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Mapping Reproductive Health of Indigenous Women in India: A Systematic Review

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Abstract

Reproductive health among Indigenous women is a multifaceted issue involving socio-cultural, economic and systematic factors. The present work aims to systematically review and synthesize existing research on reproductive health of Indigenous women in India. It addresses two interconnected research questions: their perception towards family planning & contraceptive usage and their accessibility to reproductive healthcare resources. Accordingly, a comprehensive search initially yielded 15,058 articles and later reduced to 669 after applying inclusion criteria like content accessibility, publication time frame, language and subject focus. In order to make the review country-specific, 62 articles related to India were identified. After screening the title, abstract and full-text, 17 articles were finally reviewed. The review highlights reproductive healthcare barriers faced by Indigenous women due to factors such as spatial, socio-economic status, and cultural & traditional values. It also identifies the importance of awareness regarding family planning and contraceptive uses. With reference to healthcare provision for Indigenous women, it stresses on the accessibility and quality of care as well as culturally appropriate reproductive healthcare. The review also emphasises the evident need for collaborative work between policymakers and healthcare providers in order to address such challenges and achieve equitable and comprehensive reproductive healthcare for Indigenous women.

Keywords: indigenous women, reproductive health, healthcare facilities, contraceptive use, family planning, systematic review, good health and well-being.

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1. Introduction

1.1. Background

Reproductive health constitutes a foundational dimension that encompasses the physical, emotional, and social well-being of individuals in relation to their reproductive choices. As stated by the World Health Organization (WHO), '*Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes'* (W.H.O., Chapter-17 Maternal, reproductive and child health, 2017; Strategy to Accelerate Progress towards the Attainment of International Development Goals and Targets Related to Reproductive Health, 2005). Reproductive health encompasses aspects such as menstrual health, family planning, maternal health, sexually transmitted infections (STIs) and HIV/AIDS, reproductive rights, and gender equality in decision-making. Prioritizing women's reproductive health by providing comprehensive healthcare services, such as adequate family planning, access to contraceptives, and easily accessible healthcare facilities, is essential for achieving positive health outcomes and fulfilling international development goals (Gupta, 1997; Rice, 1996).

Moreover, the principles outlined in the Programme of Action of the International Conference on Population and Development (ICPD) emphasize equal access to reproductive healthcare services, including the fundamental rights of individuals to determine the number of children they desire (Snow, 2000; United Nations Department of Economics and Social Affairs, 2020) This commitment is further reinforced in goal 3, "Good health and well-being" of Sustainable Development Goals (SDG), more specifically in goal 3.7, which aims to ensure universal access to sexual and reproductive healthcare services, including information, education, and the integration of reproductive health into national strategies and programs (Starbird et al., 2016; United Nations, Department of Economic and Social Affairs, Population Division, 2019). Consequently, it becomes imperative to prioritize women's reproductive health by providing them with comprehensive healthcare services, such as adequate family planning, access to contraceptives, and easily accessible healthcare facilities.

1.2. A Global picture of family planning and reproductive health of women

Family planning, as defined by the WHO, is an essential requirement that enables individuals to have the desired number of children and manage the age

gap between them with the necessary methods to achieve this objective (Family Planning a Global Handbook for Providers, n.d.; United Nations, Department of Economic and Social Affairs, Population Division, 2019). Studies show that family planning can potentially mitigate 32% of maternal deaths and nearly 10% of childhood deaths, and in developing countries, adequate attention to control high rate of child births and maternal deaths can consequently reduce poverty and hunger (Cleland et al.,2006; Fabic et al., 2015; Jacobstein et al., 2013; Kassim & Ndumbaro, 2020).

According to World Family Planning's report (2022), out of 1.9 billion women in their childbearing years, around 966 million were using either traditional or modern methods of contraceptives. It is also observed that despite 89% of women having options for contraceptive uses, their decision to utilize them was secondary and depended on their partner's willingness (United Nations Statistics Division, n.d.). Autonomy in making decisions regarding the use of contraceptives was also found to be reflective of the status of reproductive health of women across countries. It is well substantiated in the report by the United Nations in 2024 on gender equality– one of the indicators of SDG. While analyzing data from 68 nations collected between the years 2007 and 2022, it mentions that only 56% of women their reproductive age possess the autonomy to make decisions regarding their sexual and reproductive health and rights. It also compares and magnifies the countrywide disparities where it can be seen that while the extent of such autonomy is over 80% in certain European, Latin American, and Caribbean nations, the same is merely 37% in sub-Saharan Africa (United Nations Statistics Division, n.d.). Further, there is an unmet need for family planning resources where around 164 million women who seek to delay or prevent pregnancy face barriers in accessing any contraceptive options (United Nations; World Family Planning, 2022). WHO, in a report published in 2024, revealed that in the year 2020, out of 61% of unintended pregnancies, only 29% resulted in induced abortion (World Health Organization: WHO, 2024). Moreover, due to insufficient legislation and policies, women face significant barriers in accessing reproductive healthcare resources (Mali, 2018). The basic challenge faced by the world in imparting equal sexual and reproductive health rights is disparities, not only socio-economic but also gender-based disparities (United Nations Statistics Division, n.d.). A study estimates that approximately 21% of women of reproductive age in developing countries have an unmet need for contraception (Mugwe & Wangari, 2021; Sedgh & Hussain, 2014).

Despite the efforts of family planning programs to increase the awareness and accessibility of contraceptives in many developing nations, a considerable proportion of births are still unplanned (Boglaeva, 2021). In order to address the issue of unmet family planning needs, it is crucial to prioritize national

demographic goals and the rights of individuals, as emphasized by the ICPD held in Cairo (Boglaeva, 2021; Mugwe & Wangari, 2021).

1.3. Introduction to Indian Indigenous population

India, as a nation, is the domicile of approximately 104 million Indigenous population of 705 ethnic groups, constituting 8.6% of the total national population (Ministry of Tribal Affairs, Government of India (2013). The World Bank has explicitly defined the Indigenous group as "Indigenous Peoples are distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy, or from which they have been displaced. The land and natural resources they depend on are linked to their identities, cultures, livelihoods, and physical and spiritual well-being." (International Work Group for Indigenous Affairs, 2023).

In India, Scheduled tribes are heterogeneous communities, each having a different ethnicity, language, and race. The highest concentration of Indigenous people, comprising 46.1%, is found in the eastern and central regions, including Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, and West Bengal. While the western region (Dadra & Nagar Haveli, Daman & Diu, Goa, Gujarat, Maharashtra, and Rajasthan) is home to 27.7% of ST population, the seven states (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura) of north-eastern India comprise 12 % of the total tribal population of the country. However, it is interesting to find that, according to a report published by International Work Group for Indigenous Affairs (IWGIA), the latter is home to approximately 220 ethnic groups (Chakma et al., 2024). While southern regions, covering Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, and Telangana, accounts for 11%, the least number of tribal communities are found in the northern region (Himachal Pradesh, Jammu & Kashmir, Ladakh, Uttar Pradesh, and Uttarakhand) comprising merely 3.2% (Bijoy, 2022).

Along with geographical distribution, factors such as cultural tradition, sociopolitical structure and education also vary across tribes (Kumar & Lahiri, 2022). One such factor is their language where they are found to be highly multilingual. For instance, Dravidian language is widely used as a medium of communication among tribes of the Southern region, Gonds and Todas. However, the tribes of eastern India speak Austroasiatic languages such as Santhali, Mundari, and Ho. While the Tibeto-Barman language is popular among Nagas and Khasis, the Indo-Aryan language is widely used by tribes of the central belt (Hardgrave, 1993). With reference to family structure, the Khasis of Meghalaya follow matrilocal and trace their descent through the

female line, whereas tribes in central India maintain a traditional patriarchal family structure (Kumar & Lahiri, 2022).

With reference to their education, a comparative study of tribal and non-tribal men reveals that the rate of literacy among the former was significantly lower (68.5%) than that of the latter (80.9%). Similar disparity exists among tribal females. Also, according to census 2011, tribal communities had the highest proportion of individuals classified as "not literate," reaching to 36% of total illiterate population. This gap is even more pronounced for women, with 45.3% being illiterate (Bijoy, 2022).

Due to this diversity, it is crucial to acknowledge and address their reproductive health needs. Women from these tribal groups face various challenges when it comes to healthcare accessibility due to cultural aspects such as traditional healing practices, language barriers, and the presence of cultural insensitivity within the mainstream healthcare system (Oosterhoff et al., 2015; Panda et al., 2023; United Nations, n.d.). These challenges also encompass the role of family planning and the limited availability of contraceptives (United Nations Department of Public Information, 2014a). These aforementioned factors result in a disconnection between their socio-cultural status, their reproductive health, and their healthcare needs (Kumar & Joshi, 2008; Kumar & Rani, 2019).

1.4. Reproductive health of Indian women with specific reference to the Indigenous population

In India, the fifth National Family Health Survey conducted between 2019 and 2021 reveals that people with unmet needs for family planning are 9.4%. The report further reflects the distinction between the rural and urban populations with unmet family planning needs, i.e., 9.9% in rural areas and 8.4% in urban areas. The report also exclusively reveals that the unmet need for family planning among scheduled tribes is 9.2% (Singh et al., 2023).

Despite of awareness of contraceptive methods such as male and female sterilization, condoms, pills, injectables, and intrauterine devices being 99%, the adoption rate is limited to 67% only (National Health Survey-5, 2021). However, the survey does not offer insights into the unfulfilled family planning requisites among ethnic and tribal groups. Yet the fact remains that it is essential to understand Indigenous women's perspectives on contraceptive usage and family planning for formulating efficacious and culturally sensitive reproductive health interventions (W.H.O., A Framework for Implementing the Reproductive Health Strategy in the South-East Asia Region, 2008). This is well

substantiated by the Millennium Development Goals (MDG) Report of 2015, which considers them doubly marginalized (United Nations, 2015).

Indigenous women in India, according to the WHO (2001), are more vulnerable as they have higher maternal mortality rates, lower life expectancy, and are more prone to chronic diseases as compared to other populations (United Nations Department of Public Information, 2014b). Being exclusive due to their ethnicity, cultural specificity, and spatial separation, along with being culturally silent (Kumar & Lahiri, 2022), lack of education and awareness regarding the accessibility of healthcare facilities (United Nations, 2015), and geographical barriers hindering accessibility (Negi & Singh, 2019), they face multifaceted burdens and challenges concerning their sexual and reproductive health; for instance, religious belief in the Gond tribe of Maharashtra forbids them from avoiding reproduction. It has also been observed that these women are disinterested in opting for family planning (Babu, 2017). As indicated by the National Family Health Survey-5 (NFHS-5) that the unmet need for family planning methods is most pronounced in Meghalaya (27%) and Mizoram (19%), both of which are located in the northeastern region and hub of ethnic groups. A research investigation carried out by R. K. Prusty (2014) concerning the prevalence of contraceptives and the unmet need for family planning among tribal women in Jharkhand, Madhya Pradesh, and Chhattisgarh revealed that in Jharkhand, merely 88.8% of tribal women possess knowledge of contraceptives in comparison to 95.5% among non-tribal women in the state; similarly, in Chhattisgarh, the figures are 99.3% for tribal women versus 99.7% for non-tribal women, and in Madhya Pradesh, 97.3% of tribal women are aware as opposed to 99.3% of non-tribal women. The same study notes that at the national level in India, only 97% of tribal women exhibit awareness compared to 99.3% of non-tribal women.

The contraceptive utilization is significantly lower than the level of awareness; in Jharkhand, only 22.8% of tribal women utilize contraceptives compared to 41.3% of non-tribal women; in Chhattisgarh, the figures are 43.5% for tribal women against 56.25% for non-tribal women, and in Madhya Pradesh, there exists a 10% disparity in contraceptive use, with tribal utilization limited to 50.2% compared to 60.2% for non-tribal women in the state. This inequality in health conditions between Indian women and Indian tribal women particularly gives insight on the extent of exclusion and discrimination faced by tribal women in India (Bala & Thiruselvakumar, 2009; Salehin, 2016).

Another study in the Odisha region highlights the barriers faced by these tribal women due to distance from healthcare facilities, language barriers, and distrust or less trust in the healthcare system that is not the case with other Indian women (Contractor et al., 2018). Although India has managed to reduce maternal mortality nationwide, tribal women are still left behind, with only 25%

of their deliveries taking place in healthcare facilities and 67% being attended by untrained attendants (Shah & Bélanger, 2011).

While abortion is legally permissible in India, the availability of secure abortion services is indeed restricted (Khanna et al., 2021). Indigenous populations residing in remote and rural regions of India often encounter numerous obstacles in obtaining access to facilities that provide safe and lawful abortion services (Saha & Ravindran, 2002; Smith-Oka, 2012). The Medical Termination of Pregnancy Act governs India's legislation on abortion, permitting abortions within the initial 20 weeks of pregnancy under specific circumstances (Stone, 1953; W.H.O., Mapping abortion policies, programs, and services in the South-East Asia Region, 2013). Hence, the primary objective of this paper is to do a situational analysis of Indigenous women's condition with reference to their reproductive health by reviewing the existing literature. This study will specifically focus on two key areas: the accessibility of healthcare facilities and the perceptions of Indigenous women concerning contraceptive usage and family planning.

2. Objectives

The objective of this systematic review was to uncover and synthesize data from studies related to reproductive health of Indigenous women. Accordingly, the review focused on two broad research questions.

- What is the scenario of healthcare facilities available to Indigenous women for reproductive health services?
- What are the perceptions of Indigenous women regarding contraceptive use and family planning?

3. Methods

3.1. Search strategy

A comprehensive search strategy was formulated following Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) to identify pertinent research articles. To identify relevant literature in this area, we searched the following databases: JSTOR and Scopus. We used Google Scholar for additional information. The keywords include Reproductive Health (Family planning OR Contraceptive use); AND Indigenous Women (Scheduled Tribes OR Ethnic groups); AND India.

3.2. Inclusion and exclusion criteria

We reviewed only those articles that were accessible. To account for the pivotal health policy introduced in 2005, namely, Janani Suraksha Yojna (Ministry of Health and Family Welfare, 2006) under National Health Policy (2002), which represented a pioneering initiative in women's reproductive health, studies published between 2005 and 2023 were incorporated. Only articles published in English in the Sociology discipline are included.

Conversely, exclusion criteria were also implemented to ensure the accuracy and specificity. These criteria entailed the exclusion of articles that did not pertain to the reproductive health of Indigenous women, as well as studies that were conducted with populations other than women. Moreover, articles that were published before the year 2005 were not deemed eligible for inclusion. The collected information includes authors, publication year, study location, research questions, study design, and key findings related to healthcare facilities and perceptions about contraceptive use and family planning.

3.3. Data Collection and Data Analysis

Only those articles that cater to our research questions were included. The quality assessment of the studies was based on the following: clearly stated research questions and aims, region, consideration of ethical issues, and precise description of results. Through a thematic synthesis and analysis of selected studies, critical themes related to healthcare facilities for Indigenous women's reproductive health and their perception of contraceptive use and family planning were identified. The findings were presented in a narrative format, with supporting evidence from the included studies. The data was extracted through Zotero Extension for further analysis. The data extraction had the author's name, year of publication, study location, research questions, methodology used, and critical findings.

Using a systematic approach, this review aimed to thoroughly analyze the reproductive health of Indigenous women, with a particular focus on their healthcare experiences and attitudes towards contraception and family planning.

4. Results

A total of 11,284 scholarly articles available on JSTOR were reduced to 345 upon applying various filters. These filters included limitations on content

accessibility, a time frame ranging between 2005 and 2023, articles published in English, and a focus on Sociology. The purpose of these filters was to gain an understanding of the social and cultural factors at play.

Similarly, on Scopus, utilizing the exact keywords, there were initially 3,774 accessible articles. However, after applying the specific time range of 2005 to 2007, the number of articles decreased to 1,071. The subject areas covered in these remaining articles were Social Sciences, Arts, and Humanities, resulting in a final count of 284 articles. Additionally, there were 62 articles specifically related to India.

The literature search identified 407 potentially relevant publications from the database (JSTOR n=345 and SCOPUS n=62). The titles and abstracts were retrieved, and 57 records were selected. And after full text screening 17 articles are selected for systematic literature review (Figure 1).

Figure 1. Prisma Chart identifying steps of inclusions and exclusions of studies.

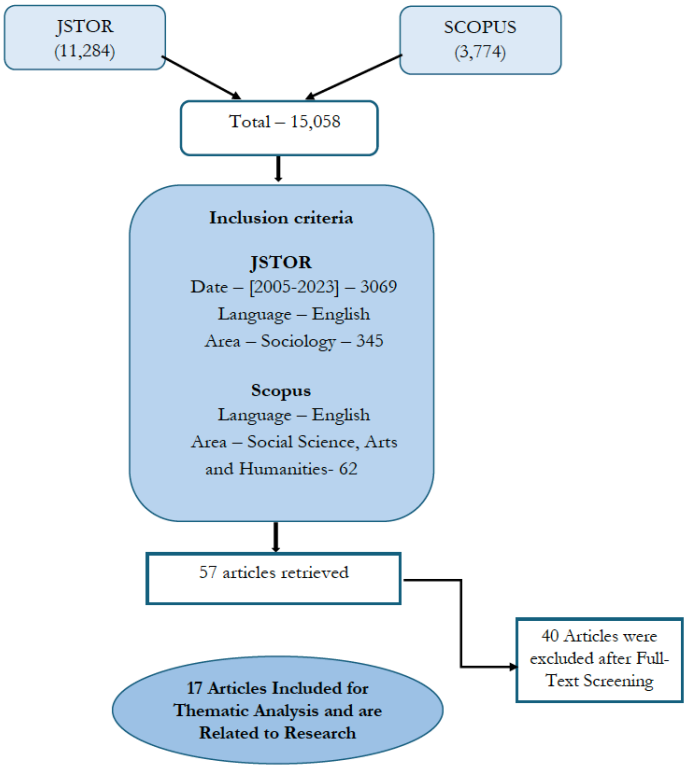

Table 1. General characteristics of studies included in the review.

Year	Author	Title	Research question	Methodology	Field	Findings
2005	D Kumar	Prevalence of female infertility and its socio-economic factors in Tribal communities of Central India	To identify the factors responsible for infertility among Khairwar and non-Khairwar tribes.	Structured interview Scheduled	Sidhi district, Madhya Pradesh	• Do not have easy access to health delivery systems. • They are more interested in traditional healers instead of seeking these resources.
2007	Sandhya Rani, Saswata Ghosh, and Mona Sharan	Maternal Healthcare Seeking among Tribal Adolescent Girls in Jharkhand	Factors involved in maternal health care seeking	Cross-sectional study	Lohardagga, Jharkhand	Autonomy - in decision making is less due to lack of peer/social support, spousal communication and awareness
2007	Alka Barua and Hemant Apte	Quality of Abortion Care: Perspectives of Clients and Providers in Jharkhand	• Quality of services women can avail of when seeking an abortion. • Clients' perspective on quality care	In-depth interview	Ranchi, Jharkhand	• Provider gives more priority to technical skills • The client is more concerned about confidentiality, provider attitude, cost, and facility-level issues
2008	Sunita Reddy	Health of Tribal Women and Children: An Interdisciplinary Approach	What are links between socio-economic, political, and ecological factors with the accessibility, affordability, and availability of health services to understand the health of the tribal population.	Secondary literature	Konda Reddi tribe, Great Andamanese, Onges, Jarawas and Nicobarese	There are barriers to accessing services in terms of poor connectivity to health centres because of physical and geographical barriers.
2008	Manju Rani, Shekhar Bonu, Steve Harvey	Differentials in the Quality of antenatal care in India	• To examine the role of socio-economic differential in the quality of antenatal care • Weak relationship between antenatal care utilization and maternal health outcome	Cross-sectional study	4-South Indian states (A.P., Karnataka, Kerela, T.N.) 4-North Indian (U.P., M.P.,	• Accessibility- 40% in the north, 87% in the South • Quality- Lower than desired antenatal care

					Rajasthan, Bihar)	● Socio-economic differentials in quality of care is evident
2009	Meerambika Mahapatro and Avanish Kumar	Maternal Mortality among the Marginalized: A Case Study of a Scheduled Tribe of Orissa	Problems and challenges in the safe delivery	Empirical study	Bhattarai tribe, Orissa	● Complication due to non-availability ● Of immediate remedial measures ● Lack of infrastructure (only option left for older women or traditional birth attendants)
2010	Shveta Kalyanwala, A. J. Francis Zavier, Shireen Jejeebhoy, and Rajesh Kumar	Abortion Experiences of Unmarried Young Women In India: Evidence from a Facility-Based Study In Bihar and Jharkhand	Abortion-related experience of young unmarried women because little is known about it	Survey method, Descriptive, exploratory	Bihar and Jharkhand	● Factors behind unplanned pregnancy- forced sex with varied types of partners. ● Abortion- unsuccessful attempts, the help of an uncertified practitioner before abortion at Janani clinic, ● Unable to recognize that they are pregnant due to a lack of awareness
2010	Rama Baru, Arnab Acharya, Sanghmitra Acharya, A K Shiva Kumar, and K Nagaraj	Inequities in Access to Health Services in India: Caste, Class, and Region	What do SCs, STs, and OBC face the barriers to accessing healthcare facilities	Secondary study	India	● Socio-economic, historical inequality in the provision and healthcare services ● Need for more investment in public sectors. ● Need for equity-enhancing initiative.
2012	Vijayaprasad Gopichandran and Satish Kumar Chetlapalli	Conditional Transfer to Promote Institutional Deliveries in India: Towards Sustainable Ethical Model to Achieve MDG 5A	The paper aims to identify the barriers to accessing the Janani Suraksha Yojna scheme and assess its	Secondary data	India	The paper emphasizes the need to bridge the ethical gaps in the JSY program to make it sustainable, ac-

			transparency and accountability.			countable, and empowering for women. It suggests measures such as transferability of the cash incentive scheme between areas and improving the health system and awareness among women.
2013	Bhavya Reddy and Gita Sen	Breaking through the development silos: sexual and reproductive health and rights, Millennium Development Goals and gender equity – experiences from Mexico, India, and Nigeria	● How sexual and reproductive health and rights advocate at the national level ● How MDG affected the implementation of national policies	Secondary study	India, Mexico, Nigeria	● Non-alignment of MDG indicator to policy on reproductive health ● Poverty reduction strategies have varied impacts on women's health ● Role of civil society- 'maternal morbidity watch'
2015	Pauline Oosterhoff, Badalam Dkhar and Sandra Albert	Understanding unmet contraceptive needs among rural Khasi men and women in Meghalaya	● Reasons for the low uptake of contraceptives ● Exploring views on contraceptive technologies and family planning	Qualitative study	Khasi tribe, Meghalaya	● Khasi women have greater decision-making power about their health ● This power does not extend to contraceptives ● This also suggests that traditional contraceptives are not working flawlessly.
2018	Parisa Patel, Mahua Das and Utpal Das	The Perceptions, health-seeking behaviors, and Access of Scheduled Caste Women to maternal health services in Bihar, India	● This paper examines the factors contributing to this low use of maternal health services by investigating SC women's perceptions, health-seeking behaviors, and access to maternal healthcare services in Bihar, India.	Interview	Purnia, Bihar	● Barriers to care- limited PNC, unauthorized payment to health care staff. ● Role of ASHAs- unfulfilling their expected role.
2018	Sulakshana Nandi, Deepika Joshi, Preeti	Denying Access of Particularly Vulnerable Tribal Groups to contraceptive services: a case	The objective is to study the experiences and perceptions of the Baiga community in	Case study with mixed method	Baiga tribe, Chhattisgarh	● Due to the 1979 order, Baiga women have to

	Gurung, Chandrakant Yadav, Ganapathy Murugan	study among the Baiga Community in Chhattisgarh, India	accessing contraceptive services in Chhattisgarh in the context of the 1979 order.			take a high risk to access and move out of state. ● Two-thirds experienced four or more pregnancies, and the same proportion experienced miscarriage once
2019	Amit Sengupta	Maternal Health in Underserved Tribal India	The objective of the paper is to describe the experience of implementing a behaviour change intervention to improve the maternity services in a rural tribal area in India	Observation by organizing various activities, these activities include needs assessments, group discussions, social audits and verbal autopsies of maternity events	Bastar, Chhattisgarh	Working closely with the community and their needs and perspectives were important factors in improving health-seeking behaviour and building trust for medical service provision in India's tribal area.
2021	Mousumi Nath Mzumder	Pluralistic Maternal Health Seeking Behaviour	● To identify the socio-demographic and cultural factors affecting access to health services. ● Circumstances that influence this behavior.	Both quantitative and qualitative approaches were used. Focused group interview, interview scheduled, and case study	Karbi women, Kamrup Metropolitan district, Assam	● The women do not have a clear perception and awareness of the importance of antenatal care. ● Majority of Kabri women have delivery at home.
2021	Kirti Gaur, Ankita Shukla and Rajib Acharya	Association between the place of abortion and post-abortion contraceptive adoption and continuation	Seeking relation between the place of abortion and post-abortion contraceptive behaviour	Secondary data (NFHS-4)	India	● Lack of adequate and comprehensive family planning policies seeking abortion in both public and private health facilities.

						• Around one-fourth rely on self-administered abortion and contacted health care providers once.
2022	Aswathy Sreedevi, Krishnapillai Vijayakumar, Shana Shirin Najeeb, Vishnu Menon, Minu Maria Mathew, Lakshmi Aravindan, Rithima Anwar, Syama Sathish, Prema Nedungadi, Viroj Wiwanitkit, Raghu Raman	The pattern of contraceptive use, determinants, and fertility intentions among tribal women in Kerala, India: a cross-sectional study	• To understand the pattern of contraceptive use. • And knowledge about it.	Community-based cross-sectional study	Wayanad, Kerala	• The awareness and contraceptive use are poor due to various factors such as lack of knowledge and education, early marriage and demanding access to health care.

5. Discussion

The culmination of our review has unveiled the following themes that significantly shape the reproductive health landscape for Indigenous women. This systematic review synthesizes the core issues such as family planning, contraceptive uses and accessibility to reproductive and sexual healthcare systems, specifically in the context of Indigenous women in India. These themes encompass quality of care, social support, socio-structural inequality, cultural practices, and intersections with Indigenous rights (Baru et al., 2010). As we delve into these findings, it becomes apparent that addressing the complex web of challenges requires multifaceted strategies that resonate with Indigenous communities' cultural nuances and unique circumstances. Multiple themes emerged in this systematic review are further categorized and discussed under three broad heads.

5.1. Socio-cultural factors

The Millennium Development Goals Report (2015) underlines the interconnectedness of education, residence, and economic status with profound health disparities among vulnerable populations. With reference to maternal health, the practice of early marriage followed by repeated cycles of pregnancy and breastfeeding results in a phenomenon known as 'maternal depletion'. Further, additional factors affecting maternal morbidity and mortality among tribal women include lack of awareness on family planning, limited access to healthcare facilities and insufficient caloric intake during pregnancies (Basu, 1990). Lack of proper nutrition and constant physical strain result in a progression of health issues, including anemia, overall malnutrition, premature aging, and premature mortality (Reddy, 2008).

Tackling these challenges requires targeted interventions addressing multiple root causes among Indigenous population, including their awareness regarding healthcare. A study conducted on the Bhattara tribe reveals that 70% of mothers lack awareness regarding the healthcare program during pregnancy and also in case of births, the majority (97.6%) occurred at home with the assistance of family members, neighbours, or midwives. Further, there was lack of protection against tetanus among one-fourth of women in this tribe. Consequently, there is a significant need to educate women about the importance of health promotion during these crucial stages of life (Mahapatro & Kumar, 2009).

Limited autonomy was also found to be affecting Indigenous women's reproductive health decisions, especially the case of abortion. A study capturing

the abortion experiences of 549 unmarried women aged 15-24 in Bihar and Jharkhand found that some of their pregnancies had resulted from non-consensual sexual encounters (Kalyanwala et al., 2010). Moreover, fearing information revelation to the family members, at times, they reported choosing private abortion services over government healthcare facilities and some other times opting for home abortions using over-the-counter medicines (Barua & Apte, 2007; Gaur et al., 2021). While decision to opt for abortion was found to be influenced by factors such as their partners' support, age, and educational background (Kalyanwala et al., 2010), decision for choosing abortion facilities depended on the level of confidentiality maintained by the healthcare provider (Barua & Apte, 2007). In the matter of reproductive health choices of Indigenous women, a comparative study between disadvantaged groups of south and north Indian states emphasized on the importance of social support, spousal communication, and acknowledgment of decisions (Rani et al., 2008). The limited control over choices is also found to be intricately linked with their Indigenous rights such as recognition of their sovereignty, which consequently empower them to make decisions regarding their reproductive health (Indigenous Peoples' Sexual Health and Reproductive Rights, 2014).

Socio-cultural beliefs and practices were also found to be intertwined with choices related to reproductive health among tribal communities (Cáceres et al., 2023). Among the tribes of Chhattisgarh factors affecting reproductive health seeking behaviour includes medically inappropriate postnatal care beliefs & practices, fear of breaking the cultural tradition coupled with their lacking awareness of evidence-based medical care (Patel et al., 2018; Sengupta, 2019). Hitherto existing traditional values are often found to be affecting family planning strategies among tribal communities such as use of traditional methods of contraceptives. A cross-sectional study conducted on women of the Paniya tribe in Kerala found their fertility rate to be higher than other tribal communities. It is also observed that the fertility rate is influenced by the gender of children, with a greater preference given to sons; resulting in an increase in fertility if a daughter is born (Sreedevi et al., 2022). Similarly, among Khasi tribes, priority for larger families often resulted in low uptake of modern contraceptives and having more than two children. Even when there are a few instances of these women using contraception, they mostly preferred natural or traditional contraceptive methods over the modern ones (Mburu et al., 2023; Oosterhoff et al., 2015). In the state of Kerala, the Paniya tribe widely adopts traditional methods of contraception such as withdrawal, rhythm, or calendar methods for family planning (Sreedevi et al., 2022).

Similarly, the study by Mazumder (2021), found that women of the Karbi tribe of Assam rely mainly on female ethnomedicine practitioners of similar ethnicity who are widely called *Dai Bhuri*. The latter having deep knowledge on

ethnomedicine mostly addresses gynaecological problems, including reproductive health issues. The study also explored Karbi women's pluralistic maternal health seeking behaviour including consultation for nausea, vomiting and bleeding during pregnancy. Preference for traditional healthcare even extended to seeking medications for painless delivery and speedy recovery from post-delivery weakness. However, in case of infertility they preferred both spiritual and traditional healers or healthcare practitioners. The study concludes that such reproductive health seeking behaviours were influenced by affordability and availability of medicines and other equipment required for reproductive healthcare facilities (Mazumder, 2021).

5.2. Accessibility and quality of care

The second important factor affecting reproductive healthcare is found to be the disparities in healthcare accessibility and quality of care. Issues related to accessibility range from geographical variations to lack of amenities. A comparative study between Khairwar and non-Khairwar tribes of Madhya Pradesh reported that inadequacies of public healthcare infrastructure and constrained healthcare access were primarily attributed to geographical limitations like hills and dense forests, resulting in the isolation of the tribal community (Kumar, 2007). Sengupta (2019) studied tribal groups living in the Bastar district of Chhattisgarh and explored how the remote location of healthcare institutions affected care delivery. Lack of modern amenities and trained personnel in remote areas discourage healthcare providers from serving such areas, resulting in neglected health services for the tribal community.

However, ensuring the availability of services is not enough; rather, attention must also be given to the quality of care. This is well substantiated by a study conducted among multiple tribal communities like Oraon, Khervar, Lohara, and others across the state of Jharkhand. Healthcare facilities in rural hospitals were found to be affected by limited skilled doctors, their absence on duty, and also a shortage of essential medicines (Rani et al., 2007). A similar study conducted by Barua & Apte (2007) among tribal communities of Jharkhand depicts that their perception of the quality of care was influenced by factors such as physical proximity to healthcare facilities, gender of the care provider, number of visits required, the waiting time and also the facility for conducting sex determination test. Despite being illegal in India, healthcare centers conducting sex determination tests are widely preferred among clients. Government healthcare facilities, despite being affordable, often lack required equipment and services. Hospitals in rural areas had an evident need for trained female doctors (Marrone, 2007). Moreover, the healthcare providers serving at

government hospitals were found to be recommending patients to visit their own private clinics (Barua & Apte, 2007). However, in some cases, availability of treatment equipment, cleanliness of the healthcare settings and repeated health check-up facilities are considered to be of lesser importance (Rani et al., 2007).

Government restrictions, in some cases, were found to be affecting accessibility of reproductive healthcare facilities among Indigenous communities. In the Baiga tribe, as a strategy to curtail their decreasing population, in 1979 the government restricted their access to permanent contraceptive methods and this policy still prevails in many states. A study conducted in Chhattisgarh reflects the challenges faced by healthcare staff in providing contraceptive methods to the Baigas women. The policy has further limited the availability of essential supplies such as oral contraceptives, intrauterine contraceptive devices, and condoms, consequently affecting family planning among Baigas (Nandi et al., 2018). Moreover, the Khasi tribe's distrust towards contraceptive technologies, inadequate local healthcare infrastructure and limited access to hormonal contraceptives, IUDs, and tubectomies, pose challenges for women in obtaining modern contraceptive methods (Mburu et al., 2023; Oosterhoff et al., 2015). Additionally, there is a lack of awareness among Indigenous groups regarding the programs launched by the government for them (Nandi et al., 2018).

5.3. Strategies for empowerment of women

Social and cultural barriers such as stigma, discrimination, and traditional beliefs prevent tribal women from seeking reproductive healthcare. This is well substantiated by a cross-national study comparing tribal populations across India, Nigeria, and Mexico. The study put enough importance on incorporating traditional Indigenous knowledge and practices to provide culturally sensitive healthcare services, fostering trust and confidence in the healthcare system among tribal groups (Reddy & Sen, 2013).

Understanding women's perspectives towards reproductive choices and identifying their care needs are vital in improving their health-seeking behaviour. In such a context, involving local authorities in awareness creation and adoption of respective healthcare strategies, plays an important role in building trust on medical services provided in tribal regions of India (Sengupta, 2019). Additionally, educational programs that respect Indigenous traditions play a pivotal role in empowering women to make informed choices about their reproductive health. National Family Health Survey (2005-06) focused on the role of comprehensive sexual and reproductive health programs for tribal

women in the regions of Bihar and Jharkhand. These programs address care needs such as access to family planning, contraceptives, safe legal abortion services, sexually transmitted infections and maternal health. Thus, implementing such educational and awareness programs contributes positively towards women empowerment. Moreover, healthcare infrastructure in tribal areas should be strengthened by improving access to healthcare facilities, appointing trained healthcare staff, and providing essential medicines and supplies (Gupta & Sharma, 2014; Jejeebhoy, 2007).

6. Conclusion

This review sheds light on the reproductive health issues of Indian Indigenous women by exploring two central aspects: their perspectives on family planning & contraceptive use and the state of healthcare services available to them. It underscores the necessity for reproductive healthcare services that are culturally sensitive, accessible, and aligned with their values. There are several socio-cultural factors that shape their sexual and reproductive health choices; such as education, awareness of healthcare options (United Nations, 2015), gender roles, decision-making autonomy, and cultural and traditional practices that constrain their choices (Hoctor et al., 2017). However, such challenges can also be found beyond Indian context. For instance, in few European nations, the stigma attached to certain kinds of reproductive healthcare and strict laws underlines a harmful spectrum of gender biases and norms that create hindrances to accessing suitable reproductive healthcare facilities for women (Hoctor et al., 2017). Similarly, the matter of 'distrust' towards contraceptive technologies among Indigenous women can only be addressed through education and awareness campaigns.

Legal restrictions further complicate the reproductive choices of indigenous women. For instance, Baigas women have to face strict laws as abortion is banned for them, and they have to go to other states for abortion care (Nandi et al., 2018). A parallel situation exists in European nations like Armenia, Georgia, the Russian Federation, and Slovakia where there exists several preconditions for women before opting for legal abortions (Hoctor et al., 2017). Such legal barriers and inadequate guidelines hinder women's ability to make choices about their reproductive health. Overcoming these challenges require elimination of legal barriers, establishment of clear guidelines, and the bolstering of healthcare facilities to ensure safe and accessible abortion services.

Access to healthcare is another significant barrier for many Indian Indigenous women communities who live in remote, hilly areas, making it difficult to reach healthcare centers (Kumar, 2007). However, the Janani

Suraksha Yojana (2005) scheme in India has significantly increased institutional deliveries to certain extent (Gopichandran et al., 2012). According to a recent report by WHO (2013), the focus should be placed on enhancing the government healthcare infrastructure and providing easy access to reproductive healthcare resources is the demand of time. Non-compliance with existing laws, such as the continued prevalence of illegal sex determination tests despite the Medical Termination of Pregnancy (MPT) Act, underscores the need for stricter enforcement and regulation. It is also interesting to find that even the gender of healthcare providers influences women's reproductive health preferences, as many hesitate to consult male medical professionals (Barua & Apte, 2007).

Globally, unplanned pregnancies and limited access to abortion services remain significant concerns. The WHO (2016) advocates for a comprehensive approach to address these issues. A noteworthy global initiative is gender budgeting, practiced in some European Countries, which involves planning and allocating resources in a gender-sensitive manner to promote equity and enhance women's well-being. India has recently adopted a similar approach to empower women and improve their social and economic status.

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