

Awareness Regarding Menstrual Hygiene Among Adolescents – A Review

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Abstract: This paper presents a review on awareness regarding menstrual hygiene among adolescents.

Keywords: Menstruation, hygiene, adolescents, awareness, India.

1. Introduction

Adolescence is defined as a period of transition from childhood to adulthood. World health organization has defined adolescents as individuals between 10-19 years. This is the period marked by maximum amount of physical, physiological and behavioral changes. One of the major causes of these change in young women is menstruation. Menstruation, also known as a period or monthly, is the regular discharge of blood and mucosal tissue (known as menses) from the inner lining of the uterus through the vagina. Menstruation begins in adolescent girls with the onset of menarche at around 12-15 years of age. It is a phenomenon unique to girls and marks the onset of puberty in them

The hormonal changes the preceding the bleeding period in a girl causes various alterations in the body. Some of these changes include acne, tender breasts, bloating, lethargy, irritability and mood and behavioral changes. Most women are unaware of these changes and might end up getting emotionally disturbed.

Despite being a physiological process in a female, menstruation has been surrounded by various myths, misconceptions and taboos. India being a country, flaunting its rich cultural heritage and diversity, has been frowned upon in still believing menstruation to be dirty and impure. Many women and girls are restricted in their daily lives simply because they are menstruating. They might not be allowed to offer prayers, enter the kitchen, cook food, and might also have dietary restrictions (sour food like curd, tamarind, etc. is not to be consumed) during menstruation. In this advancing era of science, there is so reason for such notions to persist.

The major problem arises in developing countries like India, where lack of awareness regarding menstruation embarks upon the nation. Most young girls are unaware of any phenomenon like menstruation before the onset of menarche. Most boys and men in the country are confused and disgusted by the concept. This leads to poor sanitary and hygiene conditions in a woman during menstruation. Most women resort to using clothes, rags,

foams from mattresses, cotton, etc. instead of using pads due to less knowledge and comfort to purchase sanitary napkins from a store. This in turn leads various reproductive tract infections, urinary tract infections, reoccurrence and complications. These infections might also spread to the male counterpart during sexual intercourse, to the child during birth, and might also spread to the family and surroundings.

Although WHO, various non-governmental organizations, educational institutions like schools and college run various campaigns, sessions, awareness programs etc regarding menstruation, hygiene during menses, proper usage and disposal of sanitary napkins, infection and other associated menstrual practices to promote healthy thinking about this concept but complete eradication of unawareness and such beliefs seems impossible at this point. We as responsible educated individuals should take stand and come up with strategies to educate not only our families, but also our colleagues, workers, employees, friends, and all the people associated with us.

2. Methods

We used online databases (PubMed, Google scholar) to do a literature search for studies based on Awareness and Knowledge regarding menstruation and menstrual hygiene in adolescent girls in India.

3. Search Criteria

The search terms were “menstruation” AND “awareness” AND “practices” AND “adolescent girls” AND “menstrual hygiene” AND “India”. The data was collected from the publications from year 2010 till 2018. To select a published paper the article name and abstract were reviewed.

A total of 15 articles have been studied and included.

4. Results

- Agarwal N., Soni N., Singh S., et al. did research on “Knowledge and practice regarding menstrual hygiene among adolescent girls of rural field practice area of RIMS, Raipur (C.G.), India” in the year 2018. It was a community based cross sectional study. The sample size was 263 girls from 8th and 9th standards. 48.29% girls disposed used cloth or sanitary napkins satisfactorily. 52.09% girls were

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- aware about menstruation before menarche. 17.87% girls used sanitary napkins. 49.81% girls used cloth. Cleaning of external genitalia in 32.70% girls was <2times/day. 58.17% girls used soap and water to clean external genitalia. [1]
- Tiwari A, Ekka I, Thakur R did a research on “Assessment of knowledge and practices regarding menstrual hygiene among adolescent girls of Government higher secondary school, station Murhipar, Rajnandgaon (C.G)” in the year 2018. It was a community based cross sectional study. The sample size was 141 school girls of age 12 – 17 years. 5.7% girls satisfactorily disposed cloth or sanitary napkin. 85.8% girls were aware about menstruation before menarche. 2.1% girls use sanitary pads. 37.6% girls used cloth. 80.1% girls satisfactorily cleaned external genitalia during menstruation. [2]
 - Upadhyay C, Nayak B, Desai G did research on “Knowledge and attitude of menstruation hygiene, contraception and sexual transmitted disease among school girls of Lunawada, Mahisagar, Gujarat, India” in the year 2018. It was a cross sectional study. The sample size was 310 adolescent students of standards 8th – 12th. 71.4% participants were aware about menstruation. [3]
 - Yadav A, Masand D.L., did research on “Study of menstrual disorder in adolescent girls at tertiary care centre in rural area” in Jaipur, India in the year 2018. It was a descriptive type of observational study. The sample size was 180 adolescent girls who attended OBG OPD. 66.66% girls used only cloth 5.55% girls used sanitary napkins. 38.8% girls cleaned external genitalia during menstruation. [4]
 - Gupta P, Gupta J, Singhal G, Meharda B. did a cross-sectional study on “Knowledge and practices pertaining to menstruation among the school going girls of UHTC/RHTC area of government medical college, Kota, Rajasthan” in 2018 among 300 girls. It was found out that 66% girls were aware about menstruation before attaining menarche. 65.67% girls used sanitary napkins. Municipal dustbin was used by 46% urban girls and 6% rural girls. [5]
 - Barman P, Mahanta TG, Sharma H. did a community based cross-sectional study on “Menstrual hygiene practices and reproductive tract infections among slum dwelling adolescent girls aged 15-19 years of Dibrugarh Town, Assam” in 2017 among 210 girls. It was found out that 27.1% girls were aware about menstruation before they reached menarche. 68.6% used sanitary napkins. 53.2% girls cleaned external genitalia >2 times/day. 43.3% girls suffered from reproductive tract infection using homemade reusable pads and cleaning external genitalia <2times/day. [6]
 - Mathiyalagen P, et al. did a cross-sectional study on “A descriptive cross-sectional study on menstrual hygiene and perceived reproductive morbidity among adolescent girls in a union territory, India” in 2017 among 242 girls of Puducherry. The mean age for menarche was 12.99±0.9 years. 51.7% did not know about menstruation before attaining menarche. 71.5 % were unaware of the cause of menstruation. Sanitary napkins were used by 78.1%. 21.9% used clothes as well as sanitary napkins. 12% girls followed improper cleaning of external genitalia. [7]
 - Sharma S, Mehra D, Kohli C, Singh MM. did a cross-sectional study on “Menstrual hygiene practices among adolescent girls in a resettlement colony of Delhi: a cross-sectional study” in 2017 among 85 girls of Delhi. Mean age to reach menarche was 16±2.2 years. Sanitary pad was used by 45%. 18% used sanitary napkins and 57% threw it in routine waste. 48% were cleaning external genitalia. [8]
 - Kusuma ML, Ahmed M. did a cross-sectional study on “Awareness, perception and practices of government pre-university adolescent girls regarding menstruation in Mysore city, India” in 2016 Mysore among 1500 girls. 23.3% were unaware about menstruation before reaching menarche. 54% used sanitary napkins. 38.8% reused cloth piece. [9]
 - Kansal S, Singh S, Kumar A. did a community based cross sectional study on “Menstrual hygiene practices in context of schooling: A community study among rural adolescent girls in Varanasi” in 2016 among 650 girls. It was found out that out of the 90.7% girls who had already attained menarche 29.4% knew about menstruation prior to their menarche. Of the total 31% girls used sanitary napkins and rest used cloth and other material during menstruation and 20.7% girls maintained adequate genital hygiene using soap and water regularly. Of the cloth users 19% disposed them off and others washed and reused it. [10]
 - Dudeja P et al. conducted a descriptive cross sectional study on “A cross sectional study to raise awareness about menstruation in adolescent girls of an urban slum in Western Maharashtra.” In 2016. Out of the total of 250 girls on whom the study was conducted 95% girls had attained menarche and 56.4% had knowledge about menstruation prior to menarche. It was found out that 90.5% girls used sanitary napkins, rest used cloth. Disposal of napkins was done satisfactorily in dustbins. [11]
 - Paria B, Bhattacharyya A, Das S conducted a community based cross sectional study in 2014 on “A comparative study on menstrual hygiene among urban and rural adolescent girls of West Bengal “. Sample size of 541 adolescent girls of age group 13-18 years were included. Only 37.52% girls had knowledge of menstruation before menarche. There was significant difference regarding awareness of menstruation in urban and rural areas. Out of the total 36% girls in the urban and 54.88% girls in the rural area used homemade sanitary cloth and reused the same in the subsequent period. Adequate genital hygiene was practiced by only 47.63% of the urban and 37.96% of the rural girls. [12]
 - Chothe V, Khubchandani J, Seabert D, et al. did a research on “Students’ perception and doubts about menstruation in developing countries: a case study from” India in 2014. Out of the 612 students only 381 girls were comfortable to participate in such a study. Results of this study indicated that many students had pressing doubts about menstruation and were influenced by unfounded myths and taboos about menstrual practices. Parents, guardians, teachers and policy makers in developing countries should strongly urge for

comprehensive sexual education and resources (e.g., low-cost sanitary pads and school facilities) for promotion of menstrual health and hygiene and eradication of social stigma. [13]

- Thakre B, Thakre S, Reddy M, et al. did research on “Menstrual hygiene: knowledge and practice among adolescent school girls of Saoner, Nagpur district” in the year 2011. It was a community based cross sectional study. The sample size was 387 girls of 8th and 9th standards: Urban = 241 and rural = 146. Mean age of menarche in study subjects was 12.85 ± 0.867 years. 36.95 % girls were aware about menstruation before menarche. 60.58 % urban and 30.82 % rural girls used sanitary pads. 35.68 % urban and 62.33 % girls use old cloth. 3.73% urban and 6.85 % rural girls used new cloth. 20.55% rural girls satisfactorily cleaned external genitalia. 41.91 % urban girls satisfactorily cleaned external genitalia. 45.23% urban girls and 12.33% rural girls disposed the absorbent in routine waste. [14]
- Udgiri R, et al. conducted a descriptive cross sectional study on “Knowledge and practices regarding menstruation among adolescent girls in an urban slum, Bijapur.” in 2010. Of a sample size of 342 girls on whom the study was performed 94.74% had attained menarche and 18.42% had prior knowledge about menstruation. It was reported that 60.8% girls used sanitary napkins and rest used cloth. [15]

5. Discussion and Conclusion

A review of 15 articles on awareness and hygienic practices regarding menstruation has been done which covered a total 5782 girls across the Indian subcontinent in the past 8 years. A number of studies revealed the increasing trend of using sanitary napkins over the years, but significant difference is present between rural and urban areas. Although there has been considerable improvement in the awareness and knowledge about menstruation in general in the past 8 years, there has been little improvement in knowledge about genital hygiene and sanitary practices.

The knowledge about menstruation and its hygienic practices is significantly lower in rural than urban settings. Agarwal N et al. who conducted a study in 2018 on “Knowledge and practice regarding menstrual hygiene among adolescent girls of rural field practice area of RIMS, Raipur (C.G.)” showed 17.87% girls use sanitary napkins compared to the study by Mathiyalagen P et al. in 2017 on “A descriptive cross-sectional study on menstrual hygiene and perceived reproductive morbidity among adolescent girls in a union territory, India” which showed 65.67% girls used sanitary napkins and 46% girls used municipal dustbins for disposal of waste. This difference might be owing to the lack of education, money and availability of sanitary napkins, religious and cultural difference and insufficient facilities provided by local government for disposal.

The awareness about menstruation and its education has also increased significantly in the past 8 years. Udgiri R, et al. did a study on “Knowledge and practices regarding menstruation among adolescent girls in an urban slum, Bijapur.” In which

only 18.4% girls had knowledge regarding menstruation prior to menarche, there was also very less awareness about cleanliness practices and importance of hygiene at that time. Now owing to various programmes and campaigns effort is being made to educate young girls about this very important biological process the awareness has increased by a large margin. In a recent study by Tiwari A. et al. on “Assessment of knowledge and practices regarding menstrual hygiene among adolescent girls of Government higher secondary school, station Murhipar, Rajnandgaon (C.G.)” revealed 85.8% girls were aware about menstruation before menarche.

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