



## Breaking The Silence: Menstrual Health in Adolescent Girls – Current Challenges and Future Directions

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**ABSTRACT:** This study explored the complex challenges surrounding menstrual health in teenagers. Emphasizing the interplay between sociocultural norms, economic constraints, and inadequate infrastructure barriers. In developing countries like India, particularly in rural areas, girls often lack awareness of safe and hygienic practices during menstruation. As a result, they encounter numerous challenges at home, in school and their communities. Additionally, they may have minimal or no understanding of reproductive health and the illnesses that can arise from neglecting personal hygiene during menstruation. This awkwardness prohibits open discussion, resulting in a lack of information and understanding among children and adolescents in their pubarche. Economic restrictions complicate the problem since many households in South Asia live below the poverty line, making sanitary items unaffordable. As a result, they primarily depend on reusable cotton pads, which are washed and reused. In rural areas, adolescent girls often lack access to sanitary products, have limited knowledge about the types available and how to use them, or cannot afford them due to their high cost. Educational institutions typically lack comprehensive menstrual health training at the community level. This leaves girls ignorant about the biological components of menstruation and acceptable hygiene habits. This gap fosters ambiguity and encourages riskier practices. Tackling these challenges necessitates a comprehensive research approach.

**Objective:** The main goal of this review is to outline the current challenges and practical strategies for managing menstrual health and hygiene among adolescents while examining the existing scenarios and obstacles. This contains an overview of the present understanding of epidemiology, treatment, and prevention, as well as cultural beliefs about the requirements and management of menstrual hygiene. In this review, we explored the association between menstrual issues and various socioeconomic, demographic, and health-related factors among adolescents in India.

**Keywords-** Menstrual health and hygiene; Education; Socio-cultural norms, Taboos, Adolescent girls

### I. INTRODUCTION

Menstrual health and hygiene (MHH) are vital aspects of the overall well-being of adolescent girls. According to the World Health Organization, individuals aged 10–19 are classified as adolescents [1]. Adolescence, a transitional phase between childhood and adulthood, is marked by rapid growth and development that significantly influences physical health, psychological well-being, and social interactions [2]. This stage is characterized by accelerated mental, physical, and social growth, which collectively shape the overall development of young females [2]. Despite being a natural biological process, menstruation often remains shrouded in stigma and ignorance, causing significant challenges for adolescent girls worldwide. Typically, the first menstruation occurs between 11 and 15, with an average onset at 13 years [3]. Menstruation signifies the start of physiological and reproductive maturity in females. The menstrual cycle comprises three primary phases: follicular (proliferative), ovulation and luteal (secretory). Regulated by hormones, the process involves the progressive thickening of the endometrium, followed by its shedding, which results in uterine bleeding lasting approximately 3–5 days, occasionally extending up to 7 days.

Menstruation leads to the shedding of around two-thirds of the endometrial lining. Menstrual fluid is composed of blood, mucus and vaginal secretions [4]. However, hormonal imbalances, fibroids, polyps, or conditions like endometriosis can cause an increase in menstrual flow. The commencement of menarche leads to further iron loss; sometimes, it may cause iron deficiency with or without anemia, which may impact concentration abilities, fatigue, and compromised thinking, resulting in poor school performance and a loss in overall perceived quality of life across physical, mental, and social facets[5]. In addition to these changes, adolescence increases iron requirements due to the growth of muscle mass,



blood volume expansion, rising hemoglobin (Hb) levels, and the heightened production of enzymes [6]. The onset of menstruation is a particularly critical aspect for teenagers, as it can significantly impact their academic performance and overall quality of life during puberty [7]. Globally, countless adolescent girls struggle to access essential menstrual hygiene products and services. Women and girls rely on tampons, sanitary pads, menstrual cups, towels, paper materials, and plant fibers to manage menstrual blood, maintain personal hygiene, and reduce discomfort and leakage [8]. In recent years, there has been a growing recognition of the importance of menstrual health, with organizations like UNICEF and WHO spearheading projects designed to build confidence, enhance knowledge and develop skills among teenagers. Moreover, financial limitations play a significant role in menstrual health management; period poverty, impacts millions of girls worldwide [9].

These projects focus on increasing access to supplies and facilities and building an inviting

environment where menstruation may be handled without shame or stigma. This involves increasing access to cost-effective menstruation products, expanding education and awareness, modifying sanitary facilities, and eradicating socio-cultural stigmas [10]. Taking a comprehensive approach can guarantee that teenage girls manage their menstruation with dignity, leading to better health outcomes and more opportunities for personal and professional development.

The main goal of this review is to outline the current challenges and practical strategies for managing menstrual health and hygiene among adolescents while examining the existing scenarios and obstacles. This contains an overview of the present understanding of epidemiology, treatment, and prevention, as well as cultural beliefs about the requirements and management of menstrual hygiene [FIG-1].

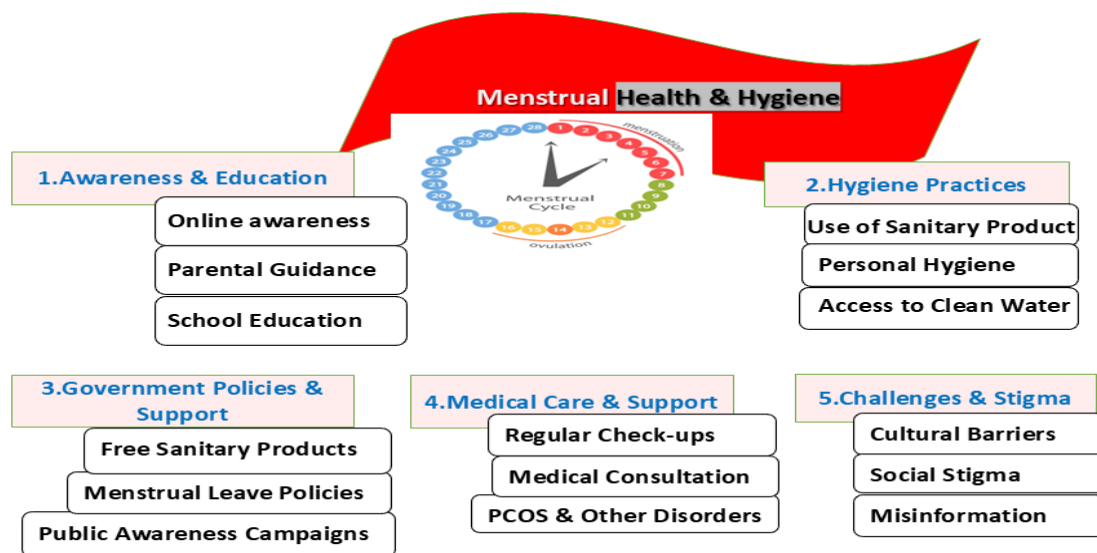


Figure 1: Flowchart of menstrual Health and hygiene

## II. Epidemiology of Menstrual Health and Hygiene

Epidemiological studies highlight disparities in hygiene management, particularly between urban and rural populations, low or middle-developed countries (LMDCs), and developed countries (DCs). In this review, we explored the association between menstrual issues and various socioeconomic, demographic, and health-related factors among adolescents in India [11].

### 2.1. Menstrual Health Challenges in Low- and Middle-Developed Countries.

LMDCs, particularly in India, Bangladesh, and other countries, are increasingly focusing on healthcare for reproductive health concerns; however, menstrual health problems remain extremely common among individuals with limited resources. Menstruation is often overlooked, preventing many girls from seeking necessary medical assistance [12]. A research study by Harlow and Campbell in 2004 indicated that only 40% of



girls sought medical assistance for menstruation symptoms, while the other 60% deemed such concerns to be typical and did not visit any healthcare professionals due to unawareness [13]. Many schools, particularly in developing regions, often lack sufficient restroom facilities. This shortfall leads to inadequate menstrual hygiene practices, significantly increasing the risk of pelvic infections and other reproductive health issues among teenagers. The limited use of sanitary pads in many parts of Asian countries remain a significant issue [14]. Studies in India reveal that 13% of teenage girls in Dehradun slums face challenges related to sanitary pad usage, primarily due to limited access and affordability [15]. Another study by Dasgupta and Sarkar revealed that 85% of school-going girls observed various restrictions during menstruation. Specifically, 70.59% avoided religious ceremonies, 50% refrained from consuming certain foods such as sour fruits, bananas, radishes, and palm, 43% avoided playing, 33.82% skipped homework, 16.18% missed school and 10.29% did not attend social events like weddings [16][17][18]. Similar findings were found in different areas of India, including Andhra Pradesh (Devi & Ramaiah) and Punjab (Puri & Kapoor), showing the broad impact of menstrual shame among teenagers [19][20]. For example, a study in Bangladesh revealed that only 38% of girls in urban schools and 21% in rural schools were aware of menstruation before their first period, with many holding misconceptions about its causes. The lack of knowledge is common across different LMDCs [21, 22]. A study conducted in Africa identified significant negative psychological impacts—such as feelings of grief, fear, shame, and anxiety—that were linked to difficulties in managing menstrual bleeding and increased school absenteeism. In terms of monthly hygiene practices, around 50% of teenagers use disposable sanitary pads. In comparison, 27.3% rely on cloth or towels, another 27.3% use various other materials, and 2.9% do not use any menstrual management products at all. Coping strategies observed include reducing the frequency of cleaning (6.6%), opting for towels or clothing instead of washing with water (1.2%), limiting water use for genital hygiene (19%), and engaging in poor bathing practices (26.9%). Alarmingly, 45.9% reported having no menstrual management strategies whatsoever [23, 24]. Inadequate menstrual health management (MHM) is associated with various health issues, including vaginal discharge, unpleasant odor, urogenital infections, reproductive tract infections, anemia, and impotence [25]. Addressing these outcomes generally requires increased awareness and the provision of essential resources,

such as menstrual products (e.g., menstrual cups, reusable or disposable sanitary pads), as well as improved infrastructure—including water, sanitation, hygiene, and waste disposal facilities in schools [26][27].

## ***2.2. Menstrual Health Challenges in Developed Countries.***

A study on systematic review has concluded that menstruation is still a subject of silence and stigma, leading to extensive misinformation and shame among adolescents [28]. Adolescents frequently experience high rates of dysmenorrhea, which is characterized by painful uterine cramping during menstruation. Studies indicate that in low- and middle-development countries (LMDCs), compared to developed countries (DCs), adolescents tend to normalize menstrual pain and opt for alternative interventions rather than seeking medical advice unless the pain becomes unbearable [29]. This tendency has contributed to increased absenteeism from school and extracurricular activities. These absences are observed not only among adolescents moderate to severe dysmenorrhea [30]. Reports have noted that painful menstrual cramps diagnosed with conditions like endometriosis, but also among those suffering from are particularly common in developed countries such as Sweden, Singapore, Switzerland, Finland, Australia and Kuwait.

In most parts, menstrual health is ignored by families that prevents adolescents from accessing proper support and treatment for menstrual issues, thus perpetuating negative stereotypes and misconceptions even in developed countries. For instance, in Taiwan, adolescent girls hide menstruation from males to prevent ridicule; thus, boys are not educated on this biological process. Such hiding reinforces male-dominated stereotypes, with menstruating teens being unfairly indicated as getting mood swings during menstruation. Such negative views may lead to adolescents developing negative attitudes towards menstruation, viewing it as a nuisance, thus perpetuating the risk of psychological disorders in adulthood [31, 32, 35]. Despite such challenges, there have been enormous efforts in managing menstrual health in developed countries. United efforts by International agencies are aimed at sensitizing the public and enhancing access to menstrual hygiene by 2025. A report by UNICEF and WHO indicates that only two out of every five schools worldwide provide menstrual health education, emphasizing the urgent need for collaborative action [33,34].

To solve menstrual health problems, there must be a multidisciplinary intervention in improving



access to low-cost and sustainable menstrual products, improving education programs to end misinformation and stigma, and offering sufficient sanitation facilities to make it more feasible. By creating free discussion and supportive policies, societies can empower people to handle menstruation with dignity, hence promoting gender equity and improving overall public health all over the world [36].

### **III. Cultural And Religious Beliefs During Menstruation.**

In many cultures, menstruation is surrounded by taboos and prohibitions, which significantly affect daily life and social relationships with others [37]. A review of the literature indicates varied cultural and religious ideas regarding menstruation. However, these standards have hindered the establishment of proper menstrual hygiene and practices. Even in the 21st century, many women face restrictions in cooking, employment, sexual interactions, bathing, spiritual practices, and the consumption of certain foods due to cultural beliefs and taboo. Menstruating women are typically restricted from visiting temples or participating in ceremonies. Inaccuracies and miscommunications regarding menstruation are prevalent in Nepal as well; for instance, the Kumari, who have been considered a living goddess in adolescence age, are believed to lose supernatural abilities once they begin bleeding, leading to an instant loss of their divine status. Additionally, the custom of "Chhaupadi" in Kathmandu puts menstruating females inside isolated huts or barriers, often in severe circumstances. Although banned, this custom remains in certain rural communities, creating significant health and safety risks for females, including adolescents [38]. Texts from the Bible also emphasize the sense of impurities associated with menstruating females. In Jewish customs, menstruating females, whatever they touch, are considered impure. Among Muslims, menstruating women are not permitted to hold the holy Quran or pray for a period of three to seven days [39][40]. Inexperienced girls frequently experience anxiety, confusion, and embarrassment at the start of menarche, which may lead to negative attitudes toward menstruation among adolescents.

### **IV. Contribution of Various Education Levels in Menstrual Health and Hygiene.**

Education profoundly impacts menstrual health and personal hygiene among adolescents by fostering comprehensive knowledge, informed perspectives, and practical habits that support them through various

stages of life. In India, a study by Rani et al. revealed that approximately 61.3% of adolescent girls experienced severe dysmenorrhea, often perceiving it as something they were expected to "endure" as a natural phenomenon. Additionally, only 1.6% had sought medical consultation, primarily due to a lack of awareness [42]. A study conducted by Gultie et al. on adolescents' understanding of menstruation in Ethiopia revealed that 33% of the participants had never discussed the topic with anyone, primarily due to feelings of fear and embarrassment. However, the absence of clean, private toilet facilities in schools often deters many girls from attending regularly. It can even lead to school dropouts, particularly as they reach puberty and begin menstruating [43][44]. Overall, education at all levels is key in strengthening menstrual health by raising information, supporting clean habits, promoting and pushing for gender equality, and improving teenagers' quality of life.

### **V. Common Menstrual Disorders and their treatment.**

The American College of Obstetrics and Gynecology states that the majority of menstrual disorders are attributed to hormonal imbalances or genetic factors. Understanding these menstrual disorders from a disease perspective is crucial for timely diagnosis and effective management. Primary amenorrhea occurs when a young woman has not had her first period by age 16, often due to genetic or anatomical abnormalities. Secondary amenorrhea refers to the cessation of periods in a woman who previously had regular cycles, which can result from factors like stress, significant weight loss, or hormonal disturbances. Menstrual irregularities are common among adolescent girls, with the prevalence ranging from 2.6% to 8.5% for secondary amenorrhea and 11.3% to 26.7% for irregular menstrual cycles [45]. On the other hand, oligomenorrhea in adolescents has been linked to primary hyperandrogenism, such as polycystic ovarian syndrome (PCOS), a condition characterized by excessive androgen production by the ovaries, resulting in infrequent menstrual cycles. Androgen is a male sex hormone and can lead to irregular cycles, acne, hirsutism, and weight gain. PCOS should be excluded before diagnosing conditions such as hyperprolactinemia, adrenal and ovarian tumors, and the effect of some drugs (e.g., danazol and certain psychotropic drugs). Although uncommon in the general population, congenital adrenal hyperplasia should be excluded by confirming a negative 17-hydroxyprogesterone test. Treatment of PCOS should aim at the correction of menstrual cyclicity, hirsutism, obesity, and insulin resistance. Data on the



duration of menstrual disturbances and the long-term effects of lifestyle factors, such as weight loss, eating disorders, and intense physical activity, remains limited. However, these factors are reported to contribute to menstrual irregularities in adolescents [46]. Thyroid disorders are increasingly common these days among girls due to hormonal imbalances. Hypothyroidism can lead to heavy and prolonged periods, but hyperthyroidism can lead to light or missed periods. Thyroid hormone status significantly influences the menstrual cycle, primarily through the action of thyrotropin-releasing hormone, which directly affects ovarian function. Abnormal thyroid function can alter the levels of sex hormone-binding globulin, prolactin, and gonadotropin-releasing hormone, ultimately contributing to menstrual irregularities.

For example, elevated levels of thyrotropin-releasing hormone (TRH) can increase prolactin levels, causing amenorrhea in cases of hypothyroidism. Additional factors that heighten the risk of iron deficiency in teenagers include illness, intense athletic training and blood donation. Iron deficiency, whether or not accompanied by anemia, can manifest as poor concentration, fatigue, and memory impairment, leading to reduced academic performance and a decline in overall quality of life across physical, mental, and social domains. A deficiency in essential vitamins and minerals, such as iron, calcium, and vitamin D, can negatively impact overall reproductive health and potentially lead to long-term fertility issues. Cushing's syndrome (CS) is another condition characterized by a group of signs and symptoms resulting from prolonged exposure to excessive levels of glucocorticoid hormones. The most common cause across all age groups is accidental steroid administration, referred to as exogenous corticosteroid (CS) exposure. Endogenous hypercortisolism, on the other hand, can be categorized as either adrenocorticotropic hormone ACTH-dependent or ACTH-independent. Excess secretion of cortisol, or the stress hormone, can disrupt the menstrual cycle, cause weight gain, and elevate blood pressure. Menstrual issues can arise from hormonal imbalances affecting the central gonadotropin-releasing hormone pulse generator, as well as from factors such as severe weight loss, intense physical activity, substantial changes in sleep or eating habits, and excessive stress [47]. Correct diagnosis of menstrual disorders requires a thorough medical history and physical and pelvic examination and may also include laboratory blood tests, ultrasound scans, or laparoscopy. The treatment depends on the specific disorder and its cause.

## **VI. Menstruation-related issues and challenges among adolescents**

The issues related to Menstrual health and hygiene are considered difficult to handle in Indian society due to misconceptions and lack of knowledge. The program offering free sanitary pads to adolescent girls in India is a commendable step toward improving menstrual hygiene and reducing reproductive system infections. However, the overall level of awareness remains low, limiting the effectiveness of initiatives to enhance adolescents' health. Empowering adolescents to make informed sexual and reproductive choices necessitates a comprehensive approach that focuses on increasing knowledge and awareness, changing attitudes and developing essential skills. Providing services, such as subsidized sanitary napkins, is a foundational step toward promoting the acceptance of healthy practices [48]. In many government schools, instructors themselves lack scientific information about menstrual health. Schools in small villages often face challenges due to limited staff, who are already overburdened with academic responsibilities and additional government programs, such as census data collection, pulse polio immunization, election duties, and training sessions. To address adolescents' reproductive health needs, the Government of India's Kishori Shakti Yojana, launched under the Integrated Child Development Scheme (ICDS) in 1991, can be leveraged effectively [49]. Furthermore, access to sanitary napkins should not be confined to health centers or health workers. In rural areas, involving women's self-help groups like Mahila Mandals, Stree-Sabhas, traditional birth attendants, and female shopkeepers in storing and distributing sanitary napkins could make them more accessible, as adolescent girls may feel more at ease purchasing from these sources. Non-government groups (NGOs) would be necessary to provide information, training, and professional help. The concept of "peer educators," where ASHAs and NGOs train selected girl leaders to educate other girls in their community, can be an effective strategy for disseminating awareness [50]. These peer-led teen groups should take on responsibilities within self-help organizations, promoting a deeper understanding of reproductive health and fostering job and economic skills.

Media is critical in disseminating information and fostering consensus on key social issues. However, much of the language used in advertising commercial sanitary napkins is geared more toward aesthetic appeal than practical awareness. Under the National Rural Health Mission, health promotion themes are widely shared through electronic and print



media, yet this crucial topic remains largely overlooked. Harnessing the power of media is essential for promoting new health initiatives with the appropriate messaging. Female celebrities, in particular, could play a significant role in socially marketing sanitary pads and advocating for menstrual health awareness. Menstrual health management in India can only be truly successful through a multi-dimensional approach that includes product availability, education and cultural transformation.

## VII. Prevention

Systematic education on menstrual hygiene is essential for safeguarding adolescents' physical health, emotional well-being, and overall development. Menstruation & menstrual hygiene management courses can address these requirements effectively. Addressing these challenges requires effective solutions, such as implementing educational hygiene programs, enhancing access to menstrual hygiene products, improving sanitation facilities, and introducing comprehensive schemes at both national and international levels to support adolescents.

### 7.1 Educating girls about infection and allowing them to access menstrual hygiene products.

Empowering a culture in which adolescents can discuss menstruation openly is necessary. Parents, teachers and community leaders must facilitate open discussion to eliminate myths and stigma. Inadequate menstrual hygiene habits can result in opportunistic infections, such as *Candida*, due to abnormally wet conditions in the vulvovaginal area. *Candida* can be difficult to eliminate from soiled clothes without proper cleaning and drying. Therefore, it is essential to educate individuals about the effective use of disinfectants [51]. A study revealed that individuals using reusable pads were 2.3 times more likely to report symptoms of urogenital infections. Similarly, case-control studies conducted by Das et al. in Odisha, India, found that women using reusable pads were 2.8 times more likely to be diagnosed with infections such as urinary tract infections or bacterial vaginosis due to the spread of pathogens [52]. Programs that distribute reusable pads or menstrual cups provide sustainable alternatives, allowing young people to maintain proper hygiene while addressing environmental and economic challenges [53].

### 7.2. Improving Sanitation Facilities at schools and public places.

Designing a girl-friendly school environment is crucial to maintaining respectable menstrual hygiene management. Teachers play a vital

role in creating a supportive school environment by addressing menstruation openly and sensitively. Menstrual health education must be incorporated into the school curriculum, including puberty, sex education, body changes, hygiene and reproductive health. This integrated approach will empower the students to learn more about sexual identity, sexual abuse prevention, unwanted pregnancy and sexually transmitted diseases. The school management committee should provide dustbins for disposing of menstrual waste, and girls must be taught how to properly dispose of used menstrual products. Teachers should be aware of the consequences of improper disposal, such as environmental risks if menstrual waste is disposed of in open areas or toilets. Proper disposal of menstrual waste is needed to ensure the environment is pollution-free [54]. Incineration is an affordable method of reducing waste volume and pathogen load with less environmental burden. Since 2018, the Government of India has promoted the use of incinerators for menstrual waste disposal as part of the Swachh Bharat (Clean India) campaign. With approximately 121 million women in India generating 12.3 billion sanitary pads annually, this results in about 113,000 tons of menstrual waste. Providing clean and private sanitation facilities in schools and public spaces is crucial to addressing this issue. UNICEF and WHO report that only two out of five schools worldwide offer menstrual health education, emphasizing the critical need for improved facilities and awareness initiatives. Ensuring access to clean water, soap, and private spaces for changing menstrual products can significantly enhance menstrual hygiene management in schools, promoting better health and overall well-being for female students.

### 7.3. Multimedia role

Using multimedia in school systems has proven efficient in supporting menstrual hygiene practices. Mobile phone-based messaging services, such as **Mobile Vani** and **Kilkari** in India, along with similar programs in other countries, have been effectively used by health initiatives to disseminate health messages, promote healthy habits and enhance service delivery.

### 7.4. Knowledge-

Awareness of the scheme ongoing at National and International levels.

International and National adolescent programs and initiatives focus on the specific requirements of teens between the ages of 10 and 19 from throughout the globe. These programs usually focus on education, health, skill learning, and social development (Table-



1&2). UNICEF, WHO, and UNESCO have initiated programs aimed at enhancing access to quality education, promoting reproductive and sexual health, preventing drug abuse and supporting the psychological wellness of adolescents. For these

initiatives to be successful and reach diverse cultural and socioeconomic contexts, collaboration among governments, nonprofit organizations, and international agencies is essential.

**Table 1:** Initiatives Providing Menstrual Health Services Internationally.

S.no	Scheme	Country/Region	Ministry/Department	Year of launch	Target	Key Features
1.	<b>Menstrual Hygiene Management in Schools Program</b>	Global	UNICEF, WHO & UNESCO	2012	School-going girls in developing countries	Promotes menstrual hygiene education and improves sanitation facilities in schools.
2.	<b>Breaking the Silence on Menstruation Initiative</b>	African Countries	WaterAid & Local NGOs	2016	Adolescent girls & women	It focuses on ending stigma and improving the infrastructure of menstrual hygiene in African communities.
3.	<b>Water, sanitation and hygiene (WASH)</b>	Global	UNICEF & NGOs	2017	Adolescent girls & young women	Provides menstrual health education and free sanitary products to low-income communities.
4.	<b>The Pad Project (NGO Initiative)</b>	India, USA, Africa	The Pad Project (NGO)	2019	Women & girls in underserved areas	It focuses on providing menstrual products and breaking the stigma around periods.
5.	<b>Periods Don't Stop for Pandemics Initiative</b>	Global	UNFPA (United Nations Population Fund)	2020	Women in crises	Ensures menstrual products are available during humanitarian crises,



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**Table 2: Initiatives Providing Menstrual Health Services in India**

S.no	Scheme	Ministry/Department	Year of launch	Target	Key Features
1.	<b>Kishori Shakti Yojana</b>	Ministry of Women & Child Development	2000	Adolescent girls in rural and urban areas	It aims to improve adolescent girls' nutritional and health status, including menstrual health awareness.
2.	<b>Menstrual Hygiene Scheme</b>	Ministry of Health & Family Welfare	2011	Rural adolescent girls	To increase awareness among adolescent girls on Menstrual Hygiene by ASHA workers.
3.	<b>Sabla Scheme (Rajiv Gandhi Scheme for Empowerment of Adolescent Girls)</b>	Ministry of Women & Child Development	2011	Adolescent girls in select districts	Focuses on improving health, hygiene, and nutrition, including menstrual hygiene awareness.
4.	<b>National Health Mission</b>	Ministry of Health & Family Welfare	2013	Women & adolescent girls	Supports menstrual hygiene initiatives through awareness programs and distribution of sanitary products in rural areas.
5.	<b>Rashtriya Kishor SwasthyaKaryakram</b>	Ministry of Health & Family Welfare	2014	All adolescents (girls & boys) in rural & urban areas	Promotes health issues through peer educators and ensures the procurement of sanitary napkins.
6.	<b>Beti Bachao Beti Padhao</b>	Ministry of Women & Child Development, Ministry of Health & Family Welfare, Ministry of Education	2015	Adolescent girls & women	Includes awareness campaigns on menstrual hygiene as part of girls' education and empowerment.
7.	<b>Swachh Bharat Abhiyan</b>	Ministry of Jal Shakti, Department of Drinking Water & Sanitation	2016	Adolescent girls & women	Implements National Guidelines for Menstrual Hygiene Management at various levels, involving engineers & head teachers.



8.	<b>School Health Program under Ayushman Bharat</b>	Ministry of Health & Family Welfare	2018	School-going adolescents	Provides education on menstrual hygiene and health as part of the school curriculum.
9.	<b>Jan Aushadhi Suvridha Sanitary Napkin</b>	Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers	2019	All women	Provides oxy-biodegradable sanitary napkins at Rs 1 per pad in Jan Aushadhi Kendras.
10.	<b>Udaan Scheme (Recent Initiative by State Governments)</b>	Various State Governments (e.g., Haryana)	2020	School-going adolescent girls	Provides free sanitary napkins to underprivileged school girls to promote menstrual hygiene and attendance.
11.	<b>Chuppi Todo, Swasth Raho Campaign</b>	Various NGOs & State Governments	2021	Adolescent girls & women	It aims to break the stigma around menstruation and promote menstrual health awareness in rural and urban areas.
12.	<b>Menstrual Hygiene Awareness Campaign under Poshan Abhiyaan</b>	Ministry of Women & Child Development	2022	Adolescent girls & women	Integrated menstrual hygiene into the National Nutrition Mission (Poshan Abhiyaan) to improve awareness and health outcomes.

### VIII. Future direction

Menstruation in India is usually surrounded by cultural myths and taboos and hence there is a vast knowledge gap among adolescent girls and their mother. To address this gap, it is essential to integrate comprehensive menstrual health education into school curriculum, to ensure that both students & teachers are well-informed about this natural biological process. Access to hygienic and affordable menstrual products should be a priority at all levels. Although initiatives such as the Jan Aushadhi Suvridha Sanitary Napkins scheme provide oxy-biodegradable sanitary pads at a subsidized price of just ₹1 per pad at more than 10,000 Jan Aushadhi Kendras across the country. Expanding subsidy programs to include a broader range of eco-friendly menstrual products and ensuring their availability through multiple distribution channels can significantly enhance access for adolescents across diverse socio-economic backgrounds. This holistic approach enhances health outcomes and fosters women's empowerment, allowing them to actively

participate in education and social activities without interruptions caused by menstrual-related challenges.

### IX. Conclusion

Menstruation, a biological milestone, is often veiled in shame and misinformation, leading to significant issues for young girls globally. Organizations like UNICEF are implementing projects to promote confidence and knowledge among teenage girls. Addressing the complex challenges associated with menstrual health and hygiene requires improving access to affordable products, expanding education, upgrading sanitary facilities and eliminating socio-cultural stigmas. In India, only 13% of women are reported to use sanitary pads, and inadequate hygiene practices can result in various health problems. However, initiatives that provide free sanitary pads to adolescent girls represent a promising step toward improving menstrual hygiene and reducing infections in the reproductive system. The education system struggles to confront misconceptions about



menstruation and the Kishori Shakti Yojana could be utilized to address these needs. NGOs can contribute by offering information, training and professional support.

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