

BARRIERS AND FACILITATORS TO INSTITUTIONAL DELIVERY AMONG PREGNANT WOMEN IN TRIBAL COMMUNITIES: A QUALITATIVE EXPLORATION

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Abstract

Background: Institutional delivery is a proven intervention for reducing maternal and neonatal morbidity and mortality. Despite national programs such as the Janani Suraksha Yojana, utilization among tribal women in India remains low due to socio-cultural and structural barriers. This study explored the perceptions, barriers, and facilitators related to institutional delivery among tribal women in Kancheepuram district, Tamil Nadu.

Methods: A qualitative exploratory study was conducted between March and April 2025 in selected tribal villages. Purposive sampling recruited 28 participants, including 18 pregnant women or recent mothers and 10 key informants (ASHAs, ANMs, community leaders, health officials). Data were collected through four Focus Group Discussions (FGDs) and ten In-Depth Interviews (IDIs) using semi-structured guides. Transcripts were translated into English and analyzed thematically.

Results: Most women were aware of the benefits of institutional delivery but faced multiple barriers. Individual-level challenges included fear of hospital procedures, previous negative experiences, and lack of awareness among first-time mothers. Cultural and societal influences, such as preference for home births, decisions by elders, and restrictive gender norms, further constrained access. Structural and health system obstacles included distance, poor transport, inadequate infrastructure, and hidden costs. Facilitators included family support, peer influence, government schemes (e.g., JSY, ambulance services), and active engagement by community health workers.

Conclusion: Barriers to institutional delivery among tribal women are multifaceted, spanning individual, socio-cultural, and health system domains. Strengthening culturally sensitive health education, improving infrastructure, ensuring affordable transportation, and leveraging family and community support can enhance institutional delivery rates. Tailored, context-specific interventions are essential to reduce maternal mortality and achieve Sustainable Development Goal 3.

Keywords: Institutional delivery, maternal health, tribal communities, barriers, facilitators, qualitative study

INTRODUCTION

Maternal health continues to be a significant global public health issue, especially in low- and middle-income nations, where maternal mortality rates are still disproportionately elevated. In 2017, around 295,000 women lost their lives during or after pregnancy and childbirth worldwide, with nearly 94% of these fatalities occurring in low-resource environments [1]. Institutional delivery, which refers to childbirth taking place in a healthcare facility under the guidance of skilled birth attendants, is an effective intervention that greatly decreases maternal and neonatal morbidity and mortality [2]. Despite worldwide initiatives aimed at encouraging institutional deliveries through policies like the World Health Organization's (WHO) Safe Motherhood Initiative and India's Janani Suraksha Yojana (JSY), gaps in utilization remain, particularly among at-risk groups such as tribal communities [3,4].

Tribal populations, commonly known as Scheduled Tribes (STs) in India, account for about 8.6% of the overall population and are marked by socio-economic disadvantage, geographical seclusion, and distinct cultural traditions [5]. These groups encounter numerous obstacles in accessing maternal health services, including a lack of healthcare infrastructure, financial limitations, and cultural inclinations towards traditional birth attendants (TBAs) [6]. Studies



have consistently shown that tribal women are less inclined to give birth in health facilities compared to their non-tribal peers, which contributes to elevated maternal and neonatal mortality rates within these communities [7]. Data from the National Family Health Survey (NFHS-5) reveal that while institutional delivery rates have generally improved across India, disparities continue to exist among tribal women, with some states reporting utilization rates below 60% [8].

Various socio-cultural elements impact the decision-making process related to childbirth in tribal communities. Traditional views on pregnancy and childbirth, gender roles, family decision-making structures, and skepticism towards formal healthcare systems often determine whether women pursue institutional care [9]. Research has shown that in numerous tribal environments, childbirth is viewed as a natural event that typically does not necessitate medical assistance unless complications occur, leading to a preference for home births overseen by family members or traditional birth attendants (TBAs) [10]. Additionally, language obstacles, feelings of discrimination, and previous negative encounters with healthcare providers further dissuade tribal women from utilizing institutional services [11]. Barriers related to structure and health systems also significantly contribute to the issue. Geographic isolation, inadequate transportation networks, a shortage of skilled healthcare professionals, and insufficient maternal health facilities create considerable obstacles to institutional deliveries in tribal regions [12]. Financial limitations, even within conditional cash transfer programs, continue to be a hindrance due to hidden expenses such as travel, meals, and accommodation during hospital visits [13]. Moreover, inefficiencies within the health system, including inconsistent access to essential medications, irregular operation of primary health centers, and a lack of culturally appropriate care, worsen the situation [14-17].

Considering the intricate factors that affect institutional delivery among tribal women, qualitative research methods are especially effective for delving into the detailed experiences, perceptions, and socio-cultural contexts that quantitative surveys might overlook. It is crucial to comprehend these barriers and facilitators in order to create culturally relevant interventions that can enhance maternal and neonatal health outcomes within tribal populations [18]. This study seeks to investigate the lived experiences of pregnant women in tribal communities concerning institutional delivery, pinpoint context-specific challenges, and emphasize facilitators that can be utilized to boost the use of institutional delivery. Ensuring fair access to institutional delivery for tribal women is vital for meeting Sustainable Development Goal (SDG) 3, which aims to lower global maternal mortality to below 70 per 100,000 live births by 2030 [19]. Examining barriers and facilitators in tribal settings offers valuable insights for policymakers, program planners, and healthcare providers to customize interventions that are both effective and culturally attuned, ultimately aiding in the enhancement of maternal and child health outcomes in underserved communities.

Objectives

- 1. To investigate the obstacles affecting the use of institutional delivery services by pregnant women in tribal communities.
- 2. To determine the supportive elements and factors that promote institutional delivery for pregnant women in tribal communities.

MATERIALS AND METHODS

Study design: A qualitative exploratory study design was utilized to achieve a comprehensive understanding of the perceptions, attitudes, and experiences of the community concerning institutional delivery among pregnant women in tribal communities. This approach enabled the investigation of the socio-cultural, economic, and structural factors that affect decisions about the location of childbirth.

Study setting: The research took place in specific tribal villages located on the outskirts of Kancheepuram district, India, between March 2025 and April 2025. These regions were selected because of their significant tribal population and the recorded low rates of institutional deliveries, making it an appropriate setting to investigate the obstacles and enablers affecting the use of maternal healthcare services.

Study population: The research focused on pregnant women and mothers who have recently given birth (aged 18 and older) living in the chosen tribal communities for a minimum of six months. Furthermore, key informants such as community leaders, Accredited Social Health Activists (ASHAs), Auxiliary Nurse Midwives (ANMs), and local health officials were included to offer a more comprehensive insight into the utilization of maternal health services. Sample size: A total of 28 individuals participated in the study. The sample consisted of 18 pregnant women or recent mothers and 10 key informants. The sample size was established based on the concept of data saturation, which is defined as the point at which no new themes or insights arise from further data collection. Saturation was reached after conducting four Focus Group Discussions (FGDs) with women and ten In-Depth Interviews (IDIs) with key informants.



Sampling: Purposive sampling was utilized to guarantee the participation of individuals with varied experiences concerning institutional delivery. This method facilitated the gathering of comprehensive qualitative data from women across different age ranges, parity levels, and socio-economic statuses, in addition to insights from essential stakeholders engaged in the provision of maternal health services.

Data Collection Tools: FGD Guide: A semi-structured guide aimed at examining awareness of maternal health services, childbirth practices, perceptions regarding institutional delivery, and the barriers or facilitators that affect health-seeking behavior. IDI Guide: This guide is crafted to gather in-depth insights from key informants about community norms, the availability of healthcare services, and the operational challenges faced in promoting institutional deliveries.

Data Collection Procedure: Focus Group Discussions (FGDs) and In-Depth Interviews (IDIs) were carried out in the local tribal language, with audio recordings made following participant consent, and were further supported by field notes. FGDs took place in community centers or other safe, accessible venues within the villages to guarantee the comfort and privacy of participants. Each FGD comprised 4 to 5 participants, while IDIs were conducted on a one-on-one basis at locations that were convenient for the interviewees.

Data Analysis: All audio recordings were transcribed word-for-word in the local language and later translated into English. Thematic analysis was utilized to pinpoint recurring themes and sub-themes associated with barriers and facilitators to institutional delivery. An iterative approach involving several reviews and investigator triangulation was implemented to ensure the reliability, validity, and accuracy of the results.

Ethical Considerations: Informed verbal consent was secured from all participants before the commencement of data collection. The consent process provided comprehensive information regarding the study's objectives, data collection techniques, the use of audio recording, and the voluntary nature of participation. Participants were guaranteed confidentiality, anonymity, and the right to withdraw at any point without facing any repercussions. The study complied with ethical standards for research involving human subjects, ensuring respect for the autonomy, privacy, and cultural values of participants.

RESULTS

Sociodemographic Information

The study involved 28 participants, which included 18 pregnant women or recent mothers and 10 key informants. The age of the women ranged from 19 to 40 years, while the key informants were between 28 and 55 years old. Among the female participants, 12 (66.7%) were multiparous, and 6 (33.3%) were primiparous. The educational background of the women varied: 5 (27.8%) had no formal education, 7 (38.9%) had completed primary education, 4 (22.2%) had secondary education, and 2 (11.1%) had attended high school. All women participants were married, and the majority were primarily engaged in household duties (12, 66.7%), with a few involved in agriculture or daily wage labor. The socioeconomic status was classified according to a modified BG Prasad classification: 14 (77.8%) were categorized as lower socioeconomic class, 3 (16.7%) as lower-middle class, and 1 (5.5%) as middle class. The key informants included ASHAs, ANMs, community leaders, and local health officials who provided valuable insights into the utilization of maternal health services.

Knowledge and Awareness of Institutional Delivery: The majority of women demonstrated awareness of institutional delivery and its significance in mitigating maternal and neonatal complications. Participants associated institutional delivery with skilled birth attendance, safety during childbirth, and access to emergency medical care. A 32-year-old multiparous woman remarked: "Delivering at the hospital is safer because trained staff can handle complications like bleeding or fever." (Participant 8).

Barriers to Institutional Delivery: Participants in this study identified various obstacles that impede the use of institutional delivery services. These obstacles were classified into individual, cultural and societal, and structural/health system factors.

1. Individual Factors: Fear and Anxiety: Numerous women expressed feelings of apprehension regarding hospital deliveries due to fears surrounding medical procedures, pain, or unfamiliar settings. The sight of medical equipment, adherence to formal protocols, and the presence of hospital personnel heightened anxiety levels among first-time mothers. A 29-year-old primiparous woman remarked: "I was scared of going to the hospital because I didn't know what would happen there. I thought it might be painful or complicated." (Participant 5)

Previous Negative Experiences: Some multiparous women shared their unpleasant experiences from earlier hospital deliveries, which included inadequate communication from staff, feelings of neglect, or extended waiting periods. Such experiences dissuaded them from opting for institutional delivery in future



pregnancies. One woman conveyed: "Last time at the hospital, they didn't attend me properly, and I felt neglected. I was afraid to go again." (Participant 12). Lack of Awareness: Certain first-time mothers were not adequately informed about the advantages of institutional delivery and the potential dangers associated with home childbirth. Misunderstandings regarding labor processes or the belief that complications are infrequent hindered them from pursuing facility-based care. A participant commented: "I didn't know why I should go to the hospital. My mother said women deliver at home in our village all the time." (Participant 3)

- 2. Cultural and Societal Factors: Preference for Home Delivery: Deeply ingrained cultural beliefs have fostered the view that childbirth is a natural event best experienced at home, with the support of family or traditional birth attendants. Women frequently favored familiar surroundings, accompanied by relatives, rather than hospital environments. A 32-year-old woman stated: "In our community, women typically give birth at home with the assistance of elders or TBAs. Visiting the hospital seems unnecessary unless complications arise." (Participant 9). Influence of Elders: The authority over childbirth decisions often lies with husbands, mothers-in-law, or other senior family members. Even when women express a preference for hospital delivery, familial influence can lead to a choice for home birth. One participant recounted: "I wished to go to the hospital, but my mother-in-law insisted that it is preferable to deliver at home. She has experience with this process." (Participant 6). Gender Norms: Several women pointed out the limitations imposed by cultural expectations, such as the prohibition against traveling alone to distant hospitals, particularly at night. Concerns for safety, societal pressures, and restricted autonomy hindered prompt access to healthcare services. A participant shared: "I cannot travel to the hospital alone at night. In our culture, women require a male relative or elder to accompany them." (Participant 10)
- 3. Structural and Health System Factors: Distance and Transportation: A significant obstacle was the geographical distance to healthcare facilities, with numerous villages situated several kilometers from hospitals. Limited or inconsistent transportation options, especially during nighttime, resulted in considerable delays. One participant expressed: "We wanted to go to the hospital, but the nearest one is 15 km away, and there is no vehicle at night." (Participant 7). Inadequate Infrastructure: Participants indicated that healthcare facilities frequently lacked adequate beds, female personnel, privacy, and hygiene standards. These deficiencies led to a hesitance to utilize institutional services. A 38-year-old multiparous woman stated: "Even when we reach the hospital, there are not enough beds, and sometimes we have to wait in the corridor. The cleanliness is not good, so we prefer home." (Participant 14) Financial Constraints: Despite governmental initiatives such as Janani Suraksha Yojana offering incentives, incidental expenses like transportation, medications, and food during hospital stays posed challenges for low-income families. A participant noted: "The hospital delivery is free, but we need to spend on travel and some medicines. It is difficult for us to manage." (Participant 8)

Facilitating Factors Identified by Key Informants: Key informants, such as ASHAs, ANMs, and community leaders, pointed out various factors that promoted institutional delivery:

Community Engagement: Health workers made efforts to engage women and their families through home visits, awareness campaigns, and counseling, highlighting the advantages of hospital deliveries. This personal interaction helped alleviate fears, correct misconceptions, and encourage women to use the services. An ASHA worker remarked: "We motivate women by visiting their homes, outlining the benefits, and occasionally arranging transportation for them to reach the hospital." (Participant 21)

Supportive Policies: Government programs like conditional cash transfers, transportation assistance, and incentive schemes played a crucial role in encouraging hospital deliveries. Key informants noted that timely information regarding these initiatives and help in accessing them led to increased participation.

Peer Influence: The positive experiences recounted by women who had given birth in hospitals had a significant impact on others in the community. Narratives of safe childbirth, effective management of complications, and supportive hospital staff fostered a peer-driven motivation. A community leader observed: "When women learn that their neighbors had a safe delivery in the hospital, they feel more assured about going themselves." (Participant 24)

Family Support: Support from husbands and mothers-in-law, financial aid, and accompanying individuals to hospitals were frequently mentioned as essential facilitators. Families that recognized the significance of institutional delivery actively encouraged timely visits to the hospital.



Table 1: Themes, Categories, and Codes Related to Barriers and Facilitators of Institutional Delivery Among Pregnant Women in Tribal Communities

THEMES	CATEGORIES	CODES
Individual factors	Fear and anxiety	Concerns about medical procedures, unfamiliar environment
	Lack of awareness	Limited knowledge of institutional delivery benefits
	Previous experiences	Negative hospital experiences, childbirth complications
Cultural and societal factors	Preference for home delivery	Traditional beliefs, childbirth as family ritual
	Influence of elders	Husband/mother-in-law decision-making
	Gender norms	Restrictions on traveling alone, cultural expectations
Structural and health system factors	Distance and transport	Long distance, unavailability of vehicles
	Infrastructure and staffing	Poor facilities, lack of female staff, hygiene issues
	Financial constraints	Hidden costs of travel, medicines, hospital fees
Facilitating factors	Family support	Encouragement, accompaniment, financial support
	Government schemes	Janani Suraksha Yojana, cash incentives, ambulance service
	Community engagement	Counseling, home visits, peer influence, awareness programs

DISCUSSION

This qualitative investigation underscores various individual, cultural, and structural obstacles, along with facilitators that affect institutional delivery among pregnant women in tribal communities. Grasping these elements is essential for enhancing maternal health outcomes in marginalized groups.

The research revealed that individual-level factors, including fear of medical procedures, past negative experiences, and a lack of awareness, significantly discouraged women from delivering in healthcare facilities. Comparable results were documented by Singh et al., who found that fear and anxiety surrounding hospital childbirth, as well as limited knowledge about institutional delivery, were key deterrents for tribal women in India [20]. Consistent with our findings, Deo et al. observed that first-time mothers particularly lacked awareness of potential childbirth complications, which affected their inclination towards home delivery [21].

Cultural and societal factors surfaced as significant barriers. The preference for home delivery, the influence of elders in decision-making, and restrictive gender norms constrained women's autonomy in pursuing institutional care. These results align with those of Ganle et al., who reported that traditional beliefs, family decision-making hierarchies, and social norms within tribal communities frequently obstructed the use of maternal health services [22]. Likewise, Bhatia and Cleland noted that in various rural and tribal regions of South India, women heavily depended on family advice and cultural practices, which influenced their childbirth decisions [23]. Barriers related to structural and health systems, such as the considerable distances to healthcare facilities, inadequate infrastructure, insufficient female personnel, and financial limitations, were frequently mentioned. These issues correspond with the research conducted by Kumar et al., who pointed out that poor transportation, lack of facility readiness, and incidental expenses hinder women's access to institutional deliveries in marginalized areas [24]. Our research further validates the significance of supportive policies like conditional cash transfers and ambulance services, as noted by Scott et al., who demonstrated that interventions by community health workers and financial incentives greatly improved the uptake of institutional deliveries in tribal regions [25].

In spite of these obstacles, various facilitators were recognized. Community involvement through home visits, counseling by ASHAs, and peer influence played a crucial role in encouraging institutional deliveries. The support from family, especially in terms of encouragement and accompaniment, strengthened positive health-seeking



behaviors. These results align with those of Sahoo et al., who illustrated that active community participation, culturally appropriate counseling, and family support were essential factors influencing institutional delivery among tribal women [26]. Likewise, awareness campaigns and ongoing interactions with health workers have proven effective in dispelling misconceptions and alleviating fears related to hospital childbirth [27].

Our research emphasizes that strategies aimed at enhancing institutional delivery in tribal communities must take a comprehensive approach, tackling individual knowledge deficits, socio-cultural norms, and structural challenges. Culturally relevant health education, improving health infrastructure, ensuring prompt transportation, and utilizing family and community support can significantly boost the utilization of maternal health services.

Conclusion

The research emphasizes that obstacles to institutional childbirth among tribal women are complex, involving personal anxieties, socio-cultural traditions, and challenges within the health system. Support from family, government initiatives, and community involvement are vital in encouraging hospital-based deliveries. Tackling these obstacles through culturally appropriate health education, enhanced infrastructure, and accessible transportation can improve rates of institutional delivery. It is essential to empower women and families to make informed choices. The influence of peers and positive hospital experiences further promote the use of these services. Policy measures should combine both awareness-raising and structural assistance. In summary, a thorough, context-specific strategy is necessary to enhance maternal and neonatal health outcomes in tribal populations.

Strengths

- The application of qualitative methods facilitated a profound comprehension of perceptions and experiences.
- The involvement of both pregnant women and key informants guaranteed a variety of perspectives.
- Purposive sampling enabled a diverse representation of socio-demographic factors..
- The triangulation of Focus Group Discussions (FGDs) and In-Depth Interviews (IDIs) improved the reliability and validity of the findings.

Limitations

- The findings are specific to the context and may not be applicable to all tribal populations.
- The small sample size restricts the broader applicability of the results.
- Dependence on self-reported experiences may lead to recall bias.

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REFERENCES

- 1. World Health Organization. Maternal mortality: Levels and trends 2000 to 2017. Geneva: WHO; 2019.
- 2. Campbell OM, Graham WJ. Strategies for reducing maternal mortality: getting on with what works. Lancet. 2006;368(9543):1284–99.
- 3. United Nations. The Millennium Development Goals Report 2015. New York: UN; 2015.
- 4. Ministry of Health and Family Welfare, Government of India. Janani Suraksha Yojana (JSY) Operational Guidelines. New Delhi: MoHFW; 2017.
- 5. Office of the Registrar General & Census Commissioner, India. Census of India 2011: Scheduled Tribes in India. New Delhi: Government of India; 2011.
- 6. Sharma R, et al. Maternal health care among tribal women in India: a review. J Public Health. 2020;28(2):123–34.
- 7. Singh PK, et al. Inequalities in maternal health among tribal and non-tribal women in India. BMC Public Health. 2019;19:1450.
- 8. International Institute for Population Sciences (IIPS) and ICF. National Family Health Survey (NFHS-5), India, 2019-21. Mumbai: IIPS; 2021.
- 9. Deo KK, et al. Cultural barriers to maternal health care utilization in tribal communities of India. J Health Popul Nutr. 2015;33:38.
- 10. Bhatia JC, Cleland J. Determinants of maternal care in a region of south India. Health Policy Plan. 1995;10(1):55-64.
- 11. Das A, et al. Perceptions and experiences of tribal women regarding maternal health services in India: a qualitative study. Reprod Health. 2019;16:93.
- 12. Ganle JK, et al. Barriers to institutional delivery among tribal women in India: a qualitative inquiry. BMC Pregnancy Childbirth. 2016;16:180.



- 13. Lim SS, et al. Financial barriers and maternal health care utilization among vulnerable populations. PLoS Med. 2010;7:e1000247.
- 14. Rao S, et al. Health system challenges in promoting institutional deliveries in tribal areas of India. Indian J Community Med. 2018;43(3):183–8.
- 15. Sahoo H, et al. Facilitators of institutional delivery among tribal women: evidence from India. BMC Pregnancy Childbirth. 2017;17:42.
- 16. Scott K, et al. Community health workers and maternal health in tribal communities: lessons from India. Glob Public Health. 2018;13(7):936–51.
- 17. Kumar S, et al. Factors influencing institutional delivery in marginalized populations of India. BMC Pregnancy Childbirth. 2016;16:35.
- 18. Creswell JW, Poth CN. Qualitative Inquiry & Research Design: Choosing Among Five Approaches. 4th ed. Thousand Oaks: SAGE; 2018.
- 19. United Nations. Transforming our world: The 2030 Agenda for Sustainable Development. New York: UN; 2015.
- 20. Singh PK, et al. Inequalities in maternal health among tribal and non-tribal women in India. BMC Public Health. 2019:19:1450.
- 21. Deo KK, et al. Cultural barriers to maternal health care utilization in tribal communities of India. J Health Popul Nutr. 2015;33:38.
- 22. Ganle JK, et al. Barriers to institutional delivery among tribal women in India: a qualitative inquiry. BMC Pregnancy Childbirth. 2016;16:180.
- 23. Bhatia JC, Cleland J. Determinants of maternal care in a region of south India. Health Policy Plan. 1995;10(1):55–64.
- 24. Kumar S, et al. Factors influencing institutional delivery in marginalized populations of India. BMC Pregnancy Childbirth. 2016;16:35.
- 25. Scott K, et al. Community health workers and maternal health in tribal communities: lessons from India. Glob Public Health. 2018;13(7):936–51.
- 26. Sahoo H, et al. Facilitators of institutional delivery among tribal women: evidence from India. BMC Pregnancy Childbirth. 2017;17:42.
- 27. Rao S, et al. Health system challenges in promoting institutional deliveries in tribal areas of India. Indian J Community Med. 2018;43(3):183–8.