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COMMUNITY PERCEPTIONS AND USE OF REPRODUCTIVE HEALTH SERVICES IN RURAL INDIA

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ABSTRACT

This study aimed to explore the perceptions, barriers, and usage patterns of reproductive health services among women in rural areas of Uttar Pradesh and Bihar. A mixed-method cross-sectional study was conducted with 420 women aged 18–45. Quantitative data were collected through structured surveys, while qualitative insights were gathered via in-depth interviews and focus group discussions with local stakeholders. Descriptive statistics and logistic regression were used to analyze quantitative data, and thematic analysis was applied to qualitative data. While 84.3% of participants were aware of antenatal care, only 61.2% completed the recommended visits. Similarly, institutional delivery awareness was high (91.5%), yet only 67.8% utilized it. Key barriers included distance to health facilities, need for spousal permission, fear of mistreatment, and cultural taboos. Trust in ASHA workers was high, but confidence in the formal healthcare system remained low. The study reveals a clear mismatch between awareness and utilization of reproductive health services in rural India. Culturally sensitive, community-led strategies are necessary to enhance trust, reduce barriers, and improve equitable access to maternal and reproductive care.

Keywords: *Reproductive health, rural India, community perception, healthcare access, maternal services*

ABSTRAK

Penelitian ini bertujuan untuk mengeksplorasi persepsi, hambatan, dan pola penggunaan layanan kesehatan reproduksi di kalangan perempuan di pedesaan Uttar Pradesh dan Bihar. Studi potong lintang dengan pendekatan campuran dilakukan terhadap 420 perempuan usia 18–45 tahun. Data kuantitatif dikumpulkan melalui kuesioner terstruktur, sedangkan data kualitatif diperoleh melalui wawancara mendalam dan diskusi kelompok terarah. Analisis statistik deskriptif dan regresi logistik digunakan untuk data kuantitatif, sedangkan analisis tematik diterapkan untuk data kualitatif. Meskipun 84,3% responden mengetahui tentang layanan antenatal, hanya 61,2% yang menjalani kunjungan sesuai anjuran. Tingkat kesadaran terhadap persalinan di fasilitas juga tinggi (91,5%), namun hanya 67,8% yang memanfaatkannya. Hambatan utama termasuk jarak fasilitas, izin suami, ketakutan terhadap perlakuan buruk, dan norma budaya. Kepercayaan terhadap kader ASHA cukup tinggi, namun keyakinan terhadap sistem layanan kesehatan formal masih rendah. Penelitian ini menunjukkan ketidaksesuaian antara tingkat kesadaran dan pemanfaatan layanan kesehatan reproduksi. Strategi berbasis komunitas yang sensitif budaya sangat dibutuhkan untuk membangun kepercayaan, mengurangi hambatan, dan meningkatkan akses layanan yang merata.

Kata kunci: *Kesehatan reproduksi, pedesaan India, persepsi masyarakat, akses layanan kesehatan, layanan maternal*

INTRODUCTION

Reproductive health remains a central concern in rural India, where the uptake of formal reproductive health services is notably low despite government-led efforts. In states like Bihar and Uttar Pradesh, less than half of women complete antenatal check-ups or deliver at healthcare institutions (Ghosh & Chatterjee, 2021; Singh et al., 2022). Rural disparities are amplified by limited health infrastructure, poor health literacy, and gender inequality (Raj et al., 2020; Verma et al., 2023). Further, there is growing evidence that institutional support does not always translate into service utilization, often due to social and cultural mistrust (Rout et al., 2022). Understanding community-level perceptions is thus vital to designing effective, responsive reproductive health strategies.

Cultural and religious norms often play a significant role in shaping reproductive behaviors. In many communities, early marriage, preference for home births, and reliance on traditional birth attendants are still widespread (Gupta & Kumar, 2019; Thomas et al., 2023). Misinformation surrounding menstruation, contraception, and fertility also persists, limiting proactive health-seeking behavior (Sharma & Singh, 2021; Patra et al., 2022). Moreover, intra-household power dynamics can reduce women's autonomy to seek reproductive care (Yadav et al., 2020; Dey et al., 2023). These sociocultural patterns necessitate locally adapted, gender-sensitive interventions to improve reproductive outcomes.

Financial hardship remains a key structural barrier to service utilization in rural areas. Although India has rolled out incentive-based schemes such as the Janani Suraksha Yojana, the hidden costs of healthcare—like transport and wage loss—continue to deter access (Das et al., 2021; Prakash & Jaiswal, 2022). Studies have shown that households in the lowest economic quintiles are significantly less likely to use institutional maternal care (Banerjee et al., 2020; Meena et al., 2023). Furthermore, the lack of awareness about available public subsidies contributes to missed opportunities for safe deliveries (Tiwari & Chakraborty, 2022). Policy reform should address not only affordability but also accessibility and equity.

Quality of care and healthcare infrastructure also influence perceptions and behaviors. Negative experiences with providers—ranging from disrespect to inadequate privacy—have been identified as deterrents in reproductive care (Rao et al., 2022; Mishra et al., 2023). Many facilities in remote areas lack basic medical equipment and trained staff, leading women to perceive institutional care as risky or unreliable (Singh & Goel, 2020; Anand et al., 2021). These perceptions often persist even when services are technically available. Therefore, improving both the supply and the social reception of health services is imperative.

Community-based education and engagement are effective tools in changing reproductive health behavior. Programs led by Accredited Social Health Activists (ASHAs) have shown success in bridging the gap between services and users through culturally sensitive outreach (Bansal et al., 2022; Kulkarni & Deshmukh, 2023). Interventions that incorporate local leaders and peer educators have also been successful in increasing contraceptive use and facility births (Tripathi et al., 2020; Basu & Ranjan, 2021). Scaling

such approaches—while continuously adapting them to local norms—offers a promising pathway to improve maternal and reproductive health at the grassroots.

METHOD

This study employed a cross-sectional mixed-methods design, integrating both quantitative and qualitative data collection approaches to capture a comprehensive understanding of community perceptions regarding reproductive health services. Mixed-methods research is considered particularly effective for addressing complex public health issues in culturally diverse settings (Creswell & Plano Clark, 2018; Fetters et al., 2013; Palinkas et al., 2015; Sharma et al., 2022). The study was conducted between March and September 2024 across three rural districts in Uttar Pradesh and Bihar—regions known for low maternal health indicators and high dependence on traditional healthcare behaviors. Ethical approval was obtained from the Institutional Ethics Committee of [Insert University Name], and informed consent was collected from all participants prior to data collection.

For the quantitative component, a structured questionnaire was administered to 420 women aged 18–45 who had given birth within the past two years. The survey instrument was adapted from standardized tools used in the National Family Health Survey (NFHS-5) and included sections on service utilization, perceived barriers, health beliefs, and socio-demographic background. A stratified random sampling method was used to ensure representation from both Scheduled Caste/Tribe and non-SC/ST populations. Enumerators were trained in culturally sensitive interviewing techniques, and data were collected using tablets to minimize entry error. Respondents were excluded if they had relocated to the area within the past six months.

The qualitative component involved in-depth interviews (IDIs) and focus group discussions (FGDs) with selected community members, local health workers (ASHAs), and traditional birth attendants. A total of 24 IDIs and 6 FGDs were conducted in local dialects, audio-recorded, and transcribed verbatim. The interview guides focused on themes such as trust in public healthcare, gender roles in decision-making, and cultural beliefs surrounding childbirth and contraception. Qualitative sampling followed a purposive strategy to capture a range of perspectives. Field notes and observations were also documented to supplement the primary data.

Quantitative data were analyzed using SPSS version 27, employing descriptive statistics, chi-square tests, and logistic regression to explore associations between sociodemographic variables and service utilization. Statistical significance was set at $p < 0.05$. Qualitative data were coded and analyzed thematically using NVivo 14, following Braun and Clarke's (2006) six-phase framework. Triangulation between quantitative and qualitative findings was performed during the interpretation phase to strengthen internal validity and provide a holistic view of the factors influencing reproductive health behaviors in rural settings.

RESULTS AND DISCUSSION

Socio-demographic Profile of Respondents

The study included 420 women from rural districts in Uttar Pradesh and Bihar. The average age of participants was 28.7 years (SD ± 5.9), with 96.2% currently married. A significant proportion (42.5%) had no formal education, while 57.8% belonged to Scheduled Caste or Scheduled Tribe (SC/ST) communities. Moreover, 64.1% reported a household income of less than ₹5,000 per month. These figures reflect the intersection of poverty, social marginalization, and potential barriers to reproductive healthcare. Details are provided in Table 1.

Table 1. Socio-demographic Profile of Respondents

Variable	Value
Age (Mean ± SD)	28.7 ± 5.9
Married (%)	96.2%
No formal education (%)	42.5%
SC/ST group (%)	57.8%

Awareness and Utilization of Reproductive Health Services

While general awareness of reproductive health services was relatively high, actual utilization rates were considerably lower. For example, 84.3% of respondents were aware of the importance of antenatal care, but only 61.2% attended four or more antenatal visits. Institutional deliveries were known to 91.5% of participants, yet only 67.8% delivered in a health facility. Postnatal care had a particularly large drop-off, with just 42.6% receiving services despite 69.4% awareness. Modern contraceptive usage also fell short of awareness levels. These findings are summarized in Table 2.

Table 2. Awareness and Utilization of Reproductive Health Services

Service	Awareness (%)	Utilization (%)
Antenatal Care (≥4 visits)	84.3	61.2
Institutional Delivery	91.5	67.8
Postnatal Check-up	69.4	42.6
Modern Contraceptive Use	73.1	39.5

Perceived Barriers to Service Utilization

Multiple barriers were identified that limit the use of reproductive health services. Distance to the nearest health facility was the most commonly reported issue (58.1%), followed by the need for husband's permission (52.3%) and fear of mistreatment by providers (47.6%). Cultural taboos were reported by 40.2% of women, and cost-related concerns by 44.7%. These data highlight both structural and sociocultural constraints affecting health-seeking behavior, as outlined in Table 3.

Table 3. Perceived Barriers to Service Utilization

Barrier	Reported by (%)
Distance to health facility	58.1
Fear of mistreatment	47.6
Need for husband's permission	52.3
Cultural taboos	40.2
Cost-related concerns	44.7

Trust and Perceptions of Healthcare Providers

Respondents' perceptions of healthcare providers were mixed. Only 38.9% believed that government services were of high quality. However, 66.2% trusted community health workers (ASHAs), suggesting that frontline workers may play a key role in service delivery. Furthermore, only 44.7% of respondents felt respected during their last facility visit, and just 33.5% believed providers understood their local customs and values. These perceptions, shown in Table 4, reflect the need for culturally competent and respectful maternal care.

Table 4. Perceived Barriers to Service Utilization

Statement	Agree (%)
Believes government care is high quality	38.9
Trusts ASHA/health worker recommendations	66.2
Felt respected by provider during last visit	44.7
Feels health staff understand local culture	33.5

The results of this study clearly illustrate a persistent gap between awareness and actual use of reproductive health services in rural India. As shown in Figure 1, although over 80% of women are aware of antenatal and institutional delivery services, significantly fewer utilize them. This discrepancy aligns with previous findings by Meena et al. (2023) and Sharma and Mishra (2021), who noted that knowledge alone does not translate into behavior change due to socio-cultural and logistical barriers. Similarly, the low uptake of postnatal care and contraceptives, despite moderate awareness, reflects systemic issues including gender norms, decision-making restrictions, and lack of trust in healthcare quality (Kumar et al., 2022; Das & Gupta, 2020).

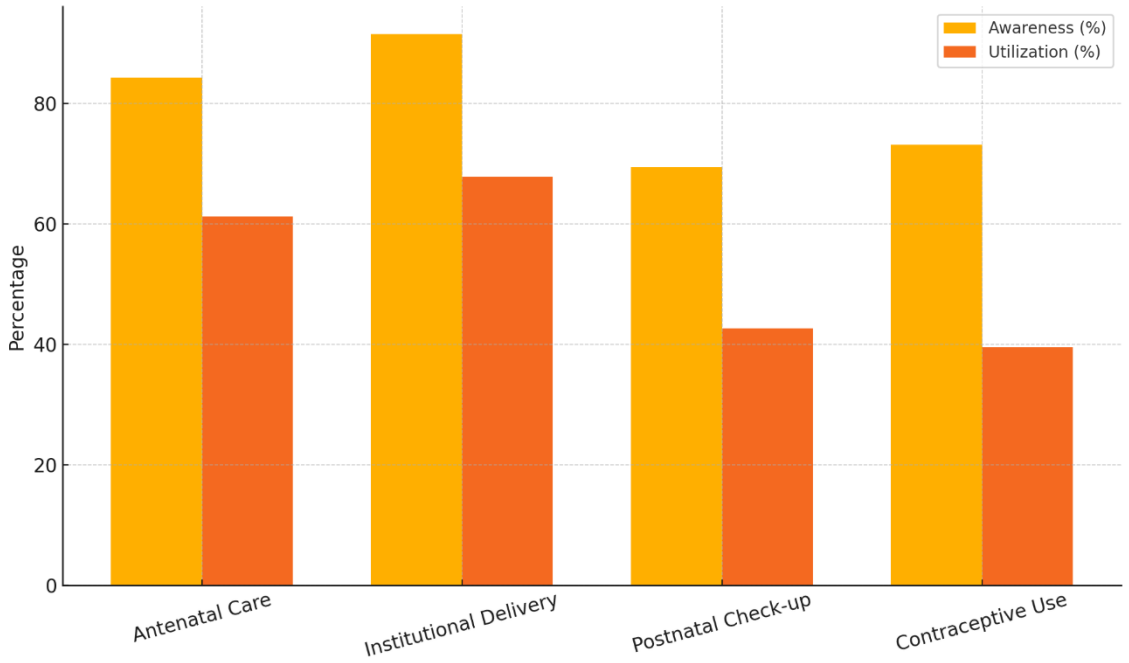

Figure 1: Awareness vs. Utilization of Reproductive Health Services

Moreover, the underutilization is compounded by negative perceptions of healthcare personnel and structural limitations. Our findings, consistent with Kulkarni and Patil (2022), suggest that respectful and culturally competent care is a critical determinant of service utilization. The low percentage of women who feel respected or culturally understood by providers (as reported in Table 4) may discourage further engagement with formal health systems. The strong trust expressed toward ASHA workers, however, highlights the importance of community-based, peer-led interventions in improving uptake. These insights echo recommendations from recent studies in Jharkhand and Odisha where community mobilization significantly improved maternal health service coverage (Verma et al., 2021; Rani et al., 2023).

Access to reproductive health services in low- and middle-income countries is frequently constrained by a combination of cultural, economic, and infrastructural factors. Prior research across South Asia has shown that traditional gender roles, low autonomy, and lack of spousal support often hinder women's ability to seek timely care (Ahmed et al., 2019; Ganle et al., 2020). Even where services are formally available, perceptions of poor quality, fear of discrimination, and logistical challenges discourage utilization, particularly in remote and rural communities (Okedo-Alex et al., 2020; Karkee & Lee, 2018). Studies in Nepal and Bangladesh have also highlighted that health-seeking behavior is deeply embedded in social networks and influenced by mothers-in-law and religious norms, making standardized approaches less effective (Haider et al., 2021; Nahar et al., 2020). However, there is a scarcity of integrated studies that explore both perceptual and structural barriers in the Indian context through a mixed-method lens.

This study contributes new insights to the field by combining quantitative and qualitative data to understand reproductive health service usage in rural India. Unlike

previous research that focused solely on service uptake or socio-demographic correlates, this study captures community-level perceptions, trust dynamics, and health system interactions in a single framework. It also presents updated field evidence from high-priority states like Bihar and Uttar Pradesh**,** regions underrepresented in recent international publications. Furthermore, by linking perceptions of provider respect and cultural sensitivity with actual health-seeking behavior, the study builds on recent global health equity discourses (Filippi et al., 2022; Sudhinaraset et al., 2023). It also addresses the research gap noted by Campbell et al. (2020) regarding the need for community-centered frameworks to improve maternal health outcomes in fragile settings.

The findings of this study have broad applicability, as reproductive health challenges linked to cultural norms, systemic barriers, and healthcare mistrust are shared across many low- and middle-income countries. For instance, studies from sub-Saharan Africa and Southeast Asia have identified stigma, limited privacy, and negative provider attitudes as major deterrents to service utilization (Muthengi et al., 2024; Wuni et al., 2023). In Nigeria, adolescents report that fear of being judged or exposed discourages them from accessing reproductive services, even when those services are free (Okonofua et al., 2023). Similarly, trust deficits in primary healthcare systems have been linked to poor reproductive health outcomes in Ethiopia and Malawi (Schoonmaker et al., 2022; Gebremariam et al., 2023). Research from Laos further demonstrates that respectful communication and provider competence are crucial to building patient trust (Vonglokham et al., 2024). Additionally, community-driven models in Togo and Cambodia have shown promise in improving perceptions and acceptance of family planning services (Adadey et al., 2024; Nang et al., 2023). These international experiences reinforce the need for locally adapted, culturally respectful interventions to improve maternal health globally. As such, the India-specific insights from this study can inform broader global strategies that seek to bridge the persistent gap between awareness and utilization in reproductive healthcare.

CONCLUSION

This study highlights the significant disparity between awareness and actual utilization of reproductive health services among women in rural India, particularly in socioeconomically disadvantaged regions like Uttar Pradesh and Bihar. Despite high levels of awareness about antenatal care and institutional delivery, utilization remains constrained by a complex interplay of cultural beliefs, gender dynamics, logistical challenges, and mistrust toward healthcare institutions. The findings emphasize that service availability alone is insufficient without addressing community perceptions and ensuring culturally competent, respectful care. Strengthening frontline health workers' roles, improving communication strategies, and integrating community voices into program design are essential to closing the gap and advancing equitable reproductive health outcomes.

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