Menstrual Health Challenges Among Rural Women: A Sociological Study in Gurna Village, Almora, Uttarakhand

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ABSTRACT

This sociological research explores the interplay of societal norms, economic barriers, and awareness levels concerning menstruation and menstrual hygiene management in Gurna Village, Almora, Uttarakhand, India. The study, conducted with 104 female participants, explores sociocultural norms, practices, and taboos related to menstruation in the rural context. It also examines the economic factors hindering access to menstrual hygiene products and assesses their impact on women's menstrual health. The findings reveal a contrast in how menstruation is perceived, with discrimination, "impurity" beliefs, and traditional practices prevalent. Economic challenges, especially high unemployment rates, lead many women to use cloth despite the availability of subsidized sanitary pads, impacting their health. The research highlights a gap between awareness and practical implementation of menstrual hygiene practices, emphasizing the need for improved management and awareness campaigns in rural communities. This study provides essential insights for policy reforms and interventions to empower women in Gurna Village and similar rural areas, addressing the complex relationship between societal norms, economic barriers, and awareness levels regarding menstruation. The findings contribute to medical sociology, advocating positive change in how menstruation is perceived and managed in rural settings.

Keywords: Menstruation, Menstrual Practices, Public Health, Rural Women, Economic barriers, Feminist Theory

INTRODUCTION

Menstruation, a natural process in the female reproductive cycle, commences between the ages of 11 and 14 for most individuals. The menstrual cycle involves monthly discharge of blood and other substances, lasting an average of 28 days but varying from 20 to 45 days among women (Sapkota, 2023). While it symbolizes fertility and womanhood in many cultures, societal norms and cultural traditions can lead to stigmatization and misconceptions surrounding menstruation. This is particularly evident in hilly regions like Uttarakhand, India, where women face segregation practices during menstruation, including isolation, separate utensils, distinct bedding arrangements, and restrictions on visiting religious sites. "Entering the 'puja room' during menstruation is a major restriction for urban girls, whereas, for rural girls, it is also prohibited to go to the kitchen." (Puri &

Kapoor, 2006). Even during menstruation, Girls and women undergoing this procedure are also prohibited from praying and touching holy books. (Garg & Anand, 2015).

These customs are traditionally justified by the need to provide rest during menstruation, a period associated with physical discomfort. Paradoxically, during this time of supposed rest, women often face neglect, impacting their overall health. An extreme example of this stigmatization is the construction of "Period Huts," such as in Ghurchum village, Champawat, Uttarakhand, where menstruating women are sent away from their homes and housed in dedicated facilities, reinforcing the belief that menstruation is impure. (Punetha, 2019).

Additionally, many women in hilly regions struggle to access sanitary pads, resorting to unhygienic alternatives like cloth, newspapers, or leaves due to financial constraints. This lack of access perpetuates unhygienic menstrual practices. Furthermore, inadequate menstrual hygiene management among teenagers in rural areas is attributed to societal prohibitions and, a lack of information, and support. The same study revealed that 89% of women use cloth for menstrual blood absorption, 2% use cotton, 7% use sanitary pads, and 2% use ash. Among those women who used cloth, 60% changed it only once a day, resulting in 14% of girls reporting menstrual infections. (Rao, 2017).

Even those with some knowledge of menstruation often resort to inappropriate practices due to the scarcity of menstrual sanitary products and a lack of support, both mentally and physically. The absence of awareness about government schemes related to menstrual health further exacerbates the challenges faced by women in hilly regions of India.

This paper delves into the cultural, societal, and economic factors that perpetuate these practices and the associated lack of awareness, ultimately leading to adverse health outcomes for women in these areas.

Literature review-

Menstrual health and hygiene in India represent a complex web of socio-cultural, economic, and awareness-related factors that significantly impact the lives of millions of menstruating women and girls. This comprehensive literature review delves into the various aspects of this issue, drawing from academic research, reports, and credible sources to shed light on the challenges and progress in this domain.

Menstruation remains a taboo subject in India, with open discussion about it often discouraged and met with disdain. In India, Girls often turn to their mothers for information and support, but 70% of mothers consider menstruation "dirty," further perpetuating taboos. (Dasra, Kiawah Trust, & USAID, 2014). This societal perception stems from deep-rooted cultural beliefs, including the myth that menstruation is impure, dating back to Vedic times. (Chawla,1994). The consequences of such taboos extend to restrictions on women's daily lives, limiting their participation

in activities like cooking, visiting places of worship, and social events. (Sivakami, 2023). This culminates in practices such as the seclusion of menstruating women in 'Kurmaghars', or "period huts," with inadequate sanitation facilities, posing serious health risks. (Puri & Kapoor, 2006).

Restrictions on entering sacred spaces ("puja" room), handling holy objects, and dietary prohibitions during menstruation further reinforce the stigmatization of menstruating women. (Garg & Anand, 2015). The prohibition of women's entry into the Sabarimala Temple is based on two primary reasons. Firstly, it is believed that Lord Ayyappa has perpetually maintained celibacy. Secondly, the entry of women is thought to impact the sanctity of the principles of Brahmachariyan, as women are considered "impure" during their menstruation. (Verma, 2020). Such beliefs also contribute to the harmful practice of secluding menstruating women, as was observed during Cyclone Gaja in Thanjavur. (Balajee, 2018). and in Uttarakhand, where menstruating women are made to sleep in cowsheds, braving the extreme winter chill in an area where maximum temperatures hover around 12 degrees Celsius and minimum temperatures drop to approximately 8 degrees, subjecting them to bitingly cold conditions. (Punetha, 2020).

The economic factors surrounding menstrual health in India are intertwined with accessibility and affordability. The majority of women and girls lack consistent access to high-quality menstrual hygiene management (MHM) products. (Dasra, Kiawah Trust, & USAID, 2014) Despite the signs of progress, the harsh truth is that only about 30% of women have access to sanitary napkins in India. This means that the majority of menstruating people in the country are still struggling with the very basics and are fighting the taboos that make any further progress seem unattainable. (Chadha & Chadha, 2022). Approximately 88% of menstruating women resort to homemade alternatives like old cloth, rags, hay, sand, or ash due to the cost and availability of commercial sanitary pads. (Dasra, Kiawah Trust, & USAID, 2014). This financial burden is exacerbated by high taxes on menstrual products. (Verma, 2020). Moreover, the absence of appropriate sanitation facilities, with 63 million adolescent girls living in homes without toilets, further complicates the issue. (Dasra, Kiawah Trust, & USAID, 2014). The challenge of addressing menstrual health and hygiene is compounded by the low levels of knowledge and understanding among girls. (Patil, et al., 2011).

A study in India reported that 70% of the girls had not heard about menstruation before attainment of menarche (Thakur & et al., 2014). While the government has initiated efforts to improve awareness through schemes like the National Rural Health Mission and the Swachh Bharat Abhiyan, more extensive initiatives are required to reach the vast population of women and girls who lack education on puberty and menstrual health. (Press Information Bureau, Government of India. 2014).

This comprehensive literature review underscores the multifaceted challenges faced by menstruating women and girls in India. Socio-cultural factors perpetuate taboos, leading to restrictions and discriminatory practices. Economic factors, such as the lack of access to affordable

menstrual hygiene products and sanitation facilities, compound these challenges. Furthermore, limited awareness and education on menstrual health among girls and women exacerbate the issue.

Research gap-

This study fills a crucial research gap by investigating menstrual health challenges among rural women in Gurna Village, Uttarakhand's hilly region. Unlike previous research, which often overlooks the distinct socio-cultural and economic factors affecting menstrual health in such areas, our study focuses on the localized experiences of these women. Our findings can inform targeted policies and interventions tailored to rural communities in hilly regions like Gurna Village, aiming to enhance menstrual hygiene management and awareness within the local socio-cultural context. This research also offers a unique perspective on how menstruation impacts societal norms and the overall well-being of rural women, contributing to the field of sociology.

Research objectives-

- To explore the socio-cultural norms, practices, and taboos related to menstruation within the context of rural women.
- To study the economic factors that impede rural women's access to menstrual hygiene products and to assess the consequences of these barriers for their menstrual health.
- To explore the levels of awareness and identify knowledge gaps among women in the village concerning menstruation and the management of menstrual hygiene.

METHODOLOGY

This exploratory research examines the sociological dimensions of menstruation among women in Gurna Village, Almora district, Uttarakhand, India, within the frameworks of medical sociology and feminist theory. These frameworks help elucidate how societal norms, economic barriers, and awareness levels impact menstrual health management and its broader implications on women's lives.

Sample

The study population comprised 208 women, from which a purposive sample of 104 participants (50%) was selected. This sample size was chosen to ensure adequate representation of various age groups, castes, and socio-economic backgrounds, providing a comprehensive view of the menstrual health challenges faced by these women. The study group was homogeneous in nature, which justified the selection of 50% of the total population for the study. The lottery method was used within this purposive sampling framework to randomly select participants, enhancing scientific rigour and ensuring representativeness.

Materials used/tools of the study

Data collection occurred over three months (October to December 2021) using non-participant observation & self-made interview schedule. The non-participant observation and interview schedule gathered quantitative data on socio-demographic variables and menstrual health practices, while non-participant observation provided qualitative insights into personal experiences and cultural beliefs. Secondary data from academic journals, books, government reports, and reputable websites contextualized and supported the primary findings.

Procedure

Quantitative data analysis involved identifying patterns and correlations between variables such as age, caste, income, and menstrual health practices.

This rigorous methodology ensures that the study's findings are credible and relevant, and contribute significantly to the existing literature on menstrual health in rural India.

RESULTS AND DISCUSSION

The study was conducted with 104 women living in the rural area of Gurna village, Almora, Uttarakhand. The participants' details, like age, caste, and religion, are outlined in a table. The aim is to explore how factors such as education, family structure, work status, and other variables influence their menstrual health challenges. The interview schedule consisted of 21 questions, which were categorized into four main themes: Health, Hygiene, Myth/Taboo, and Awareness. These categories were designed to comprehensively explore the factors influencing menstrual health, including physical experiences during menstruation, accessibility to hygiene facilities, the impact of cultural myths and taboos, and the level of awareness and knowledge about menstrual health management. By examining these themes, the study aims to provide a holistic understanding of the menstrual health challenges in this rural setting and suggest potential interventions for improvement.

Profile of the Respondents

The study focused on 104 women residing in the rural area of Gurna village in Almora, Uttarakhand. The age distribution among the participants varied significantly, as shown in Table 1, with the largest group (29.81%) falling within the 26-35 years age range, followed by those aged 15-25 years (26.92%). Women aged 36-45 years represented 21.15% of the sample, while those over 46 years accounted for 22.12%. This diverse age range allows for a comprehensive analysis of menstrual health challenges across different life stages.

Caste demographics revealed that 68.27% of the respondents were from the General category, and 31.73% belonged to the Scheduled Caste. Marital status varied, with 70.19% of the women being married, 27.88% unmarried, and 1.92% widowed. These figures are critical in understanding the influence of marital status on menstrual health management and associated responsibilities.

Table 1- Analysis of the age distribution of the respondents

Variable		Frequency	Percentage
Age	15-25 years	28	26.92
	26-35 years	20	19.24
	36-45 years	22	21.15
	Above 46	34	32.69
	Total	104	100

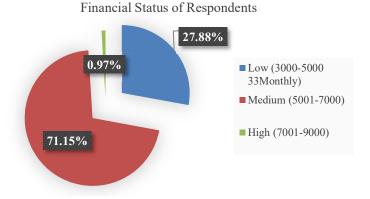
Regarding literacy levels, as mentioned in Table 2, a significant majority of 88.46% were literate, whereas 11.54% were illiterate. The educational qualifications of the respondents were diverse: 17.31% had primary education, 15.39% had secondary education, 17.12% had completed high school, 22.12% had intermediate qualifications, 18.27% were graduates, and 2.88% held post-graduate degrees. Additionally, 3.85% of the women had other forms of education. This data highlights the varied educational attainment and its potential impact on menstrual health awareness and practices.

Table 2- Analysis of the literacy level of the respondents

Variable		Frequency	Percentage
Literacy level	Literate	92	88.46
	Illiterate	12	11.54
	Total	104	100

As Depicted by Graph 1, family structure data indicated that 71.15% of the respondents lived in joint families, while 28.85% were part of nuclear families. Financial status revealed that 27.88% of the respondents had a low income (₹3000-₹5000), 71.15% had a medium-income (₹5001-₹7000), and only 1.92% had a high income (₹7001-₹9000). These financial insights are essential for understanding the economic constraints affecting access to menstrual hygiene products and healthcare services.

Graph 1- Analysis of the financial status of the respondents



Employment status showed that 25% of the women were employed, while 75% were unemployed. All respondents (100%) were engaged in agriculture as their primary occupation, highlighting the rural and agrarian context of the study population. In terms of personal property ownership, only 12.5% of the women-owned personal property, with the remaining 87.5% not owning any.

Participation in family decisions varied significantly, with 56.73% of the respondents not participating, 33.65% sometimes participating, and only 9.62% actively participating. This data is vital for understanding the empowerment and decision-making dynamics within these households. Lastly, the status in the family was perceived as respectful by 7.69% of the women, an average of 89.43%, and 2.88% were unsure of their status. This aspect provides insight into the social standing and self-perception of the women within their family units.

Overall, the socio-economic and educational backgrounds of the respondents underscore the multifaceted nature of menstrual health challenges in rural settings. Understanding these profiles is essential for developing targeted interventions that address the specific needs and constraints faced by women in Gurna village.

Health

The analysis of health-related questions provides valuable insights into the menstrual health challenges faced by the respondents in Gurna village. A significant majority (98.07%) of the women consider menstruation a natural process, while only 1.93% perceive it as a disease. This suggests a prevalent understanding of menstruation as a normal biological function among the study population. However, as shown in Table 3, the perception of menstrual blood as unhygienic was unanimous (100%), indicating widespread misconceptions that may influence hygiene practices and contribute to stigma.

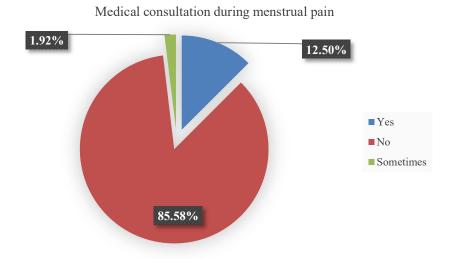
Table 3- Analysis of the perception of the respondents about menstrual blood

Variable		Frequency	Percentage
Is menstrual blood	Yes	104	100
unhygienic?	No	0	0
	Total	104	100

Regarding physical changes during menstruation, 33.65% of the women reported experiencing many changes, 48.07% reported no changes, and 18.27% experienced some changes. The variation in physical experiences highlights the need for personalized health support and education. Additionally, 39.43% of the respondents reported work difficulties during menstruation, while 52.88% did not face any difficulties, and 7.69% experienced some difficulties. This indicates that menstrual health can significantly impact women's productivity and participation in work.

In terms of healthcare-seeking behavior, as explained in Graph 2, 12.5% of the women sought medical advice for menstrual pain, 85.58% did not, and 1.92% sometimes consulted a doctor. The low consultation rate suggests potential barriers to accessing healthcare services for menstrual issues. Furthermore, only 5.76% of the respondents followed a special diet during menstruation, whereas 94.24% did not. This data indicates that dietary practices related to menstruation are not widely adopted among the respondents.

Graph 2- Analysis of the healthcare-seeking behaviour of the respondents



The use of medicine during menstruation was reported by 24.04% of women, while 73.08% did not use medicine, and 2.88% used medicine only in special circumstances. These highlight varying degrees of reliance on medication to manage menstrual symptoms.

Myth/Taboo

The examination of the myth and taboo-related questions reveals significant insights into the cultural and social constraints influencing menstrual health among the respondents. The perception and treatment of menstruation within cultural and social frameworks can greatly affect women's behaviours, practices, and attitudes toward menstrual health.

The behaviour of family members during menstruation is a critical factor. The study found that 61.54% of respondents experienced normal behaviour from their families during menstruation, while 38.46% faced discriminatory behaviour. This discrimination can perpetuate feelings of shame and isolation, impacting women's mental and emotional well-being.

As depicted by Table 4, a significant 59.61% of the respondents reported being considered impure during menstruation, while 40.39% did not face such stigmatization. This belief in impurity often leads to various social and physical restrictions. For instance, 63.47% of women were required

to eat, sit, and sleep separately during menstruation, indicating the prevalence of strict traditional practices. In contrast, 36.53% did not follow such practices.

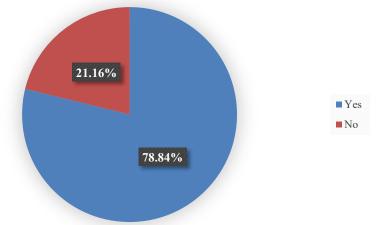
Table 4- Analysis of stigmatization of respondents as impure during menstruation

Variable		Frequency	Percentage
Considered	Yes	62	59.61
impure during	No	42	40.39
menstruation	Total	104	100

A prohibition from going to various places during menstruation was reported by 78.84% of the respondents, while 21.16% were not subjected to these restrictions as shown in Graph 3. These prohibitions can limit women's mobility and participation in social, religious, and educational activities, reinforcing their marginalization during menstrual periods.

Graph 3- Analysis of prohibition on respondents from going to various places during menstruation





Asking males in the family to bring menstrual supplies was common among 69.24% of the respondents, while 30.76% did not follow this practice. This indicates a level of dependency on male family members for menstrual hygiene products, which could be tied to cultural taboos surrounding menstruation and the discussion of related issues.

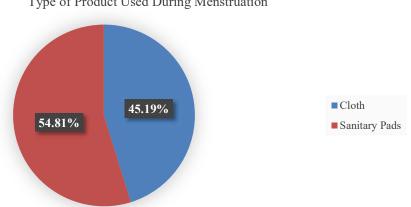
Hygiene

The hygiene-related questions provide critical insights into the menstrual hygiene practices and the accessibility of sanitation facilities among the respondents. These factors are crucial for understanding how well women can manage their menstrual health in a safe and dignified manner.

A significant majority of the respondents (96.16%) reported having access to toilets, while 3.84% did not. This high availability of toilets is a positive indicator of the basic sanitation infrastructure in Gurna village, which is essential for maintaining menstrual hygiene. Similarly, 87.5% of the women reported having access to a washroom, whereas 12.5% did not. Adequate washroom facilities are crucial for ensuring privacy and cleanliness during menstruation.

Bathing every day during menstruation was practised by 87.5% of the respondents, while 12.5% did not follow this practice. Regular bathing is a fundamental aspect of menstrual hygiene, and the high percentage of daily baths suggests a good level of personal hygiene among most respondents. When it comes to the location of bathing during menstruation, 77.89% of the women bathed at home, whereas 22.11% used other places. Bathing at home typically provides more privacy and comfort, which is important for maintaining hygiene and dignity during menstruation.

Graph 4- Analysis of the type of menstrual products used by the respondents



Type of Product Used During Menstruation

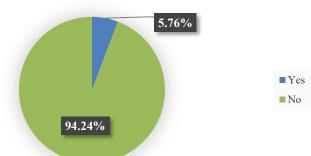
As shown by graph 4, the type of menstrual products used by the respondents varied, with 54.81% using sanitary pads and 45.19% using cloth. The use of sanitary pads is generally associated with better hygiene, although the significant use of cloth indicates that traditional practices are still prevalent. This choice may be influenced by factors such as cost, availability, and cultural preferences.

Awareness

The awareness-related questions shed light on the knowledge and perceptions of the respondents regarding menstrual health and associated government schemes. These factors are crucial for understanding how informed the women are about managing menstruation and their willingness to challenge traditional norms. A substantial majority of respondents (79.81%) were aware of the need to change menstrual pads regularly, whereas 20.19% lacked this awareness. This high level of awareness

is a positive indicator of basic menstrual hygiene knowledge among women. However, as explained in Graph 5, only 5.76% of the respondents reported being beneficiaries of government schemes related to menstruation, while a significant 94.24% were not. This low uptake of governmental support indicates either a lack of awareness about these schemes or barriers to accessing them, suggesting a need for improved dissemination of information and accessibility.

Graph 5- Analysis of beneficiaries of government schemes related to menstruation



Beneficiaries of Govt Scheme Related to Menstruation

When asked about their views on menstrual restrictions, 38.46% of the respondents considered them conservative, 58.66% did not, and 2.88% were uncertain. This division in perception highlights the varying degrees of acceptance of traditional practices and the potential for cultural shifts. Regarding changing conservative traditions related to menstruation, 57.69% of the women agreed with the need for change, 35.58% disagreed, and 6.73% were neutral. This indicates a substantial inclination towards challenging and potentially altering restrictive cultural norms.

Conclusion

This research has underscored the multifaceted challenges associated with menstrual health and hygiene among women in Gurna Village, Uttarakhand. The findings highlight significant sociocultural, economic, and awareness-related barriers that impact women's ability to manage their menstruation effectively.

Key findings reveal a notable reliance on traditional menstrual products, with 45.19% of respondents using cloth instead of sanitary pads. This practice is influenced by cost, availability, and cultural preferences. Additionally, awareness about the need for regular pad changes is high (79.81%), yet there is a low uptake of government schemes related to menstrual health, with only 5.76% of women benefiting from these programs. These insights point to a critical gap between knowledge and the practical implementation of menstrual hygiene practices.

The study also sheds light on the socio-cultural norms that restrict women's activities during menstruation, with 78.84% of respondents reporting prohibitions from various places during their menstrual period. This restriction reinforces the marginalization of women during menstruation and

underscores the need for cultural shifts to support women's mobility and participation in societal activities.

From a medical sociology perspective, the findings emphasize the health implications of inadequate menstrual hygiene practices, such as the use of unhygienic materials and infrequent changing of menstrual products. These practices can lead to infections and other health issues, underscoring the necessity for improved access to sanitary products and education on menstrual hygiene management.

Feminist theory provides a framework for understanding the systemic nature of these challenges. The economic dependency on male family members for menstrual supplies, as reported by 69.24% of respondents, reflects broader gender inequalities that limit women's autonomy and access to resources. Additionally, the high percentage of women (57.69%) who agree with the need to change conservative traditions related to menstruation indicates a growing resistance against restrictive cultural norms.

This research contributes significantly to the extant literature by providing localized insights into the menstrual health challenges faced by rural women in hilly regions. It highlights the importance of targeted interventions, such as comprehensive awareness campaigns, improved dissemination of information about government schemes, and the availability of affordable sanitary products. These measures can help bridge the gap between awareness and practice, leading to better menstrual health outcomes.

Addressing the menstrual health challenges in Gurna Village requires a multifaceted approach that considers socio-cultural, economic, and educational dimensions. By aligning these efforts with the principles of medical sociology and feminist theory, policymakers and community leaders can foster an environment that supports women's health, dignity, and empowerment during menstruation. Further research and sustained advocacy are essential to advance these efforts and promote gender equality in menstrual health management.

Suggestions

Based on these findings, several targeted interventions are recommended. Firstly, enhancing educational opportunities is crucial. Promoting higher education for women can bridge knowledge gaps and foster progressive attitudes towards menstrual health. Secondly, providing economic support and employment opportunities is essential. Creating economic support programs and employment opportunities will reduce financial insecurity and improve access to menstrual hygiene products. Thirdly, conducting comprehensive awareness campaigns is necessary. Implementing extensive awareness campaigns about menstrual hygiene and government schemes will ensure better information dissemination and practical application. Additionally, improving healthcare access is vital. Enhancing access to healthcare services for menstrual health issues and encouraging health-seeking behaviour through community outreach programs will significantly benefit the community.

Lastly, ensuring the availability and affordability of sanitary pads through effective subsidies and economic interventions is imperative. These combined efforts can lead to substantial improvements in menstrual health and overall well-being for women in Gurna village.

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Conflict of interests

The authors declare that no competing interests exist.

Author's contributions

Both authors contributed equally to the theoretical development, analysis, interpretation and writing of the manuscript. Exclusive contributions of individual Authors should be written.

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