No	27	56.25

*Currently Married Women (CMW) who have had a delivery during the last 2 years

A low proportion of deliveries (6.25%) were institutional (at PHCs or SC), and 12.50 percent deliveries were conducted at Government hospitals. Significant proportions (81.25%) of all deliveries were conducted at home.

About 64.58 percent of deliveries were conducted by untrained Traditional Birth Attendants, while 4.17 percent by Trained Birth Attendants. Women belonging to the Mahara (Swin) caste traditionally perform the activities of a midwife. Many Murias believe that such a woman or midwife is better than a trained dai. In addition to that, in some cases, family members and elderly ladies have also

been evident to conduct the delivery. The data set shows that, very low proportion of deliveries have been performed by doctors and ANM workers, i.e., 10.42 percent and 8.33 percent respectively. This indicates the Muria community is collectively dependent on traditional ways for delivery practices. A significant proportion (66.67%) of women experienced complications during delivery, while only 33.33 percent had a smooth delivery.

The current study found that a large number of women relied on traditional or informal care for post-delivery complications. Among them, 43.75% sought assistance from dais (Traditional Birth Attendants), while

29.17 percent depended on home remedies for treatment. Additionally, 4.17 percent of women did not seek any medical intervention, highlighting a strong preference for traditional practices over institutional healthcare.

Less than half (43.75%) of women followed a special diet during delivery, whereas 56.25 percent did not. The absence of a specific diet may be influenced by cultural beliefs or a lack of nutritional awareness. Proper dietary intake during delivery and the postpartum period is crucial for maternal recovery and newborn health. Table 6 can be referred to for a better understanding.

Table 7: Delivery Care among Muria Women

Delivery Care	Category	Respondents	
		No.	%
Instrument used for cutting the umbilical cord (n=48)	Blade	41	85.42
	Scissor	6	12.50
	Any other	1	2.08
Applied on cord (n=48)	Nothing	11	22.92
	Bhella/Cow dung	19	39.58
	Mustard oil	5	10.42
	Gentian violet	2	4.17
	Cow urine	1	2.08
	Animal oil	3	6.25
	Any other	7	14.58
Perform hard labour (n=48)	Yes	41	85.42
	No	7	14.58
Types of problem immediately after delivery (n=41)	Excessive bleeding	13	31.71
	Persistent back pain	28	68.29
Seek the treatment (n=41)	Govt.Hosp./PHC/SC/DISP	6	14.63
	Home remedy	25	60.98
	Traditional healer	10	24.39

Blade is the primary instrument used for cutting the umbilical cord, utilised in 83.42 percent of cases, followed by scissors at 12.50 percent, while 2.08 percent relied on other methods.

After cord-cutting, 39.58 percent of women applied cow dung or “Bhella”, a practice that poses a high risk of infection. 22.92 percent applied nothing after cutting the umbilical cord.

A majority (85.42%) of women engaged in hard labour soon after childbirth, which can lead to postpartum complications such as exhaustion, internal injuries, and delayed recovery.

Out of the pregnant women who experienced any sort of problem immediately after delivery (n=41), common postpartum health issues included persistent back pain (68.29%) and excessive bleeding (31.71%), highlighting the

physical strain women endure after childbirth.

Only 14.63 percent sought institutional healthcare (Govt. hospitals, PHCs, dispensaries, etc.). About 60.98 percent relied on home remedies, while 24.39 percent visited traditional healers.

Table 8 refers to the majority (52.09%) of postnatal care being provided by husbands, while 39.58% of women were cared for by their mother-in-law. Only 8.33% received care from Anganwadi Workers (AWWs), indicating minimal professional healthcare support during the critical postpartum period.

Table 8: Postnatal Health Care among Muria Women

Postnatal Health Care Variables	Category	Respondents (n=48)	
		No.	%
Received care	Mother-in-law	19	39.58
	AWW	4	8.33
	Husband	25	52.09
Problems faced after delivery are reported	Yes	12	25.00
	No	36	75.00
Types of problems faced after delivery	Excessive bleeding	11	22.92
	Persistent back pain	7	14.58
	High fever	2	4.17
	Pelvic inflammation	7	14.58
	Excessive bleeding + Pelvic inflammation	2	4.17
	Excessive bleeding + Persistent back pain	19	39.58
Treatment	Govt. Hosp./PHC/SC/DISP	6	12.50
	Trained Dai	9	18.75
	Home remedy	22	45.83
	RMP	1	2.08
	Traditional healer	10	20.83

About 25% of women reported experiencing health issues after delivery, while 75% did not report complications. Most common postnatal health issues include excessive bleeding, persistent back pain, pelvic inflammation, high fever, and multiple complications, such as excessive bleeding with back pain and excessive bleeding with pelvic inflammation.

Most women (45.83%) relied on home remedies, while only 12.50 per cent sought treatment from institutional healthcare facilities (Govt. hospitals, PHCs, dispensaries, etc.).

Traditional healers (20.83%) and trained dais (18.75%) played a significant role in postnatal care, showing a strong preference for indigenous healing practices over modern healthcare.

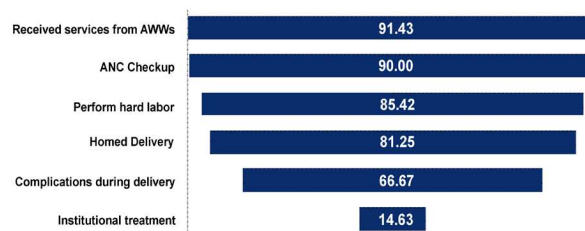


Figure 1: Declining Utilisation of Institutional Services Across Pregnancy Stages

Through the above graphical representation, it can be understood that initial contact with institutional services, especially during early pregnancy, is relatively high. However, as pregnancy progresses, there is a noticeable decline in institutional engagement. Performing Hard Labour (85.42%) and Home Delivery (81.25%) indicate a significant shift towards traditional practices, with many women still engaging in labour-intensive tasks and opting for home deliveries. Although 66.67 percent reported experiencing complications during childbirth. Only a fraction sought formal medical assistance. The above data sets highlight a critical gap in accessing healthcare during emergencies.

DISCUSSION

The Economic Survey 2018–19, which noted that 60% of primary health centres (PHCs) in India have only one doctor and roughly 5% have none, supports the current study's findings that 78.57% of villagers said there is no nearby PHC, PHSC, PHU, or dispensary. This suggests serious gaps in the country's rural healthcare system (Kaur, 2019).

Inadequate training, resource limitations, and infrastructural problems impairing performance and impacting beneficiary satisfaction were among the major gaps in AWW service delivery, identified by research conducted in a rural South Indian medical college (Debata & Ranganath, 2023). Nonetheless, the current survey shows that 73.33 percent of those who used AWW services had a favourable opinion of them.

The present study reports that 87.14 percent of women registered for antenatal services

during pregnancy. A study analysing data from India's National Family Health Survey-5 (2019-21) found that 70 percent of women had four or more ANC visits, but only 44 percent received quality ANC services. This indicates that while the number of ANC visits may be high, the quality and timing of care remain areas of concern (Girotra *et al.*, 2023).

About 75.71 percent of respondents in the current study reported that healthcare functionaries (private/public) visited their homes during the antenatal period. In Odisha, India, personalised maternal care interventions, including home visits, have been implemented to address the low proportion of institutional deliveries among tribal communities. These efforts aim to improve maternal health by providing culturally sensitive care and encouraging the utilisation of institutional maternal health services (Contractor *et al.*, 2018).

The current findings show that while ANC check-up (90.00%) and TT immunisation coverage (95.71%) are high, comparatively lower iron and folic acid tablet consumption. About 89.55% of Muria women had their body weight checked; however, blood pressure monitoring was lower (63.08%). This might suggest that there are gaps in thorough maternal health evaluations. A study in Bihar noted that inconsistent home visits by AWWs and ASHAs contributed to incomplete maternal health monitoring, particularly among marginalised communities (John *et al.*, 2020).

It has been found that delivery mostly takes place in their house, rather than in health centres. It is reported by the key information that delivery in-house is better, because at the house, family deities and ancestral spirits can protect the mother and the child from the evil spirits (Kolay, 1997). The study findings indicate a significant reliance on untrained Traditional Birth Attendants, who conducted 64.58 percent of the deliveries. This trend is consistent with similar studies in rural India. For instance, a study in Aligarh reported that untrained TBAs assisted in 89.6 percent of home deliveries, underlining the trust placed in traditional practices and the limited accessibility to formal healthcare services in rural and tribal regions (Bhardwaj *et al.*, 1990). Additionally, the involvement of family members such as mothers-in-law

(8.33%) and elderly ladies (4.17%) reflects the cultural norms prevalent in such communities. Similar findings were reported in a study highlighting that elder female family members often oversee childbirth in rural settings due to their perceived traditional knowledge and authority (Garces *et al.*, 2012). The utilisation of skilled birth attendants remains low, with only 8.33% of deliveries conducted by Local Health Visitors (LHVs) or Auxiliary Nurse Midwives (ANMs) and 10.42% by doctors. This mirrors findings from the Indian Demographic and Health Survey (2015-16), which revealed that rural residency, lower education levels, and limited antenatal care contributed to reduced engagement with skilled personnel (Islam *et al.*, 2024). The data also aligns with global insights, where traditional birth attendants were typically older, less formally educated women, influencing the quality of maternal care (Garces *et al.*, 2012).

Proper dietary intake during delivery and the postpartum period is crucial for maternal recovery and newborn health. A study on tribal women in Jharkhand and Odisha found that many postpartum mothers avoided nutrient-rich foods like dairy, eggs, and meat due to cultural taboos and the belief that these foods could harm the newborn (Dehury *et al.*, 2018). Our study suggests that 56.25% of women did not follow a special diet, possibly due to a lack of awareness about the importance of nutrition. The "POSHAN Abhiyaan" initiative in India emphasises the need for improved nutritional counselling for pregnant women, especially in tribal and underserved communities, to promote special diets during delivery and postpartum (Ministry of Women and Child Development, 2021).

According to a study conducted among the Kheria tribe, traditional delivery attendants still choose to cut the placental cord using the abundantly available bamboo split (Kolay, 2008). However, in the current study, 85.42% of participants used blades for cord cutting, followed by the application of Bhella or cow dung. This suggests that while the choice of instrument may depend on availability, the handling of the placenta largely adheres to traditional practices.

Excessive bleeding and back pain were major concerns, with postpartum haemorrhage posing a life-threatening risk if untreated, underscoring the need for improved access to

skilled postnatal care. Regarding treatment-seeking behaviour, a substantial proportion of women (45.83%) relied on home remedies, while 20.83% consulted traditional healers. This reliance on traditional methods reflects deep-rooted cultural beliefs and possible barriers to accessing formal healthcare. In contrast, only 12.50 percent sought care from government hospitals or primary health centres, and a mere 1.85 percent approached registered medical practitioners. This pattern resonates with findings from rural India, where life-threatening postpartum morbidities were present in 7.6% of women, emphasising the critical need for timely and professional medical intervention (Ziegler, 2012). These insights highlight the necessity of enhancing healthcare accessibility and community awareness regarding the importance of professional postpartum care to mitigate maternal health risks.

Recommendations

- i. This high percentage of complications suggests the need for better maternal healthcare interventions, improved access to skilled birth attendants, and enhanced emergency obstetric care.
- ii. Efforts should be made to promote institutional deliveries, strengthen the role of trained health functionaries, and improve maternal nutrition awareness.
- iii. Enhancing access to effective maternal care by increasing investment in the public sector and strengthening the monitoring systems for maternal care services.
- iv. Training TBAs can significantly improve maternal healthcare practices and outcomes. Reliance on family members, rather than trained health professionals, suggests a gap in accessible and structured postnatal healthcare services.

CONCLUSION

The study highlights significant gaps in maternal healthcare access and utilisation among the Muria women. While antenatal care is relatively well-utilised due to the efforts of Anganwadi Workers (AWWs), delivery and postnatal care remain inadequate. The reliance on traditional birth practices, home remedies, and untrained birth attendants increases the risk of maternal and neonatal complications.

While prenatal care services are somewhat accessible, delivery and postnatal care are critically lacking due to infrastructure gaps and cultural preferences for traditional practices. Strengthening healthcare accessibility, promoting institutional deliveries, and increasing awareness about maternal health risks are essential to improving overall maternal and neonatal health outcomes in the Muria community. The findings will help bridge gaps in maternal healthcare utilisation, inform culturally sensitive interventions, and improve institutional delivery rates.

The *Ghotul* is a vital component of the Muria adolescent knowledge system, preparing youth for adulthood. Imparting healthcare education through local people in their native dialect within such traditional institutions could be more effective. In a community like the Muria, where acceptance of healthcare systems is largely influenced by cultural determinants, this approach may enhance the impact of health interventions.

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