Menstrual Hygiene Management among Adolescent Girls in Tamil Nadu: A Narrative Review

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ABSTRACT
Adolescence is a period of physiological, psychological, and social transition between childhood and adulthood. On average, women spend 3000 days of their life menstruating. Most adolescent girls in India have little knowledge on menstruation, reproduction, and sexuality. As menstruation remains a taboo, several misconceptions and restrictions are followed in the community. During menstruation, poor personal hygiene and unsafe sanitary conditions increase susceptibility to reproductive tract infections and gynecological problems. A multilevel approach at the national, state, community, school, and family level including men and boys is warranted for effective menstrual hygiene management.

Keywords: Adolescents, Menstrual hygiene, Restrictions.

INTRODUCTION
Adolescents are individuals between 10 and 19 years of age. Globally there are 1.2 billion adolescents. In India, adolescents contribute to 20% of the population. According to Youth Info Tamil Nadu, there are 6 million adolescent girls in Tamil Nadu.

Adolescence is a period of psychological, physiological, and social transition between childhood and adulthood. In girls, this period is characterized by puberty and onset of menstruation. Menstruation is a process a woman undergoes, from menarche till menopause. It is estimated that on average, women spend 3000 days of their life menstruating. During menstruation, poor personal hygiene and unsafe sanitary conditions increase susceptibility to reproductive tract infections and gynecological problems. However, effective management of menstrual bleeding requires access to information and education on the safe practices of menstrual hygiene.

Most adolescent girls in India have little knowledge on menstruation, reproduction, and sexuality. UNICEF reports that one out of three girls in South Asia are not aware of menstruation prior to attaining it. Also, menstruation is surrounded by various psychological and religious barriers due to a lack of knowledge about the process.

According to WHO, adolescent health is a smart investment as it will not only improve survival in the short term but also bring benefits for future health as adults and for the generations to come. Hence this review is attempted with objectives (1) to obtain a summary of the knowledge, attitude, and practices of menstrual hygiene among adolescent girls in Tamil Nadu and (2) to summarize the strategies for effective management of menstrual hygiene among adolescent girls.

Menstruation
Menstruation is derived from the Latin word “mensis” meaning month. It is the periodic vaginal bleeding that occurs due to the shedding of the uterine mucosa. Menstruation usually occurs 1–2 years after the appearance of secondary sexual characteristics. The average cycle is 28 days which ranges from 21–35 days. Every mature female menstruates on an average of 3–5 days (ranges 2–7 days) each month until menopause. However, the amount and the length of menstrual bleeding vary for individuals.

Menstrual Hygiene
Menstrual hygiene deals especially with the healthcare needs and requirements of women during the menstrual cycle. Menstrual hygiene management (MHM) is an integral part of Swachh Bharat Mission-Gramin. Ministry of Drinking Water and Sanitation, Government of India defines MHM as the articulation, awareness, information, and confidence to manage menstruation with safety and dignity using safe hygienic materials, together with adequate water and agents and spaces for washing and bathing with soap and disposal of used menstrual absorbents with dignity and privacy.

Awareness of Adolescent Girls about Menstruation and Menarche
The awareness about menstruation before menarche ranges from 39–70% across various districts of Tamil Nadu. Awareness of menstruation before menarche is important because the reaction toward menarche is based on this. Most of the time the adolescent girls feel scared on first menstruation or disgusted or indifferent or uncomfortable or any other feelings. The primary sources of information were mothers, sisters, friends, relatives, and media. This clearly shows that the role...
of schools in educating about menstrual hygiene is very limited. This is a concern as schools are the platforms where an adolescent girl can learn about the physiology behind menstruation and the appropriate management methods. Failure of this has yielded space for an unscientific approach toward menstruation in adolescent girls and thereby in society.

Knowledge about Menstruation

The ideal knowledge about menstruation and menstrual hygiene includes the knowledge about the physiological nature of menstruation, the source of menstrual bleeding, duration of the menstrual cycle, problems during menstruation such as abdominal pain, and the correct method of disposal of menstrual products. Many girls still perceive menstruation as bleeding that occurs to remove the impure blood from the body, rather than as a hormonal process to prepare women for pregnancy.\textsuperscript{11,12,17} It is sometimes seen as a disease. Although many adolescents know that the source of uterine bleeding is the uterus,\textsuperscript{11} many girls still perceive the abdomen, urethra, stomach, and other organs as the sources.\textsuperscript{11,12,17}

Attitude toward Menstruation

Although menstruation is a physiological process, it is still not normalized in society. The attitude toward menstruation is not the same in society. It is sometimes perceived as a curse of God or as a disease. On one side, menarche is celebrated, while on the other side the monthly cycles are surrounded by taboos, without much discussion in public. All these have instilled a negative and confusing impact about menstruation among adolescent girls. This highlights the need for adequate education to bring about a change in attitude on menstruation.

Attitude toward menstruation also depends on the problems during premenstrual, menstrual, and postmenstrual symptoms. The most common symptoms are abdominal pain, backache, pain in legs or breast, irritability, disturbance in sleep, excessive bleeding, and prolonged bleeding.\textsuperscript{11–13,15}

Practice on Menstrual Hygiene

Menstrual hygiene depends on the type of material used, frequency of changing the material, bathing daily, washing the genital area and proper disposal of used materials. The appropriate practices are using clean cloth/pads, changing pads more than or equal to 3 pads/day, taking bath daily, and washing the genital area using soap and water.

Menstrual products have evolved from time to time. These products are clothes, sanitary napkins, tampons, menstrual cups.\textsuperscript{14,16} The most commonly used menstrual material is the sanitary napkin. Reusable and environmental friendly napkins are also available now.

Regarding the disposal of menstrual absorbent materials, these are the common practices ordered unsafe to safe—(i) throwing these unwrapped into fields, rooftops, etc., (ii) wrapping in paper/plastic bag and throwing outside, (iii) drying, wrapping in paper/plastic bag, and throwing in dustbins (mostly nonurinal), (iv) burying for decomposing, (v) throwing in latrine/toilets, (vi) burning (rural areas and periurban areas), (vii) using small scale incinerators (community or school level), (viii) municipal waste management/burning in health clinics (urban). Safe disposal means ensuring that the destruction of used absorbents is done without human contact and with the least environmental pollution. Improper disposal of pads like flushing in toilets can cause problems as the polymers used in napkins block sewage lines.\textsuperscript{10}

In situations where sanitary napkins are not used, the reasons are high cost, not available easily, and difficulty in disposal.\textsuperscript{12} Sanitary napkins are also provided by the government through schools for school-going adolescents and through ICDS to those who do not attend schools.

Restrictions during Menstruation

Since the topic has not been spoken outwardly, there are several misconceptions that are passed on for generations. As the mother and family members themselves are not aware of the ways to manage menstruation, several restrictions are imposed by self or by others on the women and adolescent girl during menstruation. These restrictions are observed in attending religious practices, not allowed to touch anyone before taking bath, made to sleep at separate place, not allowed to touch plants, not allowed to play, etc. Restrictions are placed even for eating certain foods like papaya, sesame, nonvegetarian items, and sweets.\textsuperscript{11–13,17,18}

Absenteism to School

Absenteism to school during menstruation is also observed in society. The common reasons apart from menstrual symptoms are lack of water supply for cleaning, shame, lack of privacy for changing and cleaning, sociocultural beliefs, and fear of stain on the clothes.\textsuperscript{12} Freedom from the fear of leakage increases a girl’s confidence to be at school during menstruation. Since it is difficult for girls to predict their menstrual cycle, schools should always have a ready supply of sanitary napkins.\textsuperscript{10}

Toward Effective Management of Menstrual Hygiene

Although only women and adolescent girls menstruate, it is necessary that everyone in society has a basic understanding about this.

- At national, state, and community levels: National- and state-level officials have the responsibility to frame relevant policies, allocate budget, and provide strategic oversight. District level officers like magistrates, collectors, public health engineers, district education officers, ICDS officers, health staff, and community frontline workers must ensure implementation and monitoring.
- Management at school level:
  - According to the Annual Status of Education Report, only 68.7% of government schools in India had working toilet facilities, meaning one in four toilets is dysfunctional. The reason being the focus is only on the availability of toilets and not on their functionality.\textsuperscript{19} Hence, usable, well maintained separate toilets for girls and boys, water supply, soap availability for hand washing, and space for washing or laundering menstrual absorbent should be ensured in study places.
  - The formation of support groups such as the Girls Hygiene Club ensuring girl in charge, peer learning, and sharing of information. At the community level, support groups among girls out of school can be created.
  - Creation of module that focuses on understanding changes during puberty, biology around menstruation, choice of menstrual absorbent, hygienic practices, handling menstrual absorbents, normalizing menstruation, debunking myths around menstruation, dealing with pain and nutrition during menstruation.
• Addressing the community barriers:
  Norms and beliefs of community and families need to be changed in this regard. School teachers, community leaders, self-help groups, families including men and boys should positively support the women around them.

**Conclusion**

This review has highlighted that there is a lacuna in knowledge, attitude, and practices on menstrual hygiene and a need to address MHM among adolescents. In order to bring effective behavioral change, multilevel approach should be followed at the national, state, community, family, and school levels. The utilization of social media platforms for debunking myths and misconceptions can be considered. Normalization of menstruation should start from the family level and educating everyone in society including men and boys is of utmost importance. Providing choices of absorbents and the provision to change the absorbents in privacy and provision for adequate disposal of used absorbents will help reduce school absenteeism.

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