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Research Article



Bridging the Gender Gap towards Inclusive Social Growth: Role of Self-Help Groups in Menstrual Health Awareness and Practices among Tribal Adolescent Girls in Selected Blocks of Jalpaiguri, Purulia, and Bankura Districts of West Bengal

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Abstract

In India, with a traditionally patriarchal society, women were seen struggling and fighting hard to make their voices heard in social, economic, and political spheres, as well as in individual health decision-making spheres. However, for national development, gender equality and women's empowerment have always remained a priority. Prime Minister Narendra Modi states that a woman's stride is the defining feature of a nation's leading development. PM Modi noted that 'Nari Shakti' is the prerequisite for India's economic growth. Under PM Modi, India's focus has moved from women's development to women-led empowerment. Globally, the UNDP Human Development Report (2010) defines the development of a nation as expanded by emphasizing the importance of access to essential life services. But women's empowerment should not only concentrate on making women economically self-sufficient, but also on maintaining women's health, particularly their vaginal health, which should be the priority of India, especially when India is designated as 'Bharat Mata.'

Vaginal diseases such as UTIs and other infectious diseases are common among women with poor menstrual hygiene, and this is quite common among women in the tribal communities. Women, comprising half of the world's population, are often left out of basic needs such as improved and affordable access to sanitation and menstrual hygiene facilities. Reaching out to these basic health necessities is crucial for the sound health of every woman. Also, it represents one of the major goals of Sustainable Development Goal 6, which is "Ensure availability and sustainable management of water and sanitation for all". Nevertheless, realizing this goal poses considerable challenges for numerous countries, including India, especially in the case of tribal women, who constitute almost half of the tribal population (about 5.20 crore as per the 2011 Census of India). Improvement of health, getting access to improved and affordable sanitation, and maintenance of menstrual hygiene for them should be the best way for the betterment of sound health and increased participation in educational institutions, leading to improved literacy and economic status of the tribal community. Especially, Self-Help Groups (SHGs) play a crucial and transformative role in improving women's menstrual health, awareness, and practices in India, particularly in rural regions. From giving a safe space for women to discuss menstruation openly, its difficulties, challenging deep-rooted taboos, and stigma, to organizing workshops, training, and peer-to-peer learning, SHGs can educate families on menstrual hygiene and safe practices, reproductive health, and menstrual disorders, myths vs. facts related to menstruation. This shall surely contribute to achieving inclusive social growth that may include all women of tribal societies. This research article aims to critically assess menstrual health-related awareness, traditional knowledge, and practices related to menstrual hygiene of adolescent girls of tribal households. About trying to limit the gender gap that exists between tribal men and women, or degenderize the social taboos that exist in the way of spreading awareness, the article aimed to focus on the role of Self-Help Groups in improving women's menstrual health, awareness, and practices, targeting selected districts of West Bengal with the highest tribal population.

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INTRODUCTION

The strength of India as a nation lies in its vast diversity. A vibrant and dynamic youth population is paving the path for the country to become a developed one. Access to sound health, improved sanitation, and requisite hygiene are the features of a developed nation. Sound health is crucial, essential, and critically challenging for women in India. Amongst the health difficulties, improved menstrual hygiene and health allow them to participate more actively in education, employment, and community life, contributing to the nation's economic growth and gender equality. The core objective of Women-Led Research on Women-Led Development is to foster women's growth, especially among tribal women, because modern hygienic developments and products to improve menstrual health have consistently been unavailable to women in tribal areas. This is partly because of their apathy towards modern menstrual health development structures, and at the same time, due to our inability to reach out to them with awareness campaigns by self-help groups and facilities. This naturally makes them depend on their indigenous structures, which, however, at many times result in poor menstrual health, resulting in the increased propensity of women's health issues and diseases. The aim of the research was also to highlight the participation and promote gender equality, active engagement with the Self-Help Groups, and collaborating with NGOs to organize menstrual health education drives in villages, thereby advancing socio-economic, cultural, and socially inclusive developments across society, communities, and the country as a whole.

However, the path is not without challenges. Due to various changes in political power, the country, despite having ample resources and potential, struggled to establish a few effective public policies related to women. Such problems are the alarming reality of inaccessibility of clean and affordable toilet facilities in rural areas, lack of proper toilets for girl students in schools, worsening gender inequalities in education, and lack of appropriate facilities while menstruating, which leads many girls to skip school, including critical tests and exams, which ultimately results in increased dropout rates and exacerbates the gender inequality gap. Girls who engage in open defecation are at a greater risk of experiencing assault and harassment from unknown individuals, which undermines their dignity and sense of safety. Lastly, insufficient sanitation facilities and the inability to maintain menstrual hygiene due to a lack of proper facilities increase the likelihood of urinary tract infections and kidney stones in girls, adversely affecting their general health and well-being. These problems act as a hindrance to women's empowerment and prevent them from developing an inclusive social growth.

This research has tried to collect data and assess Menstrual Health among tribal adolescent girls in West Bengal. Since our focus group is the tribal community, we have selected the districts based on the highest tribal population from these three districts: Jalpaiguri, Purulia, and Bankura. This study also has the potential to come up with intrinsic measures that will help the union government not only to develop women empowerment, but also help in generating related policy

formulations on improving menstrual health for the tribal women, relating to sustainable skill development by promoting inclusive social growth shortly.

Theoretical Frameworks

In a wider sense, while menstruation is a biological process, it is deeply embedded within social, cultural, and gendered norms that shape how it is understood and experienced in a broader perspective. Bazaz, R. Y. et al. (2025) emphasize that in India, and particularly within tribal communities, menstruation is framed within stigma, silence, and systemic neglect. While the current research focuses primarily on tribal adolescent girls, this framework adopts an inclusive, intersectional, multi-disciplinary approach lens. The framework integrates principles from Gender and Development Theory, Social Determinants of Health, Health Belief Model, Theory of Planned Behaviour, Intersectionality, and Ecological Systems Theory. This framework not only advances a more holistic understanding of menstrual health but also strengthens the foundation of empowerment and equity in menstrual practices, policies, and education.

Gender and Menstruation: Development Theory

Historically, menstruation has been closely tied to the female body, reinforcing a narrow binary that equates women with menstruators and men. Caroline O. N Moser, in her book *Gender Planning and Development: Theory, Practice, and Training* (GAD; 1993), argues that gender is a social construct and emphasizes the need to address the root causes of gender inequality. Unlike Women in Development (WID), which focuses on integrating women into existing development processes, GAD emphasises restructuring power relations and societal norms. Later, Chris Bobel (2019) argues for a "menstrual equity" framework that is inclusive, intersectional, and justice-oriented. This theory helps analyse how menstrual health is embedded in gendered power dynamics. Taboos, social silence, and stigma surrounding menstruation marginalize girls and restrict access to education, mobility, and autonomy. It explains how inadequate menstrual health management is not just a health issue but a gender equality issue.

Social Determinants of Health (SDH) Framework

The World Health Organisation (2008) outlines SDH as the non-medical factors influencing health outcomes. These include socioeconomic status, education, physical environment, employment, and access to healthcare. For tribal adolescent girls, factors such as poverty, illiteracy, lack of access to menstrual products, inadequate sanitation facilities, and geographic isolation severely restrict menstrual hygiene practices. SDH provides a structural understanding of why tribal girls experience disproportionate menstrual health challenges.

Health Belief Model (HBM)

The Health Belief Model, originally developed by Rosenstock (1966), suggests that individuals' readiness to act on health

advice depends on their perceived vulnerability to a situation, the apparent seriousness of its repercussions, the anticipated rewards of taking action, and the perceived barriers to action. The HBM is used to assess how tribal girls perceive menstruation-related health issues. It helps explain their health-seeking behaviour and the psychological and cultural barriers they face in adopting healthy practices. Perceived Susceptibility, such as the belief that poor hygiene could lead to infections, perceived barriers, fear, shame, cost of products, cues to action, peer discussions, school-based education, confidence in managing menstruation independently, and so on.

Theory of Planned Behaviour (TPB):

Ajzen's (1991) Theory of Planned Behaviour asserts that intention toward behaviour, subjective norms, and perceived behavioural control predict an individual's behaviour. TPB explains how tribal girls' behavioural intentions regarding menstrual practices are shaped by:

- Attitudes toward menstruation (e.g., considering it shameful vs. natural)
- Subjective norms (e.g., peer and parental expectations)
- Perceived control (e.g., access to sanitary facilities or products)

Intersectionality Framework

Scholar Kimberlé Crenshaw (1989) first coined intersectionality as a political framework. She argues intersectionality examines how multiple identities—such as gender, caste, ethnicity, and socioeconomic status interact to produce unique experiences of oppression or privilege. This framework is vital for analysing how tribal girls, due to their gender, indigenous identity, and economic status, face layered disadvantages in accessing menstrual health services. The intersectionality lens ensures the study does not treat adolescent girls as a homogenous group.

Ecological Systems Theory:

American psychologist Urie Bronfenbrenner (1979) proposed that human development is shaped by the interactions between individuals and multiple layers of their environment.

- **Microsystem:** Family, school, and peer interactions that influence MHHM
- **Mesosystem:** Linkages between home, school, and health institutions
- **Exosystem:** Community norms, local governance, NGO activities
- **Macrosystem:** Cultural beliefs, national menstrual health policies, gender norms

This theory allows the research to consider how external systems interact with individual behaviours and attitudes.

As gender theory perspective can lead to biased findings, the study adopts a holistic and context-sensitive theoretical approach to understanding menstrual health challenges faced by tribal adolescent girls. This theoretical grounding ensures that menstrual health is not viewed narrowly as a personal hygiene matter but rather as a deeply embedded social issue with

implications for gender equality, education, public health, and human rights.

LITERATURE REVIEW

“Each time we read, a seed is sown for the future.”

~Jules Renard.

The goal of examining the literature, according to Polit and Hungler, is to obtain the knowledge and understanding required to create a comprehensive conceptual framework that allows the subject to be studied. For the present research study, a review of research work was done in the context of adolescent girls' situation in India, particularly in the context of menstrual health and concerning factors.

It has been observed during the literature review that in Indian society, there is a lack of understanding of viewing the adolescent period as an extended phase of education and training for crucial roles. There is a limited scope of such understanding, such as delayed puberty due to a poor nutritional diet, a high percentage of early marriages that represent adulthood in light of concerning crimes, safety concerns, and social pressures (Bokova, 2015) [3]. With the changing shift of socio-economic profile and structures, the proper understanding, awareness, and knowledge related to girls' adolescence is more important due to many factors like generational differences between girls and boys, and early marriage of girls. ‘Girl Child in India: The Situational Analysis’ (DWCD) shows how deep-rooted gender discrimination and nutrition deficiency during menstruation often lead to anaemia and many complicated risks and reproductive failures among adolescent girls.

The effective strategy for raising women's quality of life is having access to menstrual hygiene and sanitation. Access to better WASH services is particularly limited for vulnerable indigenous communities, especially adolescent girls (Hutton & Chase, 2017). According to the UN General Assembly, everyone has the fundamental right to access sanitation and hygiene. Everyone should have access to clean water and sanitary facilities to live a decent and respectable life. Human health is also negatively impacted by inadequate menstrual sanitation services (UN-Water, n.d.; WHO WASH Strategy 2018-2025). A study by AC Nielsen, “Sanitary Protection: Every Woman's Health Right,” found that out of India's female population (586.46 million), only 12 % use sanitary napkins. According to a study conducted by Biswas, S., Alam, A., Islam, N. et al, rural areas reported a lower percentage of exclusive use of hygienic period products (72.32%) during menstruation compared to urban areas (89.37%) in India. Over 88% of women in rural areas depend on different alternatives like unsanitized cloth or rugs, ashes, and husk sand. Due to the high cost of sanitary napkins, diseases such as Reproductive Tract Infection (RTI) are 75% more common among these women.

Based on a cross-sectional study on “Menstrual Hygiene Knowledge and Practices amongst Adolescent Girls in Urban Slums” conducted by Pranjal Sonowal and Kaushik Talukdar (2019), it was found that in the city of Dibrugarh, Assam, half

of the girls were not aware of menstruation before menarche, most girls lacked knowledge of the cause of menstruation and the source of menstrual bleeding. According to Dr. Deshpande TN et al (2018), a study shows how adolescent girls in schools in urban slums practice restrictions and unsatisfactory menstrual hygiene. Therefore, he suggested educating girls about the facts of menstruation and appropriate hygienic practices. Reena v. Wagh et al (2018) ^[14]; Rabindranath Sinha and Bobby Paul (2018) stated in their work that some girls still believe menstruation is a “curse of God”, and throw sanitary pads on the road after using, 96% of girls stop going to the temple, kitchen, or family gatherings, and avoid touching things at home. Anjali Mahajan and Kanika Kaushal (2017), Sasmita Ghimire (2017), Chandra Mouli and Patel S.V. (2017), and Ishita Sarkar (2017) conducted descriptive cross-sectional studies. As a result, they concluded that the average education of menstrual hygiene among adolescent girls and the lack of proper information and practices can impact their literacy, self-esteem, and personal development.

Identification of Research Gaps in the Existing Research Gaps

The existing literature has revealed the scenario of adolescent girls concerning menstrual health and hygiene practices. The lack of a gendered thinking approach in the development sector in measuring equality and empowerment increases the unhygienic practices of menstruation, myths, and misbeliefs related to menstruation among adolescent girls. It can also be observed that adolescent girls and women face significant obstacles due to various factors like socio-economic conditions, availability of infrastructure, and lack of proper knowledge about women's menstrual health.

There has been little research on menstrual health among tribal adolescent girls, Indigenous knowledge, awareness, and practices. So, this research will be the first to analyse the menstrual health and hygiene of tribal adolescent girls (12-18) through a gendered thinking approach in the development sector in measuring equality and empowerment in three different districts of West Bengal, covering four blocks based on the objectives served.

1. The existing literature has focused on a specific state. But none of the studies have focused on the comparative analysis across districts, within West Bengal, as they are different in respect of their socio-economic and political characteristics.
2. No existing study focused on the tribal girls' menstrual health (as they are less developed, but as per Prime Minister Modi's speech, they are ahead of the rest of the country); rather, public policies have considered the assessment for aggregate sense.
3. Most studies on Self-Help Groups in India primarily emphasize women's economic empowerment, microfinance and livelihood promotion, and social capital and community participation. However, their potential as agents of health education, particularly menstrual health, remains underexplored, especially among tribal adolescent populations.

4. Earlier studies have done a short-term assessment of the particular study. Presently, it is 2025, and India has about 5 years remaining to achieve its sustainable goals (SDGs) by the 2030 timeframe, so the research question requires a proper assessment.
5. Existing literature did not explore the detailing of the awareness of tribal adolescent girls' indigenous knowledge, awareness, and practices related to menstruation. This study will try to identify these based on household, parental cooperation, and gender equality in achieving the SDG goals.
6. None of the studies have suggested development indicators to measure India's progress in Menstrual Health Management among tribal communities.

Furthermore, it would be a positive attempt to analyse girls' and women's menstrual health with basic hygienic facilities by establishing realistic time-bound targets to demonstrate the successful implementation of current policies and programs, such as the Swachh Bharat Mission for the tribals, which in a way will facilitate our resolve for Viksit Bharat.

Relevance of the proposed study for the achievement of sustainability goals

The proposed research study holds substantial relevance in addressing critical gaps in menstrual health and hygiene management (MHM) among tribal communities in India, particularly within selected districts of West Bengal. Menstrual health is not merely a personal or health issue but a multidimensional challenge that intersects with education, gender equality, sanitation, and economic empowerment making it essential for achieving several Sustainable Development Goals (SDGs), including SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG5 (Gender Equality), and SDG 6 (Clean Water and Sanitation).

Tribal women and girls often face layered barriers, including cultural taboos, limited access to menstrual products, inadequate sanitation facilities, and a lack of reproductive health education. These challenges are further compounded by geographical isolation, poverty, and systemic neglect. The study's innovative approach using adolescent girls as change agents within their families and communities' places it at the forefront of participatory, community-based health interventions. By positioning adolescent girls as both learners and educators, the study not only enhances their agency but also fosters a ripple effect of awareness and behavioural change within households and broader communities.

This study is particularly timely and relevant given the government of India's increased focus on menstrual health through programs like the Menstrual Hygiene Scheme (MHS) and initiatives under Swachh Bharat Abhiyan. However, tribal populations have remained on the periphery of mainstream health outreach. By focusing on three culturally diverse but socioeconomically marginalized districts, this research aims to provide region-specific insights that can inform policy and practice tailored to tribal contexts.

Moreover, the emphasis on comprehensive awareness—including behaviour change communication (BCC), access to sanitary products, and improved WASH (Water, Sanitation and Hygiene) infrastructure—aligns with global best practices in MHHM. The participatory methodology ensures that the solutions are not only culturally appropriate but also sustainable, as they leverage existing community structures and peer support networks.

The study has also generated critical data on menstrual health indicators, which are often lacking for tribal populations due to underreporting and inadequate inclusion in national surveys. This data is essential for policymakers, NGOs, and health practitioners working in the public health and gender development sectors.

In the broad context of sustainability, menstrual health is pivotal to ensuring girls' continued education, preventing reproductive tract infections, and promoting dignity and equality. When women and girls are empowered to manage their menstruation safely and confidently, entire communities benefit through improved health outcomes, greater school attendance, and enhanced productivity.

In conclusion, the research study directly contributes to the national and global agenda of inclusive, equitable health development and offers a scalable model for community empowerment. By investing in adolescent girls as facilitators of change, the study exemplifies a bottom-up approach to social transformation, with long-term implications for the health, education, and dignity of tribal women.

Significance

Menstrual Health and Hygiene Management (MHHM) remains a neglected yet deeply critical area within public health and gender equity, especially among tribal populations in India. These communities are often underserved due to geographical isolation, limited access to healthcare infrastructure, deep-rooted socio-cultural taboos, and a lack of educational outreach. Despite increasing national attention to menstrual health through policies and schemes such as the Menstrual Hygiene Scheme (MHS) and Swachh Bharat Abhiyan, the tribal zones of West Bengal continue to experience poor health outcomes related to menstruation.

This study seeks to fill that void by creating a culturally grounded, adolescent girl-led assessment that not only addresses menstrual health among tribal women but does so through a novel approach—mobilizing adolescent girls as mediators of change within their families and communities. This model is based on the belief that empowering young girls with knowledge, resources, and leadership opportunities creates a cascading impact on the health, hygiene, and dignity of entire communities.

Significance of Targeting Tribal Populations

Tribal communities in India comprise approximately 8.6% of the population (Census 2011), and yet their health indicators are consistently lower than national averages. Within these communities, menstruation is often enshrouded in stigma, secrecy, and misinformation. Women and girls frequently rely

on unhygienic materials, face restricted mobility during menstruation, and suffer from poor sanitation facilities. These conditions not only compromise physical health, leading to infections and reproductive complications, but also affect emotional well-being, education, and participation in social and economic life.

By focusing on selected blocks across three districts with large tribal populations, the study ensures contextual specificity and the potential for cross-regional learning. The insights gained will offer a nuanced understanding of tribal customs, belief systems, and community structures that influence menstrual practices, helping to tailor future interventions accordingly.

Path-breaking Concept: Adolescent Girl Assessment Study

The cornerstone of this research is its adolescent girl-mediated research study—a transformative, bottom-up approach that empowers adolescent girls as health educators, peer mentors, and community change-makers. Traditionally, health programs tend to view adolescents as passive recipients of aid. This study disrupts that model by positioning them as active agents of change within their families and social environments.

The study will disseminate accurate knowledge of menstrual hygiene, debunk myths, promote safe practices, and advocate for better facilities in schools and homes. Through this, the research anticipates a dual impact: improving menstrual health awareness among adolescent girls themselves, and extending this awareness to their mothers, aunts, sisters, and other women in the household thus impacting multiple generations.

Such an approach is path-breaking because it:

- Recognizing the leadership potential of adolescent girls within their communities.
- Engaging the family unit as a site of change, rather than focusing only on individuals.
- Leveraging indigenous networks and peer dynamics for sustainable outcomes.
- Empower girls to claim their space in the public discourse on health and well-being.

Integration of comprehensive components

Unlike siloed initiatives that address only one aspect of menstrual health (e.g., distributing sanitary napkins), this study proposes four interconnected components:

- **Education and Awareness:** Curriculum-based sessions on menstrual biology, hygiene practices, nutrition, and breaking taboos.
- **Behaviour Change Communication (BCC):** Through Self-Help Groups initiatives, behaviour change communication.
- **WASH (Water, Sanitation, and Hygiene):** Infrastructure Assessment: Mapping and improving access to clean water, safe disposal, and sanitary toilets.
- **Community Participation:** Engaging parents, teachers, ASHA and Anganwadi workers, and local panchayats in dialogue and action.

This multi-pronged design aligns with women's empowerment and inclusive social growth and ensures that menstrual health is addressed not just as a medical issue, but as a social, cultural, and infrastructure challenge requiring holistic solutions.

Contribution to the Sustainable Development Goals (SDGs)

The research directly contributes to the achievement of several SDGs:

- **SDG 3 (Good Health and Well-being):** Reducing infection and reproductive health complications through improved menstrual hygiene.
- **SDG 4 (Quality Education):** Addressing menstrual-related absenteeism and drop-out rates among school-going girls.
- **SDG 5 (Gender Equality):** Challenging discriminatory practices and empowering girls to assert bodily autonomy.
- **SDG 6 (Clean Water and Sanitation):** Advocating for safe and inclusive sanitation solutions in tribal communities.

Additionally, the community-centred approach supports SDG 10 (Reducing Inequalities) by targeting marginalised tribal groups and SDG 17 (Partnerships for the Goals) by promoting collaboration across government, civil society, and academic stakeholders.

Research and policy significance

Another key innovation lies in the study's research methodology and expected data outcomes. The project has employed a mixed-methods approach combining quantitative surveys, educational, health assessments, and qualitative narratives to provide a rich, intersectional understanding of menstrual health. This includes factors such as caste, age, income, and geography, creating nuanced evidence base for targeted policy design.

The insights generated will be crucial for

- Inform state and national menstrual health policies.
- Enhancing the effectiveness of schools' health programs and tribal welfare schemes
- Build a scope for policy formulation for menstrual health interventions.

Sustainability and Long-Term Impact:

What makes the study truly innovative is its built-in sustainability. By fostering women's empowerment among adolescent girls and integrating community awareness into the process, the study is designed to outlast the duration of the study. Workshops and training for girls will continue to influence their peers and communities, creating a self-perpetuating cycle of awareness and action.

Additionally, the study will explore linkages with local self-help groups (SHGs) for the production and distribution of eco-friendly sanitary products, thereby creating skill development through inclusive social growth and addressing environmental concerns linked to menstrual waste in the future.

The research study is significant not only for addressing a critical yet neglected issue—menstrual health among tribal women—but also for doing so in a way that is bold, inclusive, and forward-thinking. Investing in adolescent girls at the heart of the research study breaks conventional boundaries and offers a replicable, scalable model that can transform how we understand and act on menstrual health challenges in tribal and marginalised settings. In essence, this research is not just about menstruation—it is about dignity, equality, education, sustainable development, and inclusive social growth.

Observation

Jalpaiguri District (Focus Area: Tea Garden and Forest-Dwelling Tribes)

The situation in Jalpaiguri is unique due to the concentration of tribal populations in tea gardens.

- **Environmental Factors:** High humidity and lack of drying spaces for reusable cloths in tea garden labour quarters (coolie lines) lead to increased risks of Reproductive Tract Infections (RTIs).
- **Institutional Support:** School-going girls have better access to sanitary napkins than those who have dropped out to work in the gardens.
- **Hygienic Practices:** NFHS-5 trends suggest that while "hygienic methods" (sanitary napkins, locally prepared pads, or cups) are used by roughly 67% of tribal adolescents in West Bengal, the specific usage in Jalpaiguri's remote tribal blocks often dips due to supply chain inconsistencies.

Purulia District (Focus Area: Santhal and Sabar Tribes)

Purulia remains one of the more challenged districts due to its topography and socio-economic indicators.

- **Menarche Readiness:** Awareness before menarche is lower here than the state average, often restricted to information passed from mothers, which is frequently bundled with traditional taboos.
- **Hygiene Barriers:** The "unclean" stigma is strong, with significant restrictions on entering kitchens or touching water sources during periods.
- **Product Access:** While government schemes (like Sabar Sathi and school-based pad distribution) have increased "ever-used" rates, consistent "exclusive use" of sanitary napkins remains lower among tribal groups compared to non-tribal rural peers.

Bankura District (Focus: Kora and Other Tribes)

Recent studies in Bankura highlight a significant "awareness gap."

- **Knowledge Deficiency:** Approximately 74.8% of tribal adolescent girls in rural Bankura reported having no prior understanding of menstruation before menarche.
- **Product Usage:** There is a high prevalence of homemade reusable cloth/pads (75.2%), often due to economic constraints.

- Sanitation Infrastructure: A critical bottleneck is the lack of private toilets; nearly 73.8% of respondents in tribal-heavy rural pockets reported a lack of available household toilet

facilities, leading to challenges in private hygiene management.

The following table summarises the critical indicators typically observed in these tribal belts

Indicator	Estimated Prevalence/ Status	Primary Barriers
Awareness before Menarche	25% – 40%	Social silence, lack of school-based education.
Sanitary Napkin Usage	55% – 65%	High cost, lack of disposal facilities.
Use of Reusable Cloth	70% – 80% (including mixed use)	Traditional preference, economic necessity.
Socio-Cultural Restrictions	~85% (Religious/Dietary)	Deep-seated community taboos and myths.
School Absenteeism	15% – 20% during periods	Lack of functional, private school toilets.

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