

SUSTAINABLE MENSTRUATION: ENVIRONMENTAL IMPACT, AWARENESS, AND START-UPS

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Abstract

Awareness about menstrual hygiene and the impact of menstrual hygiene products on the environment is low in India. Tonnes and tonnes of menstrual waste is disposed off without due consideration to the environment. Creating awareness about the harmful effects of usage of sanitary pads and the benefits of sustainable menstruation products is imperative in today's age. This paper intends to understand the awareness of women about sustainable menstruation and their readiness for trial of these products. It also helps to study the harmful effects of menstrual waste disposal and the sustainable menstrual hygiene alternative available like reusable cloth pads, biodegradable pads and menstrual cups.

Keywords: *sustainable menstruation, reusable cloth pads, menstrual cups*

Introduction

Menstrual waste disposal is a problem that is looming large, posing a threat to health and environment. About 121 million menstruating women in India use Sanitary Pads as a menstrual hygiene material, on an average, even if 8 sanitary pads are used per cycle, India generates a massive waste of 12 billion pads per year (Ministry of Drinking Water and Sanitation (MDWS) report (2016)). Due to poor awareness and lack of education about the impact of disposable menstrual products on the environment, more and more women are continuing to contribute to the non- biodegradable waste caused by sanitary pads. Sustainable menstruation offers a solution to this insurmountable problem. Sustainable menstruation refers to the use of menstrual hygiene products that are safe, both for the user and the environment. Where disposable sanitary pads are one-time use and take around 800-900 years to decompose, reusable products like cloth pads and menstrual cups can be re-used for up to 10 years and prove to be a more environmentally friendly alternative. Sustainable menstruation is the need of the hour as sanitary pads are disposed off with utmost disregard to the environment, with 28% being disposed with routine waste, 28% disposed in open, 33% buried and 28% burnt in the open (MDWS report, 2016). Educating the young women about the benefits of sustainable menstruation is the only way forward to protect their health and the environment.

Literature Review

Many girls and women lack access to information and resources about menstrual hygiene because menstruation is frequently regarded as taboo. Poor menstrual hygiene habits may result from this, raising the risk of infections and other health problems, women with low-income wear disposable sanitary napkins for more than 6 hours due to monetary constraints which increase the risk of reproductive tract infections (RTI).

The improper and inadequate menstrual hygiene management practices lead to the choking of the environment. The various health and environmental problems can be combated with the help of sustainable alternatives like biodegradable sanitary pads, washable cloth pads, and reusable menstrual cups (Maurya and Bhalla, 2020). There are certain notions like menstruating women are “impure”. Not entering places of worship is one of the major restrictions among urban women. It is also believed menstruation women are unclean and unhygienic. Such taboos impact the girls’ emotional state, mentality lifestyle, and health. Many girls drop out of school during menstruation in economically less developed countries. Community-based health education campaigns can help raise awareness among adolescent girls. Empowering women through education also helps in this regard. Adequate provision of sanitation facilities should be made available (Garg and Anand, 2015). Biodegradable, eco-friendly solutions and sustainable resources are very necessary in today’s world to combat the issue of menstrual waste disposal. More than 15,000 tons of sanitary pad waste is generated annually and these sanitary pads contain more than 90% plastic, which does not biodegrade and exhausts the landfill waste for around 500-800 years. The usage of single-use sanitary pads has to be reduced and sustainable options are to be adopted. Various biodegradable materials like herbal coated sanitary pads with Tulsi and aloe vera were produced, serving as an eco-friendly and economical option. Sustainable pads were also produced from industrial waste. These sustainable alternatives will be the way to go once commercialization occurs (Sareen, 2021). Although menstrual cups were made available shortly after sanitary pads in the 1930s, they did not gain popularity. This was due to high levels of marketing of disposable products as compared to the poor marketing of the cups. Product reliability, peer opinion, cost of a product, convenience, availability, and marketing are the factors that affect the choice of menstrual products purchased by women. The impact of producing disposable products is not known widely or considered. Women having higher levels of awareness are more willing to choose products that have a comparatively low impact on the environment (Elizabeth et al. 2019). Menstrual hygiene management is better in urban areas than in rural two reasons are accessibility to sanitary materials which is more in urban areas, and parents are more willing to have discussions on this matter in the urban areas. Girls in urban areas have more access to media leading to comparatively high levels of awareness (Sulochana et al. 2022).

The phrase "sustainable menstruation" refers to the healthy and environmentally friendly management of the menstruation cycle. Companies like Sanfe, Avni, and Pee Safe make ‘sustainable menstruation’ possible with their products such as reusable cloth pads, biodegradable pads, and menstrual cups.

Sanfe is a start-up that introduced a first-of-its-kind reusable sanitary pad made with banana fibre that can last for two years i.e., around 120 washes. It also sells menstrual cups that last around a decade. The firm hopes to spread awareness of several crucial concerns affecting women today through its goods. Sanfe is working to solve the enormous issue of disposable pad waste that is burdening the environment. The company was started to urge NGOs and the government to provide rural and semi-urban women with reusable pads rather than sanitary napkins that prove harmful to the environment and empower women through their products (Mathur N., 2022).

Avni is also a start-up that aims to provide toxin-free menstrual products for women as per their flow body type and comfort, safe for the environment and sanitation workers. **India's first 24x7 period helpline** was introduced by Avni. It helps not only to raise awareness but also to combat menstrual myths. Even before they make a purchase, most customers want to be knowledgeable about the goods. It, therefore, makes a big difference for a company and its end users to have real-time conversations with experts to answer their questions (Gupta V., 2022)

Pee Safe is another popular brand that sells sanitary products that are made from 100% organic cotton and bamboo fibre.

Objectives

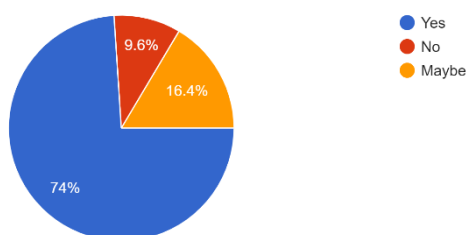
1. To study the popularity and awareness of sustainable menstrual products.
2. To study the perception of women towards 'sustainable menstruation'.
3. To study the willingness among women to switch to sustainable menstrual products.

Research Methodology

Descriptive research method has been used for the purpose of research and descriptive data analysis is done using an online survey. A sample of 73 women between the age group of 18-25 has been surveyed for this research.

Data Analysis and Findings

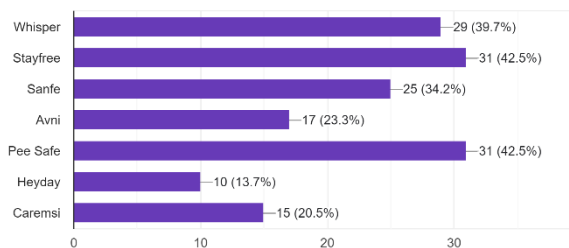
Are you aware of the concept 'sustainable menstruation' ?
73 responses



When asked if people were about the concept of sustainable menstruation 74% said yes, as shown in the above image. But when asked what companies they think make sustainable menstruation products, many chose Whisper and Stayfree, which is incorrect as they sell single-use sanitary pads that are not environmentally friendly. Although many people are somewhat aware of companies like Pee Safe, Sanfe Avni, Heyday, and Caremsi that sell sustainable menstruation products as per the image below.

Which of these companies do you think makes sustainable menstruation products ?

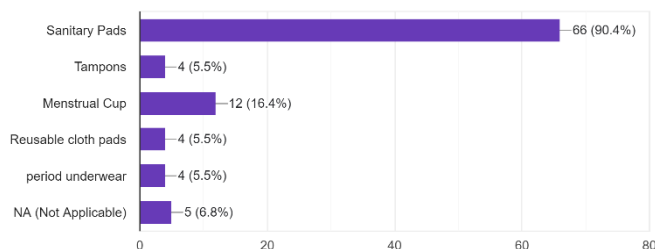
73 responses



This question studied the perception of people regarding companies that make sustainable menstrual products. It is evident from the results that the respondents lack awareness about the companies that make sustainable menstruation products.

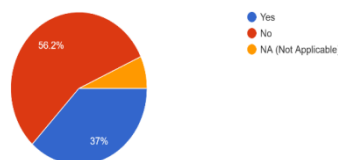
Products you use on a regular basis

73 responses



Do you/have you ever used these products (menstrual cup and/or reusable cloth pads) ?

73 responses



As we can see from the above image the majority of women use sanitary pads on a regular basis and only a small percentage of women use products like reusable cloth pads and menstrual cups. This shows that to reduce the negative impact on the environment, the usage of sustainable menstruation products has to be increased and more awareness needs to be created. Although 37% respondents have used sustainable menstruation products, regular usage has not been adopted yet.

If no, then why not?

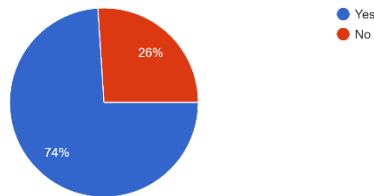
73 responses

- Didn't had much information and awareness about other products
- Never thought about trying
- Not aware of these kind of products
- Used
- Tried using it but somehow didn't work out for me
- I find sanitary pad more comfortable and hygienic
- Menstrual cup because I want more knowledge about its size and quality.
- Pads are more comfortable for me
- Using other sanitary pads which is comfortable and scare to use menstrual cup.

When asked why they haven't used these products, most of the answers said that they were scared to use these products, didn't have enough information, or aren't comfortable using them. This shows that more information about these products is to be made available in an efficient manner.

Are the sustainable products (menstrual cup, reusable cloth pads, etc.) easily accessible to you?

73 responses



A majority of people say that sustainable products are easily accessible to them.

Recommendations

1. Menstruation sustainability-oriented start-ups should start promoting heavily using advertisements and digital marketing to increase brand visibility and to increase awareness about sustainable menstruation products.
2. The government should take the initiative to promote sustainable menstruation products instead of single-use sanitary pads and tampons to reduce their environmental impact.
3. Government should provide grants or incentives to start-ups that contribute to sustainable menstruation which will help make these more products affordable and easily accessible for both urban and rural populations.
4. Measures should be taken to spread awareness regarding the use of sustainable menstruation products through collaborations between NGOs and start-ups, this will help in educating the rural population.
5. Seminars could be conducted to educate people regarding the usage, maintenance, and disposal of products such as menstrual cups and reusable cloth pads.
6. Awareness programs could also be conducted to bust the myths surrounding menstruation and the use of products such as menstrual cups and reusable cloth pads.

Limitations and Scope of further research

This study was conducted only among 73 participants due to time limitation and reluctance of participants to share information, as menstruation is still considered a taboo and respondents are not ready to discuss it openly. This study has been conducted in the city of Mumbai. However, the status of awareness on menstrual hygiene will differ among different areas within the country as well as from country to country.

Therefore, more research need to be conducted on larger samples to understand the awareness regarding sustainable menstruation and the readiness to shift to sustainable menstrual materials.

Conclusion

- Through this research we can conclude that awareness regarding sustainable menstruation should be increased as it will help in reducing the negative environmental impact significantly.
- The above-mentioned recommendations could be put into action slowly and steadily as even a small step can contribute towards sustainability.
- The government's input can give a kick start to such companies, not only educating the people, but it will also help in increasing employment opportunities.
- Initially when pads were introduced, they were assumed to be the best option for menstrual hygiene but as we can see how these new sustainable innovations like menstrual cups and reusable cloth pads have proved the earlier assumption wrong, similarly the current innovations can be overruled by the future innovations hence, more research on 'sustainable menstruation' as a concept is required.

References

- Johnson, M. (2022, September 2). *9 Sustainable Feminine Hygiene Startups of India*. Prakati India.
- Maurya, A. (2020, September). *Examining the Need for Sustainable Menstruation in India*. research gate.
- Anand, T., & Garg, S. (2015). Menstruation related myths in India: strategies for combating it. *Journal of Family Medicine and Primary Care*, 4(2), 184.
- Sareen, S. (2021, December). *Sustainable menstrual alternatives: The journey so far - researchgate*. research gate.
- Peberdy, E., Jones, A., & Green, D. (2019, January 17). A Study into Public Awareness of the Environmental Impact of Menstrual Products and Product Choice. *Sustainability*, 11(2), 473.
- Pednekar, S., Some, S., Rivankar, K., & Thakore, R. (2022, August 31). Enabling factors for sustainable menstrual hygiene management practices: a rapid review. *Discover Sustainability*, 3(1).
- *How is Avni Transforming the Female Hygiene Market with its Innovation*. (n.d.). Indian Retailer.
- *IIT Delhi start-up Sanfe launches reusable sanitary pads*. (2019, August 20). IIT Delhi Start-up Sanfe Launches Reusable Sanitary Pads - the Hindu Business Line.

