



(REVIEW ARTICLE)



## Novel tools to solve menstrual health crisis targeted at rural India

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### Abstract

The lack of comprehensive data on menstrual health is a significant barrier to addressing menstrual health issues and promoting menstrual health management globally. A menstrual health database can provide a solution to this problem by collecting and organizing data on menstrual health from various sources. In this paper, we propose the development of a comprehensive menstrual health database and discuss its potential benefits in improving menstrual health management and policy-making.

**Keywords:** Menstrual health; Database; Rural India; Proposed Solution

### 1. Introduction

Menstrual health is a critical aspect of women's health and well-being, yet it remains a topic surrounded by taboos and misinformation. In order to ensure that accurate information about menstrual cycles, reproductive health, and hygiene products is accessible to everyone, several resources and databases have been developed to provide information on various aspects of menstrual health. To avert the taboo around attempting to gain information around menstrual health, one needs avenues that do not involve ill-informed or biased individuals. We thus aim to create such a platform, which includes information, resources and referrals surrounding menstrual and related personal health. The following study also contains a breakdown and a case study of the problems faced by menstruators specifically in rural India.

### 2. Problems faced

A study in 2018 aimed to enumerate the various menstrual health management initiatives and challenges. It could largely box the challenges faced by women into six categories.

#### 2.1. Managing menstrual hygiene awareness: Reducing hurdles

Hygienic menstruation habits must start with access to accurate and useful information. Studies from various regions of the nation have shown that different facets of society have appallingly little awareness and comprehension of menstruation as a typical biological process. It is challenging for women and girls to discuss menstruation openly and shamelessly due to prevalent social conventions, beliefs, and customs [1]. Menstruation is such a taboo topic in society that not only girls and women are uncomfortable talking about it, but also instructors and health professionals. To alter the long-standing societal stigma around menstruation and to dismantle the culture of quiet and passivity, all-out efforts are required. It thus becomes imperative for women to access a means that does not require interaction with positions of authority as well as people who may further instill taboo beliefs within them.[2][3]

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## **2.2. Increasing the availability of sanitary menstruation hygiene products**

A significant factor in determining good menstruation management practices is the availability of sanitary menstrual absorbents at reasonable prices. Numerous attempts have been made in this regard over the years, and the most current statistics from the National Family Health Survey 4 (NFHS 4) reveal that 57.6% of women use sanitary techniques for menstruation protection overall. In the current Indian setting, however, the availability and accessibility of clean and safe menstrual absorbents for all women seems like a pipe dream [1]. According to NFHS 4, 62% of women use fabric that can be washed, cleaned, and dried again before being used again. However, in urgent situations or owing to a lack of resources, these reusable materials are frequently not adequately cleaned with soap and clean water [4]. Compostable disposables (such as sanitary pads made from locally harvested materials like bamboo, banana stem fiber, and sugarcane waste, as well as reusable cloth pads) are more difficult to find and more expensive, whereas non-compostable disposables (such as sanitary pads made of cellulose with plastic barriers), which currently hold the majority of the market share, are a double-edged sword. They offer secure and sanitary MHM, yet they are still out of reach for women from low-income households.

Despite government programmes like "Free Days" and "Suvidha" that aim to make disposable sanitary pads more affordable, the demand for safe MHM products greatly outweighs their accessibility and availability. To meet the need, decentralized approaches for manufacturing of inexpensive sanitary napkins by community-based organizations or self-help groups may be pushed. Supporting programmes to improve behavior is one way that corporate sectors may successfully participate.

## **2.3. Infrastructure for waste disposal: Limited capacity**

It's important to dispose of used napkins securely and sustainably. But in India, disposing of old napkins has grown to be a bigger issue. It is not yet known whether used absorbents will be labeled as biomedical waste since they are polluted with blood and bodily fluids or hazardous solid waste because they include plastic. The choice will have an impact on how the nation plans and implements adequate menstrual waste management. According to the NFHS 4, 42% of Indian women between the ages of 15 and 24 now use sanitary napkins, and it is certain that this percentage will rise over time. With an estimated 121 million girls and women in India using an average of eight disposable sanitary pads each month, the country has a significant difficulty in safely disposing of this amount of trash in an environmentally responsible manner [4]. Used sanitary pads are discharged into urban sewer systems, landfills, rural fields, and aquatic bodies due to a lack of effective disposal methods at the community level and institutions (schools, universities, workplaces, and hospitals) [5].

## **2.4. Goods and services tax exemption: The requirement**

No way can sanitary napkins be viewed as a luxury item for women. However, a sizable portion of the poor women are prevented from accessing this important good due to the discriminatory bracketing of sanitary pads for tax purposes. Hindu marital symbols like sindoor, bangles, and bindis are now exempt from taxes; condoms and other contraception are already exempt from taxes, but sanitary napkins are still subject to them. Removing the levy on sanitary napkins would not only make them more widely available, but it will also help millions of women improve their personal hygiene [4].

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## **3. Pre-existing statistical analysis**

The NFHS 4 survey showed that 57.6% women in India have access to sanitary means of menstruation. Over 60%, however, still use cloth. Studies find that the proportion of women using safe menstrual products is significantly higher in women with >12 years of schooling, or women in urban areas. This can, however, just as well be attributed to proximity to knowledge and money, as villages with a history of NGO based awareness campaigns, or richer sections of rural areas also had significantly higher levels of sanitary menstrual product usage [1][4].

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## **4. Existing structures dealing with menstrual health management**

World Health Organization (WHO): WHO is a leading international organization that provides comprehensive information on menstrual health and hygiene. Their website offers information on the physiology of menstruation, menstrual hygiene management, and the impact of menstrual health on women's health and well-being [6][7]

United Nations Children's Fund (UNICEF): UNICEF works to promote the rights of children and women and improve their health and well-being. Their website provides information on menstrual health management in schools, including the importance of menstrual hygiene and the provision of sanitary products [8][9][5].

United Nations Population Fund (UNFPA): UNFPA is an international organization that focuses on reproductive health and rights. Their website offers information on menstrual health and hygiene management, including the impact of menstruation on women's health and well-being and the provision of menstrual health services [10][11].

The Guardian: The Guardian is a leading news source that covers important social and political issues. Their website provides information on period poverty and the impact of inadequate menstrual health management on women's health and well-being [12].

Menstrual Health Alliance (MHA): MHA is a network of organizations and individuals working to promote menstrual health and rights. Their website offers information on menstrual health and hygiene management, including menstrual health services and the provision of sanitary products [13].

These are just a few of the many resources and databases available that provide information on menstrual health. While they each offer valuable information on different aspects of menstrual health, there is still a need for comprehensive and accessible resources that provide accurate information on all aspects of menstrual health, including menstrual cycles, reproductive health, and hygiene products.

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## 5. The proposed product

Menstruation is a natural biological process that affects approximately half of the world's population. Despite its importance and prevalence, menstruation remains a topic surrounded by taboo and misinformation. This is why a comprehensive resource portal like Menstrual Health Hub is essential to ensure accurate information about menstrual cycles, reproductive health, and hygiene products is easily accessible to everyone.

There are several databases available today that focus on menstrual health and provide information on various aspects of the topic. However, most of these resources have limitations in terms of accuracy, comprehensiveness, and accessibility. For instance, many websites focus solely on menstrual products and lack information on other important aspects of menstrual health, such as menstrual cycles, reproductive health, and hygiene practices. Additionally, some websites may provide outdated or inaccurate information, and the information may not be accessible to everyone due to language barriers, lack of internet access, or other factors.

Our proposed solution is to design a comprehensive resource portal for all things menstrual health. The website offers accurate information on menstrual cycles, reproductive health, and hygiene products, and also provides a series of articles and blog entries on various topics related to menstrual health, such as controlling period discomfort, recognizing PMS, and choosing ecologically sustainable menstruation products.

Through our research, we find that uneducated populations have a higher prevalence of stigma and lack of awareness around issues centered around mental health. We believe that any solution available to them must thus:

- Be easily accessible even in remote areas with little access to technology
- Must be comprehensible to those with limited literacy
- Must necessarily revolve around providing resources and access to healthcare, as well as methods of basic preliminary self-diagnosis, while aiming to reduce stigma

We think the best method to tackle accessibility with respect to menstrual health care is to allow for an open access website. The salient features of this include:

- Easily translatable into multiple local languages
- Interactive pictures describing ailments, along with color coded severity as well as easy to comprehend descriptions of its treatment
- Link and maps to find general physicians, OB-GYNs, enterprises, as well as NGOs that may help with menstrual health care
- Additionally, information may be added about various forms of sanitary products, inclusive of but not limited to tampons, pads, menstrual cups etc, with directions of use and avenues of purchase

## 6. Conclusion

While this presents as a novel product in menstrual health care, peer powered websites have been in use for a while, especially in mental health care. Hotlines and helplines are usually backed up and overworked, and require a certain amount of epistemic access to the resource, the language, and an oral description of the problem, which may not be possible for a major chunk of the population due to intellectual, linguistic or stigmatic barriers.

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## Compliance with ethical standards

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The authors of this review declare that they have no conflicts of interest to disclose. The research and writing of this article were conducted in an unbiased manner, without any financial or personal relationships that could influence the objectivity or integrity of the content presented.

Furthermore, the authors have no personal experiences, biases, or prior involvement in initiatives related to menstrual health in rural India that could influence their viewpoint or the conclusions drawn from the literature.

The authors affirm that the primary goal of this article is to provide a comprehensive and evidence-based analysis of the challenges and opportunities surrounding menstrual health in rural India. The information presented is based on a thorough review of existing literature and is intended to contribute to the advancement of knowledge, policy, and practice in this important field.

The authors certify that they have made every effort to ensure the objectivity, accuracy, and transparency of the information presented in this review article, with the sole aim of promoting awareness, understanding, and improvement of menstrual health in rural India.

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