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Understanding Menstrual Hygiene Products and Policy Expectations: A Nationwide Survey of Indian Menstruators

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ABSTRACT

Introduction: The choice of Menstrual Hygiene Products (MHP) significantly impacts both personal health and the environment. In India, the widespread use of disposable products generates an alarming amount of plastic waste annually, contributing to the ongoing environmental crisis. Objective: This study investigates awareness and usage patterns of menstrual hygiene products among Indian menstruators, identifies barriers to eco-friendly alternatives, and provides tailored recommendations for both policymakers and menstruators. Methods: A cross-sectional study design was employed, involving 787 participants who completed an online survey. Both quantitative and qualitative data analyses were performed to uncover core trends and challenges related to MHP choices. Results: Findings reveal high awareness of sustainable alternatives, such as cloth pads and menstrual cups, yet limited adoption persists. Key barriers include cultural taboos, misconceptions, and practical challenges, such as difficulties with usage, cleaning, and availability. Conclusion: This study underscores the importance of promoting sustainable menstrual practices through systemic efforts. Recommendations include public awareness campaigns, subsidies for eco-friendly products, and infrastructure improvements by the government. For menstruators, education on proper usage, disposal, and health benefits of sustainable MHP can address misconceptions and foster community-driven change.

KEYWORDS: Cross-Sectional Study, Environmental Impact, Health Awareness, India, Menstrual Hygiene, Sustainability

INTRODUCTION

The type of Menstrual Hygiene Products (MHP) used impacts both our health and the environment. In India alone, around 12.3 billion pads are discarded annually, filling up the landfills and causing micro-plastic pollution. ^[1, 2] Additionally, these products often incorporate harmful chemicals such as dioxins, furans, and phthalates, which can have dangerous consequences such as skin allergies, reproductive issues and even cancers. ^[3, 4]

A report by ToxicsLink Delhi revealed that disposable sanitary napkins constitute 90% plastic and are adding to the plastic crisis. The study also found that sanitary waste is almost always non-segregated at the municipal level and conventionally all of it reaches the landfills. Workers handling this waste often get exposed to highly unhygienic conditions without adequate personal protective equipment (PPE), posing health risks. ^[5]

Despite known risks, there is limited research on addressing cultural taboos and practical barriers hindering the adoption of sustainable MHP in India. Menstrual cups, reusable cloth pads, and period underwear are emerging as sustainable options, yet their adoption is hindered by a lack of awareness and many cultural barriers. [6] The majority of menstruators are unaware of the economic and health benefits of switching to reusable products. This points towards an urgent need to address these knowledge gaps and promote the use of safer, more sustainable menstrual products.

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Thumati et al www.pimr.org.in

Addressing the above issues requires coordinated efforts to educate and empower menstruators regarding sustainable menstrual hygiene products. Existing studies suggest that increasing awareness and accessibility to alternatives can significantly reduce environmental impact and improve health outcomes. ^[7,8] This study aims to explore the usage and knowledge of Indian menstruators about different Menstrual Hygiene Products (MHP), as well as to capture their messages for the government and Indian menstruators. Findings from this study intend to guide future awareness campaigns and policy interventions to foster sustainable menstrual practices.

METHODOLOGY

A cross-sectional study was conducted among Indian menstruators over two months (December 2021 to January 2022). This design was chosen as it allows for efficient data collection from a diverse population over a defined period, to provide valuable baseline insights into menstrual hygiene practices. Sample size was calculated based on the National Family Health Survey-4 data ^[9] which found that, 37% young women exclusively used disposable pads as menstrual hygiene products (MHP). The sample size was determined to be 359 (with 95% confidence and 80% power) using OpenEpi Software. ^[10]

A pre-tested semi-structured questionnaire was designed, using evidence from previous studies. [11, 12] The questionnaire consisted of quantitative and qualitative components. The questionnaire was pilot-tested among 15 participants to assess clarity and reliability before dissemination. Necessary adjustments were made based on feedback. The questionnaire was then disseminated via various social media platforms and through group and personal messaging to reach a nationwide audience. Non-probability sampling strategy was used to target maximum number of menstruators who were willing to participate. All efforts were made to recruit menstruators from diverse geographic, cultural, and socioeconomic backgrounds to enhance representativeness. Questions were framed in simple colloquial Indian English, avoiding scientific terms, and with simple images of different menstrual hygiene products (MHP) to guide the menstruators through the questionnaire. The email ID of the principal investigator was provided to resolve participants' queries.

Data was collected using a Google form and then extracted into Excel spreadsheets for analysis. The analysis was conducted using EpiData Analysis V 2.2.3.187 (EpiData Association, Odense, Denmark). Categorical variables were expressed as frequencies and percentages, while continuous variables were presented as mean (SD) or median (IQR).

Qualitative data analysis involved thematic analysis using a coding framework. Participant responses were subjected to open coding, grouping similar ideas into axial codes, and developing selective codes aligned with research objectives. Themes and sub-themes were structured under 'Message to Government' and 'Message to Menstruators,' supported by

direct quotes to represent participant perspectives comprehensively. Categories were finalized through iterative review to ensure accuracy, enabling the identification of participant priorities and concerns.

The research protocol was approved by Institutional Review Board. Consent was obtained at the beginning of the Google survey via a mandatory consent form, ensuring voluntary participation. Participant identification details and email ID submission were not made mandatory, to offer confidentiality and comfort for the participants, and to ensure that they could answer all menstruation-related questions without hesitation.

RESULTS

A total of 787 menstruators participated in this online survey conducted between December 2021 and January 2022. The mean age was 25.5 years (SD \pm 6.9), with participants ranging from 15 to 49 years. The sample included one non-binary and one transgender individual. Participants were predominantly from southern states (79%, n=622), with limited representation from northern (6.1%, n=48), eastern (2.8%, n=22), western (4%, n=31), and northeastern (4%, n=31) regions, as shown in Figure 1 which highlights the participants' regional origins and their MHP usage patterns.

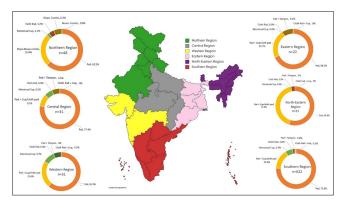


Figure 1: The participants' regional origins and their MHP usage patterns (n=783)

Menstrual Hygiene Products (MHP) Usage: Of the participants, 80% (n=629) used a single type of MHP, with disposable sanitary pads being the most common (72%, n=567). Forty-four participants (6%) combined disposable pads with menstrual cups, while 25% (n=197) reported using cloth pads at least once in life. Awareness of sustainable MHP was high: 77% (n=606) had heard of cloth pads, and 95% (n=748) were familiar with menstrual cups. However, adoption remained low, with only 16% (n=126) using menstrual cups and 23% (n=181) cloth pads.

Health and Environmental Awareness: Sixty-three percent (n=496) were aware of harmful chemicals (e.g., dioxins, phthalates) present in disposable pads and tampons, with 37% (n=291) recognizing associated risks such as

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endometriosis and infertility. Additionally, 73% (n=575) knew that disposable pads take hundreds of years to decompose, and 72% (n=567) acknowledged risks of rashes, allergies, and fungal infections due to sweat retention. Participants also demonstrated awareness of tampon-specific risks, including vaginal dryness and ulcers (27%, n=212), as well as Toxic Shock Syndrome (46%, n=362).

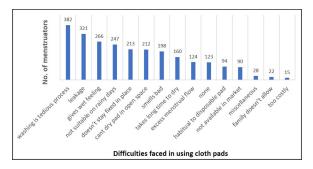


Figure 2: Barriers faced in using/switching to cloth pads (n=680)

Barriers to Sustainable MHP Adoption: Among cloth pad users, 40% (n=79) disposed of them after a single use, while 50% (n=99) reused them for one to two years. Notably, 31% (n=61) were unaware that cloth pads could be safe and hygienic if properly washed and sun-dried. Reported challenges included time-consuming washing (n=382), leakage (n=321), discomfort, wet sensation (n=266), and drying issues etc., as summarized in Figure 2. For menstrual cups, 233 cited barriers such as pain during insertion/removal, fear of use (n=218), and sterilization difficulties (n=109) etc., (Figure 3) with 69% (n=543) expressing a need for more education.

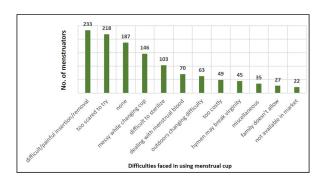


Figure 3: Barriers faced in using/switching to menstrual cup (n=598)

Information Preferences: Most participants (67%, n=527) preferred English for learning about menstrual hygiene, followed by regional languages (e.g., Hindi, Tamil). Preferred online resources included Google searches (31%, n=244), YouTube (14%, n=110), and Instagram (6%, n=47).

Qualitative Findings: Thematic analysis of open-ended responses identified key messages for policymakers and menstruators. For the government, participants emphasized the need for public awareness campaigns, subsidies

for sustainable MHP, improved access in rural areas, and enhanced waste management infrastructure (Table 1). For fellow menstruators, themes included normalizing talking about menstruation, promoting sustainable practices, and and engaging men in these discussions (Table 2). Representative quotes underscored cultural barriers, such as stigma around reusable products, and practical concerns, like sterilization of menstrual cups.

DISCUSSION

This cross-sectional survey of 787 Indian menstruators reveals a significant gap between awareness and adoption of sustainable menstrual hygiene products (MHP). Despite high awareness of cloth pads (77%) and menstrual cups (95%), only 16% and 23% of participants used or recommended these, respectively, with disposable pads usage dominating at 72%. This preference aligns with prior research indicating convenience and familiarity as key drivers of disposable MHP use in India. [8] The predominance of southern states participants (79%) suggests regional bias, potentially limiting the generalizability of findings to diverse Indian contexts.

The predominant utilization of disposable sanitary pads reflects product loyalty, convenience, and limited awareness of alternatives, as noted by Meher & Sahoo (2023). [13] A systemic review by van Eijk et al. found that Commercial pad use was more common among urban than in rural girls and use increasing over time in India. [14] Some participants may use a mixture of MHP in a single cycle, based on situational factors such as daily activities and comfort preferences. The significant prevalence of disposable MHP usage may be due to their ease of use, adherence properties, and minimal maintenance requirements. Singh et al. observed that disposable pads dominated usage patterns due to their convenience, despite environmental concerns. [8] Similarly, a study by Sommer et al. (2020) highlighted the convenience factor as a significant barrier to adopting reusable MHP in East Africa. [15]

Environmental and Health Awareness

Despite over 90% usage of plastic-based products and and being aware of their environmental impact, a gap between knowledge and behavior persists. To bridge this gap, applying behavioral change theories to design interventions that address the psychological and practical barriers to adopting sustainable products is essential. In another systematic review, van Eijk et al. [12] documented similar challenges globally, where awareness of environmental impacts did not necessarily translate into sustainable practice adoption. This aligns with the findings of the WHO/UNICEF Joint Monitoring Programme, which highlighted a widespread gap between awareness and action in menstrual hygiene practices across 51 countries. [16] Awareness of harmful chemicals is high, while knowledge of specific health risks like Toxic Shock Syndrome (TSS) remains limited. The persistence of plasticbased product usage despite awareness of health risks sugThumati et al www.pimr.org.in

Category	Code	Quotes
Education and communication	Public Awareness	"If there is so much research about bad effects of disposable pads and tampons, why isn't the government. educating the society? If cloth pads or menstrual cups are better, why aren't there any ads about them on TV?" - 22 yr female, Andra Pradesh
	School Programs	"Education policy should let adolescents known all details about menstruation both boys and girls."-46 yr female, Uttar Pradesh
	Product education	"Give a proper class on the topic to use eco-friendly and healthy products during periods as most of us are afraid of inserting menstrual cups" - 19 yr female, Tamil Nadu
	Media strategy	"More ads about sustainable menstrual products other than plastic pads." - 21 yr female, Karnataka
Product Access and affordability	Pricing policy	"First pad should be tax free and easily available to women of all the economic strata." - 45 yr female, Haryana
	Subsidies	"More than awareness and advertisement, they should provide subsidy REUSABLE hygiene products." - 17 yr female, Gujarat
	Distribution	"They should provide menstrual pads in all public places for free access in emergency or at nominal cost." - 36 yr female, Andra Pradesh
	Rural Access	"Don't encourage plastic pads. Encourage people to use cloth pads. Use NGOs to make more availability to rural areas too." - 28 yr female, Telangana
Health and safety standards	Product safety	"Want sanitary which are chemical free, rash free and vaginal friendly." - 24 yr female, Karnataka
	Infrastructure	"To improve menstrual hygiene, there is a need of availability of clean water and extensive awareness among the community" - 28 yr female, West Bengal
Policy and sustainability	Workplace Policy	"A couple of day's leave for working women every month should be given as some women have very painful periods. Should be optional." - 29 yr female, Gujarat
	Environmental impact	"Promote menstrual cups and cloth pads. Awareness among general public about menstrual hygiene." - 39 yr female, Tamil Nadu
	Waste Management	"Make options of incinerating available for sanitary waste disposal. Do not shame people for using pads." - 36 yr female, Andra Pradesh

Table 1: Thematic Analysis of the Theme: "Message to government

www.pimr.org.in Thumati et al

Category	Code	Quotes
Destigmatizing Menstruation	Normalizing Talking About Menstruation	"Menstruation is something we all need to talk about. Regardless of the gender, everyone should know about menstrual hygiene and especially sustainable way of menstrual hygiene." - 22 yr female, Telangana
	Involving Men	"It will be men from every single family who can make women and girls of their home comfortable to talk about periods otherwise they will be hesitant and in silence" - 20 yr male, Bihar
Menstrual Hygiene and Health	Maintaining Hygiene	"Use the hygienic cloth pads which are reusable so that genital infections and the harmful fungal, bacterial diseases not occurs. Change the pad every 5hrs." - 22 yr female, Andra Pradesh
	Seeking Medical Attention	"Don't ignore the changes in your cycle. Consult a gynecologist if you don't feel well. Try to know more about your own body and figure out what works best for you." - 18 yr female, Kerala; " If you have irregularity in your cycle or heavy bleeding, clots formation or anything abnormal during periods consult nearby doctor." - 19 yr female, Rajasthan
Sustainable Menstrual Practices	Trying Different Products	"Try all the options out there. Don't be scared to try. Take your time. Choose the option that gives you the most comfortable experience during your menstruation." - 25 yr female, Maharashtra
	Sustainable Practices	"Proper disposal after segregation of menstrual waste from other waste right from home will make the job of sanitary workers much better and easier." - 22 yr female, TN; "Don't hesitate to share your issues related to periods. Cloth pad is safe if u can wash or dry properly because it is free from chemicals and fully ecofriendly." - 44 yr female, Haryana

Table 2: Thematic Analysis of the Theme: "Message to menstruators

gests deeply ingrained behavioral patterns that require targeted intervention strategies.

Despite 80% being aware about cloth pads, adoption rates remain remarkably low. Barriers include challenges with washing, drying, privacy, leakage concerns, and limited market availability. Addressing menstrual taboos through culturally sensitive approaches, like engaging community leaders and peer educators to normalize the use of sustainable products, is crucial. Similar barriers were identified by Meher & Sahoo (2023), where socioeconomic and cultural factors significantly influenced menstrual product choices. [17] In a province of the United States, Kuhlmann et al. (2019) also noted privacy and convenience as major barriers to the adoption of reusable products. [18]

Information Dissemination and Future Implications

The study revealed that information about menstrual hygiene products primarily flows through family networks, internet resources, and social media platforms, particularly Instagram and YouTube. This multi-channel information flow presents both opportunities and challenges for education initiatives. Media exposure, notably by 67% of participants preferring English-language resources; and mobile phone ownership, implicit in the online survey format, likely influence MHP awareness. Singh et al. [8] found that mass media exposure and mobile phone ownership significantly increased hygienic method use among rural adolescents.

Multilingual, culturally appropriate educational materials, coupled with social media campaigns and family engagement programs, can enhance awareness and support sustainable product choices. The WHO/UNICEF Joint Moni-

Thumati et al www.pimr.org.in

toring Programme found similar patterns globally, where social media and family networks played a significant role in menstrual hygiene management education. [16] Additionally, the study by Kuhlmann et al. (2019) emphasized the importance of social media and peer networks in disseminating menstrual health information and influencing product choices. [18]

The analysis of MHP usage patterns reveals several significant trends and challenges in adopting sustainable alternatives. Educational campaigns showcasing the benefits of sustainable products, alongside influencer collaborations to promote ease of use, can strengthen awareness of sustainable MHP These preferences can be shifted by organizing workshops demonstrating the environmental and health impacts of plastic-based products, coupled with hands-on sessions for reusable product usage, to help users make informed choices. Use of visual aids, such as info-graphics and videos in educational sessions, can further emphasize the benefits of using sustainable alternatives from the lens of environmental footprint left by single-use vs reusable MHP.

The qualitative findings from this study highlight the multifaceted nature of menstrual health and the need for systemic, collaborative approaches. Participants advocate for subsidies on reusable products and integrating menstrual health into school curricula, aligning with menstrual equity research. [14] Participants advice to fellow menstruators urges them for open discussions about menstrual health and the benefits of sustainable products, which mirrors recommended best practices from healthcare providers. [16] Overall, the analysis from this survey advocates the need for a community-driven approach, with governments, civil society, and menstruators working together to develop holistic solutions that address the complex challenges around menstrual health and hygiene.

Limitations

Limitations of this study include potential bias from leading questions and selection bias due to non-probability sampling, despite efforts for diversity. Self-reported data may have recall bias. The online format limited the sample to educated, smartphone-owning individuals with internet access, primarily reached via specific online networks, thus likely underrepresenting rural and resourceconstrained populations and skewing the sample towards urban menstruators. The over-representation of participants from Southern India also limits generalizability to the entire Indian population. A separate, accepted publication from this project provides a detailed age-based analysis and socio-demographic trends. Marital status was not included in this study's questionnaire, as the focus was on other key determinants of menstrual practices. Future research should prioritize geographically diverse recruitment.

RECOMMENDATIONS

Based on the study findings, there is a clear need for targeted interventions to promote the use of sustainable menstrual hygiene products (MHP). Public health authorities and stakeholders should initiate culturally appropriate awareness campaigns that address health, economic, and environmental benefits of eco-friendly MHP. Menstrual health education should be integrated into school curricula at an early age for both genders to reduce stigma and foster informed choices. Financial incentives, including subsidies or free distribution of reusable products such as cloth pads and menstrual cups, should be implemented, particularly in rural and low-income communities. Improvement in water, sanitation, and waste disposal facilities is essential to support the safe use and reuse of these products. Behavioural change communication strategies should be designed to address misconceptions, fear of insertion, and pain associated with menstrual cups, leveraging digital media, peer groups, and healthcare providers. Involving men and community leaders in menstrual health discourse may further enhance acceptance and reduce societal taboos.

CONCLUSION

This nationwide survey among Indian menstruators highlights a persistent reliance on disposable sanitary pads despite high awareness of sustainable alternatives. The findings reveal substantial barriers—both informational and practical—hindering the adoption of reusable MHP like cloth pads and menstrual cups. Participants expressed a strong demand for government-led interventions in awareness-building, affordability, accessibility, and infrastructure development. Bridging the gap between awareness and behavior will require a multi-sectoral approach, combining education, policy, community engagement, and inclusive communication. Ultimately, widespread adoption of sustainable practices could significantly reduce menstrual product waste, contributing to both improved health outcomes and environmental conservation.

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Author Contribution: All the authors involved in study have contributed equally at all stages of work

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REFERENCES

1. Aujla M, Logie C, Hardon A, Narasimhan M. Environmental impact of menstrual hygiene products. Bulletin of the World Health Organization. 2025;103(3):223–

www.pimr.org.in Thumati et al

- 225. Available from: https://dx.doi.org/10.2471/blt.24. 291421.
- Menstrual Health Alliance India. Understanding menstrual waste management in India; Available from: http://www.menstrualhealthalliance.org/menstrualwaste-management-india/.
- Chem Fatale report. Missoula (MT): Women's Voices for the Earth; 2020. Available from: https://www. womensvoices.org/2020/01/28/chem-fatale-report/.
- 4. Menstrual products and their environmental impact. Greenpeace International;. Available from: https://www.greenpeace.org/international/publication/47438/menstrual-products-environmental-impact/.
- 5. Toxics Link Delhi. Menstrual products & their disposal;. Available from: https://toxicslink.org/publications/reports/menstrual-products-their-disposal.
- Karamanidou C, Dimopoulos C. Awareness and use of sustainable menstrual products: a comparative study in Greek and German women. European Journal of Public Health. 2022;32(4):678–684. Available from: https:// doi.org/10.1093/eurpub/ckac032.
- Van Eijk AM, Zulaika G, Lenchner M, Mason L, Sivakami M, Nyothach E. Menstrual cup use, leakage, acceptability, safety, and availability: a systematic review and meta-analysis. PLoS One. 2019;4(8):376–393. Available from: https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(19)30111-2/fulltext.
- 8. Singh A, Chakrabarty M, Singh S, Chandra R, Chowdhury S, Singh A. Menstrual hygiene practices among adolescent women in rural India: a cross-sectional study. BMC Public Health. 2022;22(1):1–18. Available from: https://dx.doi.org/10.1186/s12889-022-14622-7.
- Ram U, Pradhan MR, Patel S, Ram F. Factors Associated with Disposable Menstrual Absorbent Use Among Young Women in India. International Perspectives on Sexual and Reproductive Health. 2020;46:223–234. Available from: https://doi.org/10.1363/46e0320.
- 10. OpenEpi Software Version 3.0. Emory University;. Available from: http://www.openepi.com.
- Pokhrel D, Bhattarai S, Emgård M, von Schickfus M, Forsberg BC, Biermann O. Acceptability and feasibility of using vaginal menstrual cups among schoolgirls in rural Nepal: a qualitative pilot study. Reproductive Health. 2021;18(1):1–10. Available from: https://dx.doi.org/10. 1186/s12978-020-01036-0.

- 12. van Eijk AM, Jayasinghe N, Zulaika G, Mason L, Sivakami M, Unger HW et al. Exploring menstrual products: A systematic review and meta-analysis of reusable menstrual pads for public health internationally. PLOS ONE. 2021;16(9):1–26. Available from: https://dx.doi.org/10.1371/journal.pone.0257610.
- 13. Meher A, Sahoo S. Product loyalty and limited awareness play significant roles in the predominance of single-use products among Indian women. Int J Environ Res Public Health. 2023;20(3):1234–1234.
- van Eijk AM, Sivakami M, Thakkar MB, Bauman A, Laserson KF, Coates S et al. Menstrual hygiene management among adolescent girls in India: a systematic review and meta-analysis. BMJ Open. 2016;6(3):1–12. Available from: https://dx.doi.org/10.1136/bmjopen-2015-010290.
- Sommer M, Ackatia-Armah N, Connolly S, Smiles D. A comparison of menstrual product provision in East Africa. Global Health Action. 2020;13(1):1747093. Available from: https://doi.org/10.1080/16549716.2020. 1747093.
- 16. Yes a continuous of the state of the sta
- 17. Meher T, Sahoo H. Menstrual hygiene management among adolescent girls in India: socioeconomic and demographic determinants. Indian Journal of Public Health. 2023;67(2):123–131. Available from: https://doi.org/10.4103/ijph.ijph_1161_22.
- 18. Kuhlmann AS, Henry K, Wall LL. Menstrual Hygiene Management in Resource-Poor Countries. Obstetrical & Gynecological Survey. 2017;72(6):356–376. Available from: https://doi.org/10.1097/ogx.0000000000000443.

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