

Reproductive Health Issues of Tribal Women: Voices from the Margins

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Abstract

India is a multicultural country that has many communities, and the Scheduled Tribes (STs) are one of them. Scheduled Tribes are characterised by distinct cultures and a close relationship with the land they inhabit. They face deprivations caused by social, economic, and political exclusion. They are uninformed of their basic rights, and they are victims of domestic violence, starvation, and a variety of other serious health issues. Despite having many health issues in everyday life and during pregnancy, they did not seek medical help because they continued to believe that diseases are always caused by black magic or hostile spirits. Tribal women, like any other social group, account for roughly half of the entire population. The objectives of this study are to compare and understand the trends of reproductive behaviour among Indian and J&K tribes, and to understand the fertility preferences and contraceptive usage among tribal women. This research is based on the both primary and secondary data especially the census and National Family Health Survey of India and in-depth interviews from the field.

Keywords: reproductive health, Family Planning, Scheduled Tribes (STs), Gujjars

Introduction:

India is a multicultural country which has many communities, and the Scheduled Tribes (STs) are one of them. Scheduled Tribes are characterised by distinct cultures and a close relationship with the land they inhabit. According to the 2011 census, tribal people comprise 8.6% of the population or more than 104 million people. They experience deprivation due to social, economic, and political exclusion. In India, displacement caused by development projects is pushing tribal people out of their natural habitats, depriving them of their customary forest resources. Women and children who are displaced suffer more than men, particularly while transitioning to a new environment. This displacement has a largely effect on women's and children's health. Health care is one of the greater human rights for everyone and it is observed that apart from other inequalities, women are deprived of basic health facilities (WHO, 2017). Rather a very notion of health as a state of 'complete well-being' and 'not merely the absence of disease or infirmity' (WHO, 1948) could not mark its imprints on the popular perception of the masses. More so when it comes to reproductive health, the matter enters the domain of 'silence' and least to mention it as a priority public health concern (Qadeer, 1998). The much credit for putting reproductive health on the priority agenda of the nation-states goes to the International Conference on Population and Development (ICPD) held in Cairo (Egypt) in 1994 and the Plan of Action that evolved (UN/UNFPA, 1994) and which also paved the way for giving due space to reproductive health issues and rights in the subsequent Millennium Development Goals (UNDP, 2001) and Sustainable Development Goals (UNDP, 2015).

"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 to its functions and processes" (UNFPA, 1994). Reproductive health implies that people can have a satisfying and safe sex life and that they can reproduce

and have the freedom to decide if, when and how often to do so. More specifically, it triggers the discourse of choices, opportunities and informed decision-making in matters relating to safe motherhood, child survival, contraception, reproductive tract infections and sexually transmitted infections including HIV/AIDS (Muhammad et. al, 2003).

Jammu and Kashmir is an Indian union territory (and, until October 31, 2019, a state) in the northwestern Indian subcontinent, near the Karakoram and the westernmost Himalayan Mountain ranges. When the Mughal ruler Jahangir first laid eyes on Kashmir's valley in the seventeenth century. While living on a houseboat on Dal Lake, he claimed that if heaven exists anywhere on the planet, it is here. *Gar Firdaus, Baruhe Zamin Ast, Hamin Asto, Hamin Asto*, if there ever was heaven on earth it's here only. It is also India's northernmost Muslim-dominated union territory, with a population of over one crore, according to census data (2011). Jammu and Kashmir are home to a wide range of ethnic groups who established themselves in all aspects of these hilly terrains (Gul & Sheikh, 2014). The constitution of Jammu and Kashmir designates twelve tribal clans as scheduled tribes. Balti, Bot, Beda, Brookpa, Garra, Changpa, Mon, and Purigpa were granted this status in 1989, while Gujjars, Bakarwals, Gaddis, and Sippis were notified as scheduled tribes under the Constitution (Scheduled Tribes) Order (Amendment) Act of 1991.

During the 2001 census, all twelve scheduled tribes were officially counted for the first time, with a total population of 1,105,979. According to the 2011 census, the state's Scheduled Tribes population is 1,493,299, accounting for 11.9% of the state's overall population and 1.43% of the country's total tribal population (Sofi, 2014). A large number of these tribes can be found in the state's Ladakh region. In Jammu and Kashmir, Gujjars and Bakerwals make up the majority of STs. They dwell in the union territory's mountainous Kandi regions. In the summer, they went from the plain to the upper region with their cattle, goats, and sheep in quest of good pastures for their livestock. Gujjars and Bakerwals can be found in both of the union territory's areas. Jammu is made up of (the districts of Jammu, Poonch, Rajouri, Kathu and Udhampur). Kashmir is a state in India (districts of Anantnag, Baramulla, Kupwara, Pulwama, Kulgam and Shopian). They hold a majority in the districts of Poonch and Rajouri. The tribes of Jammu and Kashmir are distinct from other Indian tribes by their people and areas, customs, cultures, forms of communication, or simply their culinary arts. According to a study conducted by the Tribal Research and Cultural Foundation (TRCF), a nonprofit organisation dedicated to the cause of Indian tribes, 66% of nomadic Gujjar and Bakerwals who belong to Scheduled Tribe groupings in the state of Jammu & Kashmir live in poverty (Koundal 2012). To achieve holistic development of a society, the cultural dimension of a community's health should be prioritized, particularly for the Gujjar and Bakerwal peoples. Because it is a significant tribe in J&K. These women face hazards associated with pregnancy and childbirth. Both factions of the Gujjar population need food and fodder for their livestock. They need essential services such as shelter, health, drinking water, and education. Because they are migratory, the Gujjars and Bakerwals in the state are the poorest, living in deplorable conditions and lacking access to education. In J&K, the health of Gujjar and Bakarwal women is particularly low.

Review of Literature:

This section highlights some of the relevant research conducted in the field of reproductive health among tribal women in India in recent years. **Vinitha et al., (2007)** found in their study that increasing knowledge about health among women in India was a difficult task. Education level was substantially connected with awareness of all four reproductive health concerns. **Negi et al., (2010)** found in their study that tribal women lag behind others in both states in terms of socioeconomic and demographic variables. Distance to the nearest public health facility is not a reliable predictor of public health service utilisation because it does not indicate the relative accessibility of that health facility when there are several other options for the same services. Accessibility is determined by both the distance travelled and the quality of the services provided. **Goswami et al., (2011)** conducted an intensive

exploratory study titled "Traditional Method of Reproductive Health Care Practices and Fertility Control among the Bhumija Tribe of Baleswar, Orissa," which shows that the traditional reproductive health care system still finds its meaning of survival in the tribal domain. **P. Muttreja and S. Singh, (2018)** investigated family planning in India. The study indicated that more male participation is required, both as enablers and beneficiaries, in addition to addressing young sexual and reproductive issues. The government must ensure that family planning is prioritised on the national development agenda.

Sharma, (2018) found in her research that less than 20% of the women in all districts use unhygienic methods during menstruation. The district's menstrual hygiene has to be improved. Family planning services demonstrate high acceptability. Female sterilisation is the most often used technique of contraception. The usage of modern contraceptives has also increased significantly. Services for maternity and reproductive health must be improved. Tribal women are educated and aware, and as a result, they are beginning to make informed decisions. Demand will not be met while the supply side of healthcare delivery lags. Menstrual hygiene and RTI/STI treatment seeking among tribal women are major concerns in the districts. **Gupta & Sharma, (2019)** analysis of the relationship between reproductive health and infant mortality, post-delivery care and the material used to cut the umbilical cord have a significant impact on the determinant of infant mortality, whereas mother delivery care and the length of breastfeeding have the least impact.

The review of studies reflects that there is a relative dearth of studies focusing on the holistic nature of reproductive health of tribal women in general and Jammu and Kashmir in particular. However, studies abound on the segmental aspects of reproductive health or on the issues that closely have a bearing on reproductive health. And there is a need for comprehensive studies. As such the present research study was undertaken. The objectives of this study are:

- To comparatively analyze and understand the trends of reproductive behaviour among India and J&K tribes.
- To understand the fertility preferences and contraceptive usage among tribal women.

Research Methodology

The study examines the reproductive health of tribal women in Jammu and Kashmir, focusing on antenatal care, institutional delivery, infant mortality rate, contraceptive methods, and postnatal care. A mixed-method approach was used, which included both primary and secondary data. In-depth interviews with tribal women were used to collect primary data, with an emphasis on their prenatal experiences and practices, institutional delivery, infant mortality rate, and usage of contraception techniques in their most recent pregnancies.

This qualitative data offered deep insights into the personal and cultural circumstances that influence reproductive health behaviours. In addition, secondary data from the most current NFHS-4 reports for Jammu Kashmir and India were analysed to contextualise and compare the findings on a larger scale. The NFHS-4 data included extensive quantitative information on key reproductive health indicators such as antenatal visit frequency, institutional delivery rates, infant mortality statistics, and contraceptive use patterns. By combining different data sources, the study provides a more nuanced knowledge of the reproductive health difficulties and needs of tribal women in the area.

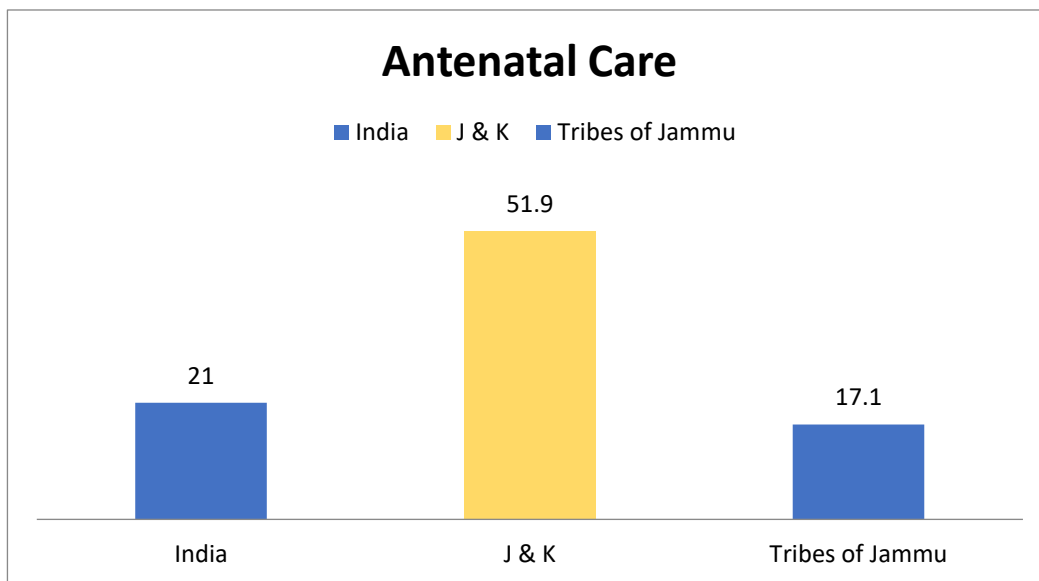
Analysis and Findings:

In this study, researchers discussed various dimensions of the reproductive health of women. The following figures show Antenatal care, Institutional Delivery, Infant Mortality Rate, Under Five Mortality Rate, Fertility Rate and Use of Contraceptive Methods.

Antenatal care is a key aspect of reproductive health since it not only impacts the outcome of pregnancy but also plays a critical part in preserving the mother's health and can be a useful tool in recognising and preventing dangers during pregnancy. ANC is an important part of the continuum of care, that is a critical framework for understanding the continuity of maternal, newborn, and child health.

ANC enables competent medical professionals to educate and engage women on how and why to deliver their babies at a hospital (in-facility delivery, IFD), the advantages of breastfeeding exclusively, where and when to return for postpartum and postnatal care, and the accessibility of modern family planning options (McNellan & et.al, 2019).

Figure 1: Antenatal Care



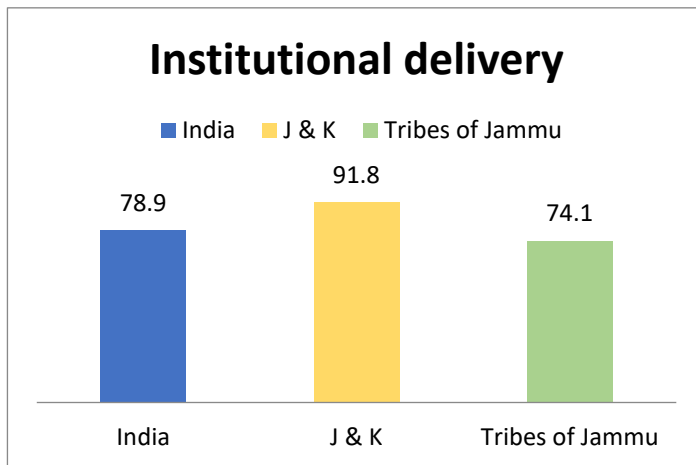
According to NFHS-4 in India, 21.0% of Antenatal care is received by overall women, 51.9% in Jammu and Kashmir, and 17.1% of Antenatal care is received by tribal women in Jammu and Kashmir. The World Health Organisation (WHO) recommends expecting mothers to have at least eight prenatal care appointments, during which a medical professional can monitor the fetus's health and look for any indications of illness, such as underweight, anaemia, hypertension, or infection. Tribal women of Jammu and Kashmir received 17.1% of antenatal care, it is due to their way of life, backwardness, and the old traditions followed by the tribal women.

The access to rudimentary health care is made worse for Gujjar and Bakerwal women by poor education, lack of awareness about existing health programs and their nomadic way of life. As one of the respondents said, *When I was pregnant, I would rarely go to the hospital for a checkup, because that would take me a whole day, The hospital is far from here and the local dispensary has no facilities. My first pregnancy was a nightmare as I had to travel many kilometres to Poonch, a nearby village, to see the doctor. I would be in severe pain and dependent on painkillers, which I took without any prescriptions.*

The findings from the NFHS-4 data, together with the field narrative, indicate the crucial need for targeted initiatives to address the insufficient prenatal care received by tribal women in Jammu and Kashmir. Geographic isolation, poor healthcare infrastructure, and ingrained socio-cultural traditions all create significant challenges that demand a diversified approach. Improving transportation, upgrading local healthcare facilities, and deploying mobile health units are critical steps towards increasing access to care. Furthermore, culturally appropriate educational efforts and the participation of community leaders can help to create awareness about the importance of prenatal care and existing health programmes. By tackling these concerns thoroughly, policymakers and healthcare

professionals can aim to improve maternal and foetal health outcomes while also eliminating healthcare disparities among tribal women in the region, resulting in a healthier and more equitable community.

Figure 2: Institutional delivery

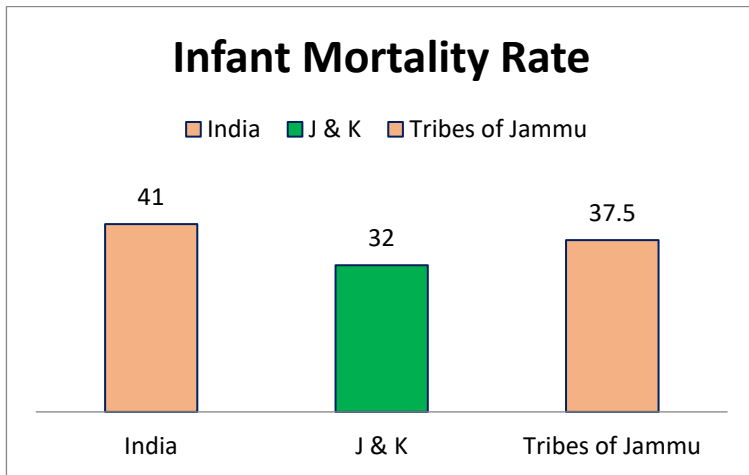


The place of delivery is an important factor for reducing the risk of infant and maternal death. The first 24 hours of delivery is the most critical period for the postpartum mother. According to the NFHS -4 report in India about 78.9% per cent of deliveries were performed at hospitals, about 91.8% of deliveries were performed at hospitals in Jammu and Kashmir, and the institutional delivery rate of tribal in Jammu and Kashmir is about 74.1%.

The reason behind the home delivery was the attitude, health being facility far and economy and utilization of institutional delivery care services is low in tribal women. The healthcare authorities should emphasize increasing awareness about the importance of institutional delivery both for the mother as well as the baby through health education and health promotion. As one of the respondents said, *"I was seventeen when I was married to Naiz, from the same village. I did not know about reproductive health and still, I feel I don't have any knowledge about it. I gave birth to my first child at the government hospital in Poonch. Our village doesn't have any health care facilities and knowledge about reproductive rights is nowhere."*

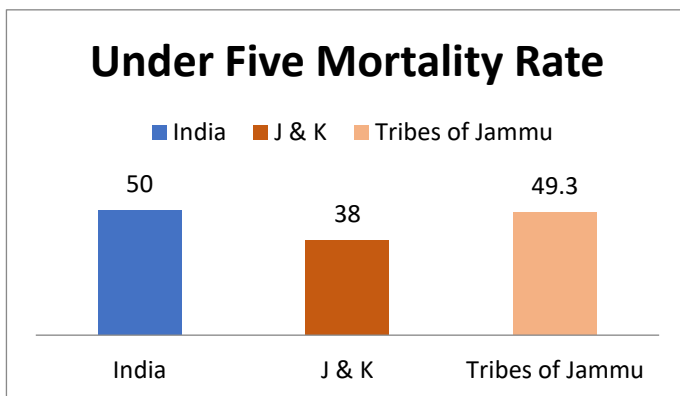
For their treatment, they have to visit the district hospital for their delivery which is far away from their village, and for that, they have to walk around 4 to 5 km, and in labour room men were also there, they did not feel comfortable for institutional delivery. As one of the respondents said, *she also says that travelling to the hospital was the toughest part of her three pregnancies. For most women in her village, the only way to the maternity ward is on a man's shoulders.*

Figure 3: Infant Mortality Rate



Infant mortality Rate continues to be a massive problem in India despite improvements over the years. According to the NFHS-4 report, the IMR in India is 41%, and in Jammu and Kashmir, the IMR is 49.3. U5MR in India is 50% and 49.3% in Jammu and Kashmir, IMR and U5MR of Jammu and Kashmir Tribe are 37.5 and 49.3.

Figures 4: Under Five Mortality Rate

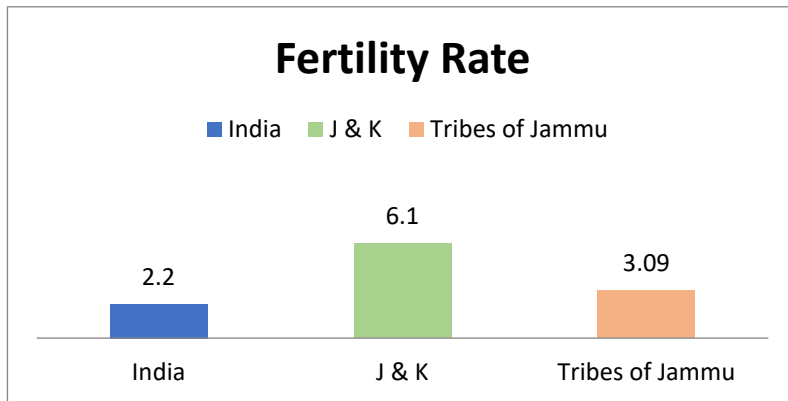


The findings from the NFHS-4 report reveal a major concern with India's infant and child mortality rates, notably in Jammu Kashmir. The national infant mortality rate (IMR) is 41%, however it is much higher in Jammu and Kashmir (49.3%). The Under-Five Mortality Rate (U5MR) is 50% nationwide and 49.3% in Jammu & Kashmir. Interestingly, the tribal community in Jammu and Kashmir has a lower IMR (37.5%), but their U5MR is the same as the overall population (49.3%). This indicates that, while tribal infants have a higher chance of survival in their first year than the rest of the population, the mortality rate for children under five remains the same in both groups. The data reveals that variables influencing child mortality in Jammu and Kashmir go beyond early childhood, affecting both tribal and non-tribal children equally. This could be due to ongoing problems such as hunger, infectious infections, and a lack of access to excellent healthcare. The findings highlight the importance of focused healthcare interventions and policies that address newborn and child mortality, with a focus on increasing healthcare facilities, access, and preventive measures in the region.

Tribal women face pregnancy and birthing hazards in areas with high fertility rates and limited access to basic maternity care. They are especially vulnerable and do not receive adequate attention or a balanced diet during pregnancy. According to India's National Health Policy 2017, emergency contraception should be available at

various levels of the health-care system in addition to other contraceptive options. However, due to familial restraints and social taboos, reproductive rights are rarely exercised.

Figure 5: Fertility Rate



Fertility is an important issue that influences women's health in a variety of ways. In India, the fertility rate is 2.2%, however, it is higher in Jammu and Kashmir at 6.1%. The tribal community in Jammu and Kashmir has a fertility rate of 3.09%. However, social restrictions limit indigenous women's access to fertility control options.

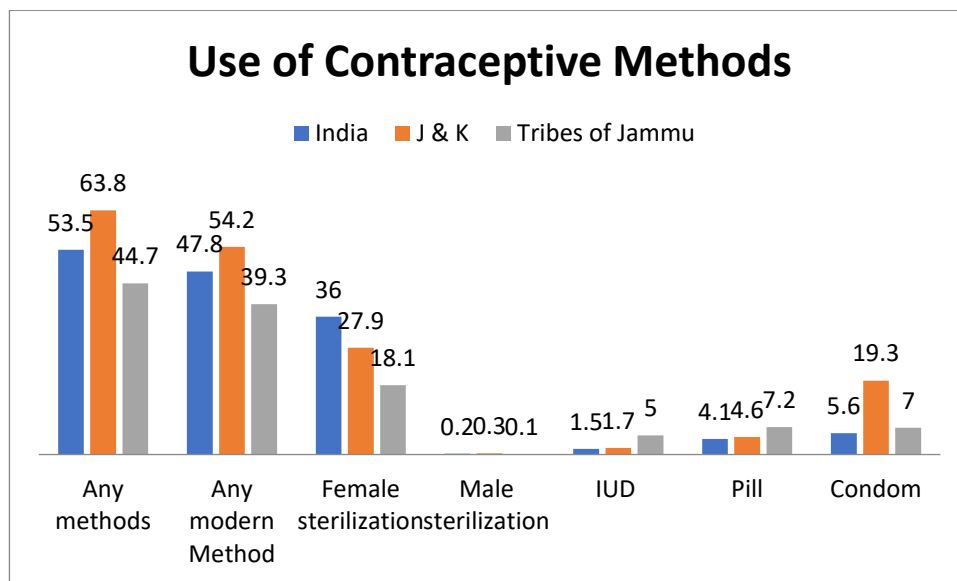
During the fieldwork, the researcher observed that the women from the tribal community, as they do household work. As one of the respondents said, *I've become weak and had many health issues. Our work is physically demanding, with responsibilities such as caring for cattle, working in the fields, getting wood from forests, and caring for a large number of children. Sometimes I feel like I'm going to collapse and die.*

Fertility data and field narrative show severe health and socioeconomic issues for women, particularly tribal women, in Jammu and Kashmir. The fertility rate in India is 2.2%, while in Jammu and Kashmir, it is significantly higher at 6.1%, with the tribal population having a fertility rate of 3.09%. These numbers show that tribal women in Jammu and Kashmir have more children than the national average, but fewer than the region's general population. Tribal women's higher fertility rates can be ascribed to social constraints that limit their access to fertility control and family planning services. Tribal women's higher fertility rates can be ascribed to social constraints that restrict their availability of fertility control and options for contraception. A tribal woman's firsthand narrative highlights the extreme physical and health demands made on these women. Significant health problems and physical tiredness result from the combined effect of high fertility rates, physically hard employment, and childcare obligations. This emphasizes how urgently comprehensive social and health measures are needed. Women should be educated about reproductive health, have better access to family planning services, and have support networks to lessen the physical responsibilities of their traditional duties. To improve tribal women's overall well-being and health in Jammu and Kashmir and eventually contribute to their empowerment and improved standard of living, these issues must be imperative that these issues are addressed.

Family planning is considered anti-faith among tribal people. The other reason is that tribal people live a nomadic lifestyle and must walk with their livestock. They desire more children since it requires more human resources to care for the cattle; families with more children are perceived as stronger and more respected in society. As one of the respondent said, *My husband never permitted me to go for family planning since it is forbidden in our religion and community's faith. This has harmed my health because we live in poverty and do not have adequate access to healthcare; my blood sugar levels reach 300. I feel so weak. I have heavy periods, and I have tried medication, but I am still not feeling well. I believe that repeated births have contributed to my health worsening.*

The social structure enables and promotes more children to move into the community. The point is that women are not even allowed to consider or express their opinions on whether or not to have children. According to this study, tribal women in Kashmir are more likely to have high-risk pregnancies because of their high fertility rates and lack of access to maternity care. Tribal women in Kashmir are not allowed to make their own decisions about birth control. These decisions are decided by their husbands, or sometimes by their in-laws. As one of the respondent said, *My husband has never used protection at all. I have a total of four kids, two sons and two daughters, and we never consider keeping a space between them, nor do we use protection. Everyone claims that using protection causes illness. We also feel that birth control pills are harmful, therefore we do not take them; no one in our society does.*

Figure 6: Use of Contraceptive Methods



Contraceptive use has been increasing in India over the last few decades. The NFHS-4 data shows significant differences in the methods of contraception used by the Indian population as a whole, the people living in Jammu and Kashmir (J&K), and the tribal communities that are part of J&K. While 53.5% of women nationwide use any kind of contraception, this percentage is higher in J&K (63.8%) and much lower among tribal women (44.7%). Similar trends may be seen in the usage of contemporary contraceptive methods: 47.8% in India, 54.2% in J&K, and only 39.3% among women from tribal communities.

At 36.0% nationwide, female sterilisation is the most prevalent method; however, in J&K, this reduces to 27.9%, and there is no data specifically for tribal women. All groups together still have very low rates of male sterilisation: 0.2% nationwide, 0.3% in J&K, and 0.1% among tribal men. Intrauterine devices (IUDs) are not widely used; among tribal women, the rate is 0.5%, while it is 1.5% nationwide and 1.7% in J&K. It's interesting to note that tribal women consume more tablets (7.2%) than both the national average (4.1%) and the J&K average (4.6%). The percentage of women who use condoms varies significantly by location; in J&K, it stands at 19.3%, while nationwide it is 5.6% and among tribal women, it is 7.0%.

These figures highlight many significant findings. First, J&K has a higher overall rate of contraceptive use than the national average; nevertheless, tribal women use the method less frequently overall and more rarely than other women. This disparity implies that cultural and probably practical hurdles severely restrict tribal women's access to and use of contraceptives. Tribal women's low rates of sterilisation and IUD use, along with their increased reliance

on tablets, point to a preference for less intrusive or permanent methods—possibly because of cultural acceptability or accessibility concerns. Though this success is not as noticeable among tribal people, the strong condom usage in J&K suggests successful local awareness and availability initiatives.

The findings highlight the necessity of focused family planning initiatives and interventions catered to the particular difficulties faced by J&K's tribal women. Improving access to and knowledge of a wider variety of contraceptive choices, such as long-term and permanent techniques, could aid in addressing the unmet requirements in these areas. Enhancing health and well-being overall, this strategy may provide native women more agency over their reproductive health.

Conclusion:

Tribal women in Jammu and Kashmir's reproductive health practices are influenced by their socio-cultural and religious beliefs and practices, which are intrinsic to their overall cultural environment. Thus, culturally sensitive and targeted social work interventions are essential to improve reproductive health outcomes. Social workers must make an effort to identify culturally and religiously sensitive programs, policies, and practices that resonate with and appeal to local traditions. The study's findings reveal that a considerable number of indigenous women continue to face a variety of issues and uncertainty. Their demands and goals are impeded by a variety of socioeconomic and cultural barriers. The fundamental health care needs of tribal women are mostly related to nutritional inadequacy, childbearing, reproductive health and hygiene, unplanned pregnancies, abortions, RTIs, and HIV. Tribal women face significant pregnancy-related risks and consequences. Tribal women in Jammu and Kashmir experience high rates of female illness and mortality, but they do not seek general medical care from health centres. Many of them overlooked major health issues such as nutritional disorders, RTIs/STDs, menstrual disorders, and unintended pregnancies, owing to a lack of knowledge and, more broadly, a lack of access to health facilities, sufficient information, and supervision. As a result, many programs designed for their benefit should take an integrated, multidimensional approach to raising healthcare awareness. The projects should help indigenous women achieve holistic development. Policies and programs based on micro-level community data can help to eliminate harmful practices against women and girls by reducing impediments to women's rights, sexual exploitation, and violence.

References:

- Abou-Zahr, C.L. and Wardlaw, T.M. (2003) Antenatal Care in Developing Countries: Promises, Achievements and Missed Opportunities: An Analysis of Trends, Levels and Differentials, 1990-2001. World Health Organization.
- Arora, S., & Khan, S. (2019). *Knowledge of Gujjar Women Regarding Safe Motherhood Practices in Doda District(J&K)*. 6(2).
- Baru, R., Acharya, A., Kumar, A. K. S., & Nagaraj, K. (2010). Inequities in Access to Health Services in India: Caste, Class and Region. *Economic and Political Weekly*, 45, 49–58.
- Bhat, B. (2010). Gender, education and child labour: A sociological perspective. *Educational Research Review*, 5, 323–328.
- Bilal, S., & Gul, A. (2014). Assessment and Understanding of Gujjar and Bakerwal Women's Health in Jammu And Kashmir. *Journal Of Business Management & Social Sciences Research*, 3, 37–43.
- Census of India (2001). Office of the Registrar General and Census Operation, Ministry of Home Affairs, Government of India, New Delhi, India.
- Dabral, S., & Malik, S. (2004). Demographic Study of Gujjars of Delhi: IV. KAP of Family Planning. *J. Hum. Eco*, 16, 231–237. <https://doi.org/10.1080/09709274.2004.11905744>

- Dhanasree, D.K., Vijayabhinandana, D.B., & PradeepKumar, D. (2014). Socio-Economic Empowerment of Tribal Women in High Altitude and Tribal Zone of Andhra Pradesh. *International Journal of Innovative Research in Science, Engineering and Technology*, 3,
- Ghosh, S., & Malik, S. (2009). Assessment and Administration of Health in a Tribal Community of India. *The Internet Journal of Biological Anthropology*, 3, null. <https://doi.org/10.5580/fae>
- Goel, S., Gauri, A., Chauhan, U., Kaur, H., & Singh, A. (2014). Linking lifestyle of marginalized Gujjar population in Himachal Pradesh with plague outbreaks: A qualitative enquiry. *Indian Journal of Public Health*, 58(2), 113. <https://doi.org/10.4103/0019-557X.132287>
- Gogoi, D. M. (n.d.). *A KAP study on family planning among the plain tribes' women in rural context of Assam*.
- Gulzar, D. (2021). Inclusive Policies and their impact on Tribals of Jammu and Kashmir: A Case of Gujjar Tribals. *International Journal of Rural Development, Environment and Health Research*, 5(3), 14–19. <https://doi.org/10.22161/ijreh.5.3.2>
- Gyimah, S., Takyi, B., & Addai, I. (2006). Challenges to the reproductive-health needs of African women: On religion and maternal health utilization in Ghana. *Social Science & Medicine*, 62 12, 2930–2944. <https://doi.org/10.1016/J.SOCSCIMED.2005.11.034>
- International Institute for Population Sciences (IIPS) and Orc Macro International (2007) National Family Health Survey (NFHS-3), 2005-2006. IIPS, Mumbai. - references - scientific research publishing. (n.d.). Retrieved February 26, 2022, from [https://www.scirp.org/\(S\(i43dyn45teexjx455qlt3d2q\)\)/reference/referencespapers.aspx?referenceid=689667](https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/referencespapers.aspx?referenceid=689667)
- Maiti, S., Unisa, S., & Agrawal, P. (2005). Health Care and Health Among Tribal Women in Jharkhand: A Situational Analysis. *Studies of Tribes and Tribals*, 3, 37–46. <https://doi.org/10.1080/0972639X.2005.11886518>
- McNellan, C. R., Dansereau, E., Wallace, M. C. G., Colombara, D. V., Palmisano, E. B., Johanns, C. K., Schaefer, A., Ríos-Zertuche, D., Zúñiga-Brenes, P., Hernandez, B., Iriarte, E., & Mokdad, A. H. (2019). Antenatal care as a means to increase participation in the continuum of maternal and child healthcare: An analysis of the poorest regions of four Mesoamerican countries. *BMC Pregnancy and Childbirth*, 19(1), 66. <https://doi.org/10.1186/s12884-019-2207-9>
- *Ministry of Tribal Affairs, Government of India*. Ministry of Tribal Affairs - Government of India. Retrieved February 26, 2022, from <https://tribal.nic.in/>
- Mitra, A. (2008). The status of women among the scheduled tribes in India. *The Journal of Socio-Economics*, 37(3), 1202–1217. <https://doi.org/10.1016/j.socec.2006.12.077>
- Mog, M., Chauhan, S., Jaiswal, A. K., & Mahato, A. (2020). *Family Planning Practices among Tribal women: An insight from Northeast India*. 10(4).
- Mohanty, S., & Pathak, P. (2009). Rich–Poor Gap in Utilization of Reproductive and Child Health Services in India, 1992–2005. *Journal of Biosocial Science*, 41, 381–398. <https://doi.org/10.1017/S002193200800309X>
- Mukherjee, A., Banerjee, N., Naskar, S., Roy, S., Das, D., & Mandal, S. (2021). Contraceptive behaviour and unmet need among the tribal married women aged 15–49 years: A cross-sectional study in a community development block of paschim Bardhaman District, West Bengal. *Indian Journal of Public Health*, 65(2), 159. https://doi.org/10.4103/ijph.IJPH_115_21
- Muttreja, P., & Singh, S. (2018). Family planning in India: The way forward, *The Indian journal of Medical Research*, vol. 148(Suppl), pp. S1–S9.
- National Family Health Survey-4 (2022). Retrieved February 26, 2022, from <http://rchiips.org/NFHS/nfhs4.shtml>

- Navaneetham, K., & Dharmalingam, A. (2000). 1 UTILIZATION OF MATERNAL HEALTH CARE SERVICES IN SOUTH INDIA. *Social Science & Medicine*, 55 10, 1849–1869. [https://doi.org/10.1016/S0277-9536\(01\)00313-6](https://doi.org/10.1016/S0277-9536(01)00313-6)
- Pathak, P., Singh, A., & Subramanian, S. (2010). Economic Inequalities in Maternal Health Care: Prenatal Care and Skilled Birth Attendance in India, 1992–2006. <https://doi.org/10.1371/journal.pone.0013593>
- Pooja Negi & Rajeev Singh (2021): Association between reproductive health and nonionizing radiation exposure, *Electromagnetic Biology and Medicine*, DOI: 10.1080/15368378.2021.1874973
- Rahi. Javid, (2011). Tribal Research and Cultural Foundation is a National Organization working on Gujjars and Bakarwals in Jammu and Kashmir. Available at www.iosrjournals.org/iosr-jhss/papers/Vol11-issue6/G01166367.pdf
- Rani, M., Bonu, S., & Harvey, S. (2007). Differentials in the quality of antenatal care in India. *International Journal for Quality in Health Care: Journal of the International Society for Quality in Health Care*, 20 1, 62–71. <https://doi.org/10.1093/INTQHC/MZM052>
- Sathiya Susuman. A, (2012). Correlates of Antenatal and Postnatal Care among Tribal Women in India, *Kamla-Raj Ethno Med*, 6(1): 55-62,2012
- Sofi, Jan Umer. (2013). Paradox of Tribal Development: A Case of Gujjars and Bakarwals of Jammu & Kashmir (India). *Journal of Sociology and Social Work*, 1(1), pp. 01-08.