

REVIEW ARTICLE

Promotion and strategies of menstrual cup use among healthcare providers: A primer towards a sustainable solution for menstrual health and hygiene management in India

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CITATION

Behera SM, Epari V, Behera P, Patro BK. Promotion and strategies of menstrual cup use among healthcare providers: A primer towards a sustainable solution for menstrual health and hygiene management in India. Indian J Comm Health. 2024;36(1):07-11.

<https://doi.org/10.47203/IJCH.2024.v36i01.003>

ARTICLE CYCLE

Received: 28/05/2023; Accepted: 09/02/2024; Published: 29/02/2024

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ABSTRACT

Menstrual cups are considered a sustainable solution for menstrual health and hygiene management, as they are cost-effective, environment-friendly, reusable and offer health benefits over traditional menstrual hygiene products such as pads and tampons. However, in lower middle income countries (LMICs), menstrual cup use is limited. Recently, India's current menstrual hygiene program has included menstrual cups as an option for menstrual health and hygiene management. However, the menstrual cup has not been promoted widely in the Indian context. Even if the use of menstrual cups among female healthcare providers in India is minimal, the manuscript identified the crucial challenges in menstrual health and hygiene management, the role of menstrual cups as a solution and the essential strategies to increase menstrual cup use. Programmatic success requires endorsement from healthcare providers as they are trusted sources of information related to healthcare. Good experiences and leading examples from healthcare providers about using menstrual cups is a welcoming step in the path of the dream of a "pad-free country" for India.

KEYWORDS

Female; Menstrual Hygiene Products; Menstruation; Developing Countries; Cost-Benefit Analysis; Hygiene; Information Sources; Health Personnel; Delivery of Health Care; India

INTRODUCTION

Menstruation is an essential aspect of women's reproductive health and is an indicator of fertility. Menstrual health hygiene refers to the practices and products used to

manage menstrual bleeding safely and hygienically to avoid infection and other health-related complications. Several menstrual hygiene products are available, including pads, tampons, menstrual cups,

reusable cloth pads, etc.(1) Women choose a menstrual product that is comfortable, convenient, and affordable and should change their products regularly to maintain good hygiene.

In lower middle income countries (LMICs), many adolescent girls and women witness physical discomfort and psychological distress in menstruation management due to lack of effective and affordable products.(2) They find menstrual management not only difficult but also face a severe adverse effect on their lives, impacting significantly on the health of the family and the community at large.(3) Attitudes toward its management can vary with individual experiences of perception of health, as well as by social and cultural factors. Despite the importance of menstrual hygiene, it remains a taboo in many cultures, and women often face barriers to accessing proper menstrual hygiene products and education. Efforts are being made to break the taboo surrounding menstruation and increase awareness about menstrual health and hygiene, particularly in LMICs.(4)

Box 1: Challenges of menstrual health and hygiene management while using sanitary napkins (5)

1. Health hazards of using low-quality sanitary napkins (TSS, UTI etc.).
2. High Expenditure every month.
3. Irritation, rashes and other adverse effects due to sanitary napkins and other products.
4. Lack of environment-friendly disposal methods for sanitary napkins and other products.

Menstrual cup as a sustainable solution for menstrual health and hygiene management

In 2019, UNICEF released a menstrual hygiene management guideline that provides evidence-based recommendations for menstrual hygiene management. The menstrual cup is a non-absorbent bell-shaped device inserted into the vagina to collect menstrual flow.(6) It creates a seal and is held in place by the walls of the vagina. It is typically made up of medical-grade silicone, which has no such health hazards to use it. It collects

three times more blood than pads or tampons and needs to be emptied once every 6 to 12 hours, after which it is rinsed and re-inserted. The health risks (toxic shock syndrome, infections and vaginal irritations) due to menstrual cups are minimal as it does not disrupt vaginal flora and the pH compared to other materials.(6) Good hand hygiene is essential for the safe use of the cup.(2) While the device must be boiled once a month, it can last 5–10 years if properly maintained. Thus, it is also environmentally friendly compared to other products.(2) The menstrual cup helps to address various challenges faced while using sanitary napkins for menstrual health and hygiene management (Box 1).

Menstrual cups are a sustainable solution for menstrual health and hygiene management, offering a range of benefits over traditional menstrual hygiene products such as pads and tampons. Here are some reasons why menstrual cups are a sustainable option:

Health benefits: Menstrual cups are made of medical-grade silicone or latex and do not contain harmful chemicals that may be present in traditional menstrual products. They also do not interfere with the natural pH balance of the vagina.(6)

Cost-effectiveness: While the initial cost of a menstrual cup may be higher than that of traditional menstrual products, its reusable nature means it can save money in the long run. According to some estimates, using a menstrual cup can save up to \$1000 over a woman's reproductive years. (7)

Reusability: Menstrual cups are reusable and can last up to ten years. (8)

Lower environmental impact: Menstrual cups are reusable and generate less waste than traditional menstrual products. Pads and tampons are single-use items that contribute to landfill waste. Additionally, the manufacturing process of menstrual cups requires less water and energy than that of disposable pads and tampons. (5)

Menstrual cups are a sustainable and cost-effective solution for menstrual health and hygiene management. With increased awareness and education about menstrual cups, more women can benefit from this healthier and more sustainable option.

Global evidence on the use of menstrual cup
A study from Nepal reported that the participants found using the menstrual cup easy and convenient, economically efficient and eco-friendly. Further, peer exposure increased the adoption of MC, resulting in higher acceptance among school-going adolescent girls.(9) Studies from the USA, the UK, India, Spain, China, and Canada revealed that females using MC had higher satisfaction rates with average cost savings and much-reduced environmental effects than tampons.(10) By comparing MC to pads/tampons, the menstrual cup was better in terms of comfort, quality, blood collection, and the fear of stains in the clothes.(11) A study from Spain suggested that the use and perception of menstrual cups among 26 to 35-year-olds is better compared to older women who are menstruating, and menstrual cups were accepted as a comfortable and environment-friendly option that also promoted body literacy. (12) 'Menstrual cups can be rash-free, cash-free, and trash-free alternatives with very little investment for a hygienic menstrual life. It gives mobility to work and sports activity and has a leak-proof, hygienic period with no worries of disposal or re-stocking.'

Menstrual cup use in the Indian context

Even in India, menstrual cups are gaining popularity as a sustainable and cost-effective solution for menstrual health and hygiene management. The studies conducted in different parts of India find a massive gap between the knowledge and willingness of women to accept the menstrual cup.(4,8) In a study conducted by Swetha and Amritha, The study participants were mainly medical and paramedical students (16-30 years of age) in south India; it was reported that though 82% of the participants have good knowledge about the menstrual cup among them, 65.75% have knowledge about menstrual cup usage, but only 6% had used MC.(13) Studies also found menstrual cups pose no health hazards to women. It doesn't cause bacterial or yeast infection on prolonged use since it is made of nonreactive medical-grade silicon. After their second or third use, most women feel

comfortable and are willing to completely switch over to menstrual cups. (14,15) The various reasons for the limited use of menstrual cups are comfort, limited knowledge and accessibility. Despite increasing interest and growing evidence of their acceptability, the use of menstrual cups is yet to be promoted in LMICs.

Existing literature also suggests that sustainable Menstrual Hygiene management by adopting MC could be achieved through strategies like strengthening communication, creating health support groups, and involving healthcare providers and community healthcare workers. (15,16) Some studies also pointed out the importance of awareness campaigns among reproductive women and adolescent girls, and the easy availability of MC can increase the use of the menstrual cup as they can help build good menstrual hygiene. (14)

Kerala's two villages, Kumbalangi (the country's first sanitary napkin-free village) and Muhamma (India's first synthetic pad-free village), already have a step forward to accept using menstrual cups. (17,18)

HEALTHCARE PROVIDERS PERSPECTIVES

Healthcare providers like medical and paramedical staff, along with female frontline health workers (FFHWs), constitute an essential part of the healthcare delivery system in India. The task of provisioning health services at the community level relies on the shoulders of female frontline health workers (FFHWs), namely the community health worker (CHW), Accredited Social Health Activists (ASHAs), the Anganwadi Workers (AWWs) and Auxiliary Nurse Midwives (ANMs). FFHWs manage health by reaching out to the populations in remote and rural parts of India through spreading awareness, health promotion and disease surveillance activities.(19) In 2012, the existing guidelines for the menstrual hygiene scheme under the National Health Mission (NHM) were extended to all districts. The ASHAs and ANMs are already involved in the promotion of menstrual hygiene among adolescent girls in rural areas by providing sanitary napkins, for which they are incentivized.(20) Female healthcare

providers like ASHAs, AWWs, ANMs, and Community Health Officers (CHOs), including staff nurses and female medical officers, can set themselves as a leading example for the community's uptake and acceptance of menstrual cups.

Strategies to promote menstrual cups among healthcare providers

The use of menstrual cups among healthcare workers can be increased in a number of ways, which will both directly and indirectly increase the use of menstrual cups in our society, including:

- a. *Providing access and affordability:* Making menstrual cups more easily accessible and affordable for healthcare providers can increase uptake. This may include providing cups for free or at a reduced cost and ensuring that they are available in a range of sizes to accommodate different needs. (8)
- b. *Encouraging peer support:* Encouraging peer support and discussion among healthcare providers who use menstrual cups can help to increase their confidence and provide a sense of community. (9)
- c. *Addressing misconceptions:* Addressing misconceptions and concerns about menstrual cups can help to increase their acceptance among healthcare providers. This may include dispelling myths about their safety and effectiveness and addressing concerns about comfort and hygiene. (15,16)
- d. *Providing resources and support:* Providing resources and support to healthcare providers who use menstrual cups, such as instructions for use, cleaning and storage, can ensure they are used correctly and effectively. (13)
- e. *Promoting environmental sustainability:* Emphasizing the environmental benefits of menstrual cups, such as reducing waste, can effectively encourage their use among healthcare providers concerned about sustainability. (5,21)

THE WAY FORWARD

The menstrual cup is already available in the category of reusable menstrual products in the existing menstrual hygiene scheme. However,

its information and promotion are limited now. The awareness of the benefits of the menstrual cup over sanitary pads needs to be emphasized.

To improve the adoption of menstrual cups, the youth should be targeted through our frontline healthcare workers, who are more open to environment-friendly products. Both government and non-government agencies can use the help of female healthcare providers to increase awareness and assist in using menstrual cups, thus improving menstrual hygiene at a lower cost. Education and discussion about myths and misconceptions are crucial for increasing the acceptance of the menstrual cup, with continued support and access to knowledge. Menstrual cups are often perceived as better than pads or clothes with ease and discretion in washing, drying, storing, quality, comfort, and duration of wear.

The menstrual cup should be included in the training module for ASHAs, ANMs, and CHOs who are active MHS members and work closely with the community. There is a need for training and capacity building on menstrual cups at various levels, mass awareness programs related to the importance and myths related to menstrual cups, and active promotions with the involvement of celebrities and ambassadors. In rural areas, the VHNDs (Village Health Nutrition Days) provide an ideal platform to provide health education and training to the target population through the existing menstrual hygiene scheme. Programmatic success will be possible with good experiences and leading examples from healthcare providers. The use of menstrual cups among healthcare providers is a welcoming step in the path of the dream of a "pad-free country" for India.

AUTHORS CONTRIBUTION

Conceived the concept: SMB, VE, PB and BKP. Wrote the paper: SMB, VE and PB. Data interpretation: SMB, VE and PB. Critical revision to the manuscript: SMB, VE, PB and BKP. All authors have read and approved the manuscript

FINANCIAL SUPPORT AND SPONSORSHIP

Nil

CONFLICT OF INTEREST

There are no conflicts of interest.

DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors haven't used any generative AI/ AI assisted technologies in the writing process.

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