

A Study to Assess the Knowledge and Practices Related to Menstruation and Menstrual Hygiene Among Adolescent Girls of Selected School Azamgarh

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Background: Menarche, among Adolescence girls, signifies the adaptation to womanhood as it is associated with pubertal changes and beginning of the capacity to reproduce. This is a period of gonadal development and growth spurt. Menstrual hygiene is crucial to healthy reproductive system and in return to good physical health and wellbeing. Therefore, enhanced awareness regarding menstruation and related hygiene, right from adolescence may escalate safe practices that are helpful in alleviating the distress of millions of women.

Materials and Methods: Total enumeration sampling technique was used to enroll 192 adolescent girls from class 9th to class 12th from selected schools after obtaining written informed consent from parents and verbal consent from girls. A descriptive cross sectional study was conducted in selected schools Azamgarh Ethical clearance was obtained from Institute Ethics committee. Doubts of the participants were cleared after data collection.

Results: Among 192 girls, nearly half girls were aware of menstrual hygiene and reported use of sanitary napkins and 40.1% girls were aware of the symptoms of poor menstrual hygiene.

Conclusion: There is a need to implement an education program for adolescent girls on menstruation and menstrual hygiene to ensure healthy menstrual practices.

Keywords: Knowledge; Practices; Menstruation; Menstrual Hygiene; Adolescent Girls

Introduction

Menstrual cycle is a unique natural phenomenon to females. It happens in a predictable pattern, during month. It starts at puberty and continues until the menopause. Certain body hormones rise and fall during the month, causing the menstrual cycle to occur. At age of 15 years, 98% of females usually have had menarche. Menstrual hygiene has been an issue of concern worldwide especially in developing nations. Social, cultural and religious factors have an impact on adjustment to menstrual hygiene. There are

number of myths, misconceptions, and superstitions and cultural and/or religious taboos concerning menstrual blood and menstrual hygiene, for instance in Jewish, menstruating women and everything they touch is considered to be impure. In Hindus, menstruation is considered as dirty and restrictions during menses are linked to auspiciousness and positivity.[1], [2] In certain tribes of Nigeria, menstruating women must isolate themselves in menstruation huts, because they believed that menstrual blood pollutes the home.[3] Such taboos

have a major impact on mentality, lifestyle, emotional state, and most importantly, health of women.[4]

The factors influencing menstrual hygiene also include socio-economic status, environmental constraints, humiliation and stress, lack of knowledge, lack of facilities such as water, menstrual stigma, gender norms bathroom and privacy.[5], [6] One of the studies from Saudi has reported that girls get limited knowledge from their mothers, sisters and from religious books. A study found that 71% of girls in India report having no knowledge of menstruation before their first period.[7] National Family Health Survey 2015-2016 estimates that only 36 percent women are using sanitary napkins. Many girls use unhygienic undried rags and clothes.[8]

Improper menstrual hygiene leads to reproductive and urinary tract infections.[9], [10]

Despite effort of WHO, UNICEF & National Government like Kishori Shakti Yojana (KSY) to address menstruation and menstrual hygiene issues it continues to remain a factor that affect health of adolescent girls. In Azamgarh, India poor menstrual hygiene has been one of the insufficiently acknowledged problems. It was observed that there was no information available on these issues so the present study was under taken to assess knowledge and practices related to menstruation and menstrual hygiene among adolescent girls.

Aims

To assess the knowledge and practices related to menstruation and menstrual hygiene among adolescent girls of selected schools Azamgarh.

Materials and Methods

Research Approach: Non-experimental research approach

Research Design: Descriptive cross-sectional study design

Setting: Selected schools of Azamgarh

Population: Adolescent girls studying in selected schools (Class 9th to 12th)

Sample: Adolescent girls from Class 9th to 12th who:

- Were willing to participate
- Could understand Hindi, English, or Punjabi

Sample Size: 192 adolescent girls

Sampling Technique: Total enumeration sampling technique

Tool for Data Collection: Self-structured questionnaire

- Section I: Socio-demographic profile
- Section II: Knowledge regarding menstrual hygiene
- Section III: Practices related to menstrual hygiene
- Validated by 9 nursing experts
- Content Validity Index (CVI)=0.87

Results

Socio-Demographic variables of adolescent girls are More than half 81 (42.1%) girls were between age group of 12-14 years, 111 (57.8%) were between in age group 15 to 17 years. Half of the parents 95 (49.47%) had income in between 5000-10000 Rupees/month, 66 (34.3%) parents had income greater than 10000 Rupees/month and 31 (16.1%) parents had income less than 5000 Rupees/month. Majority of girls 128 (66.6%) were living in rural community and 64 (33.3%) girls were living in urban community. Half of the girls 96 (50%) were having separate room, 44 (22.9%) were living with their male and female siblings, 38 (19.79%) were living with others, 14 (7.2%) had their rooms with their parents. All 192 (100%) adolescent girls were having toilet facility at their home. Majority of girls 164 (85.4%) were living in a nuclear family and few of them 28 (14.5%) were living in joint family. Data about mothers of girls revealed that more than half 115 (59.8%) of them were less than 40 years and 66 (34.3%) and 62 (31.8%) were educated up to primary level, and higher secondary level respectively, 36 (18.7%) were illiterate and 28 (14.5%) were educated up to secondary level. None of them were graduate or above.

Menstrual profile of adolescent girls

Majority 180 (93.7%) girls had regular menstrual flow; few 12 (6.25%) girls had irregular menstrual flow. More than half 113 (58.8%) girls achieved menarche at age of 1-12 years, 72 (37.5%) girls achieved menarche at age 13-15 years, very few 7 (3.6%) girls achieved menarche at age 16-18 years.

Knowledge and source of information regarding Menstruation and Menstrual Hygiene

Most of girls 130 (67.7%) were getting the information regarding menstruation from their mother whereas 36 (18.55) girls were getting information from their sister, few 5 (2.6%) from their fathers, 3 (1.5%) from friends, very few (0.5%) were getting information from books.

Source of information regarding menstrual hygiene was T.V, news papers, internet, library for nearly half 85 (44.3%) girls. Menstruation was identified as a physiological process by more than half 120 (62.5%) girls whereas 46 (24%) girls reported it as pathological process, few 19 (9.9%) girls said it a curse and very few i.e. 7(3.6%) reported it as an abnormality. Nearly half 93 (44.4%) girls were aware of meaning of menstrual hygiene i.e. cleaning perineal area during menses, using sanitary pads, proper disposal of pads, all are part of menstrual hygiene. Content of menstrual flow was correctly reported by one fourth 56 (29.2%) girls that it is dead cells, blood and ovum, mucus and endometrial lining 77 (40.1%) girls correctly responded that itching, abnormal smelling vaginal discharge and infection and all are common symptoms of poor menstrual hygiene. Advantages of menstrual hygiene were correctly reported by nearly half 93 (48.4%) girls. One fourth of 47 (24.5%) girls correctly responded that cleaning of perineum, it should be done every time after passing urine.

Regarding pain, 67 (34.9%) girls reported that pain starts after some time of onset of menstruation, 54 (28.1%) girls responded it as irregular, 36 (18.8%) girls responded it as regular and 35 (18.2%) girls responded it is continuous. Related to method used to reduce the pain 66 (34.4%) girls responded that it can be decreased by hot application, 59 (30.7%) girls responded that it can be decreased by pain killers, 35 (18.2%) girls responded that it can be decreased by cold application and 32 (16.7%) girls responded that exercise decrease pain.

Regarding diet, recommendation of iron rich diet, nutritious diet and sleep of 6-8 hrs was identified by majority of adolescent girls (124 (64.6%) and 130 (67.7%) respectively)

More than half 112 (63.5%) girls reported sexual activity is safe to perform during menses.

Practices of adolescent girls regarding menstruation and menstrual hygiene

Market pads were preferred to use by nearly half 89 (46.4%) girls whereas 38 (19.8%) girls used clothes, 37 (19.3%) girls used both cotton and clothes and 28 (14.6%) girls use only cotton during menstruation. Related to frequency of changing pads 23 (12%) girls reported that it is more than three times in a day, 47 (24.5%) girls reported twice daily, 41 (21.4%) girls reported thrice daily and few girls i.e. 19 (9.9%)

reported once daily. Nearly half 98 (51%) girls reported that preferred method of sanitary pad disposal was to throw it in dustbin.

To clean perineum, 78 (40.6%) girls were using only water, 56 (29.2%) girls reported use of both soap and water, 32(16.5%) reported using dettol/savlon, 27(14.1%) reported using potassium permagnate, and few 11(5.7%)reported using other solution to clean the perineum. Technique used to clean perineal area was both front to back and back to front technique by 78 (40.6%) girls. 43 (22.6%) girls do not consider it as important, and 22 (11.5%) girls practice front to back technique to clean perineal area. Nearly half 87 (45.3%) girls used direct sunlight to dry undergarments whereas, 43 (22.4%) girls covered them with towel/clothes, 40 (20.8%) girls used to dry them under tube light and few girls i.e. 22 (11.5%) used to dry their undergarments inside the room.

Less than half 75 (39.1%) girls felt more comfortable to talk about menses with their mothers, 43 (22.4%) girls with their friends, 39 (20.3%) girls with their sisters and 35 (18.2%) girls feel more comfortable to talk with their teachers. Regarding problems faced during menses, 73 (38%) girls reported weakness, 56 (29.2%) girls reported fatigue, 51 (26.6%) girls reported headache, 46 (24%) girls reported dysmenorrhea.

Discussion

Menstruation and Menstrual hygiene is surrounded by myths, misconceptions, superstitions and (social, cultural and/or religious) taboos. Education by parents concerning reproductive health, sexuality and related issues is considered almost everywhere as a “no –go” area. In the present study it was found that adolescent girls had limited knowledge regarding Menstruation and Menstrual hygiene. Most of the girls the source of information was mother followed by sister, fathers, friends whereas very few were getting information from books. Similar results were reported in previous study that girls get most of knowledge about Menstruation and Menstrual hygiene from their mothers.[11] Another study on attitudes and knowledge regarding menstruation reported lack of sufficient information about menstruation and about the use of tampons.[12]

Various studies have reported use of boiled and dried cloths rags torn from old saris, sanitary pads and tampons during menstruation. National family health survey reported that girls used cloth followed by

sanitary pads and locally prepared napkins. Whereas, in the present study girls preferred using sanitary pads however difficulty to procure pads was also reported, and same was reported in report of NFHS-4.[13] According to latest data by Ministry of Health only 12% of women have access to sanitary napkins in India therefore they have to rely on unhygienic and outdated methods.[13] Another study conducted in South region of India revealed that, women and girls in poor countries cannot afford to change pads around four times a day during menstruation. Instead, the vast majority of women and girls used rags. These were usually torn from old saris.[14] Similarly in the present study use of cotton and cloth during menstruation was reported.

In the present study, girls were aware about menstruation and believed it is a physiological process. The results were similar to metaanalysis and systematic review on menstrual hygiene in which half of the girls considered it normal process.[11] Another study on perineal hygiene reported use of both soap and water for the cleaning of perineum during menstruation but in present study more girls used only water to clean perineum followed by soap and water.[15], [16]

Menstruation and menstrual hygiene is associated with various practices avoiding certain foods, drinks and activities, including showering and performing perineal care, and practiced several indigenous rituals during the period. A study reported self imposed restrictions during menstruation on exercise, food items, visits and sex to lessen discomfort and avoid embarrassment. [3] Similar results were found in present study. Adolescent girls reported avoiding cold drink, citrus fruits, spicy foods, pickle, cold food, dry fruit, fried items and increased consumption of hot milk, hot tea, coffee, soft diet, hot soup, hot water, *Trachyspermum copticum* (commonly known as ajwain), medicine, ghee and milk, vegetables, rice, kidney beans, banana, bread and pumpkin. Hot application followed by pain killers medication and cold application was used to ease with menstrual pain. Current study found that girls have lack of knowledge regarding menstruation and menstrual hygiene and related practices and similar finding have been reported by other in developing countries

Conclusion

The study results revealed that the adolescent girls were having lack of knowledge regarding

menstruation and menstrual hygiene and were following inadequate practices regarding the same. These findings of study were mind boggling and are suggestive of a need to conduct a research to assess the effectiveness of some strategies to improve knowledge and practices of adolescent girls regarding menstruation and menstrual hygiene so that infection can be prevented. Awareness raising programmes, health personnel, enthusiastic school teachers and knowledgeable mothers can play a prominent role in communicating the crucial message of maintaining proper menstrual hygiene to the adolescent girl of today.

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References

1. Cohen I, CB, IW, BF, EK, Roberts T, et al. Menstruation and Religion: Developing a Critical Menstrual Studies Approach. The Palgrave Handbook of Critical Menstruation Studies [Internet]. Singapore: Springer; 2020 [cited 2021 Sep 21]. 2020.
2. Female Purity (Niddah) [Internet]. Jewish Women's Archive. [cited 2021 Sep 21].
3. Umeora O, Egwuatu VE. Menstruation in Rural Igbo Women of South East Nigeria: Attitudes, Beliefs and Practices. *Afr J Reprod Health Rev Afr Santé Reprod.* 2008;12(1):109-15
4. Garg S, Anand T. Menstruation related myths in India: strategies for combating it. *J Fam Med Prim Care.* 2015;4(2):184-6.
5. Lahme AM, Stern R, Cooper D. Factors impacting on menstrual hygiene and their implications for health promotion. *Glob Health Promot.* 2018;25(1):54-62.
6. Hennegan J, Shannon AK, Rubli J, Schwab KJ, Melendez-Torres GJ. Women's and girls' experiences of menstruation in low- and middle-income countries: A systematic review and qualitative metasynthesis. *PLOS Med.* 2019;16(5).
7. . FSG-Menstrual-Health-Landscape_India.pdf [Internet]. [cited 2021 Sep 21].
8. Bhaskar |S. Menstrual Hygiene Day Facts: Only 36 Percent Of The Women In India Use Sanitary Pads During Periods [Internet]. NDTV-Dettol

Banega Swasth Swachh India. 2019 [cited 2021 Sep 21].

9. Torondel B, Sinha S, Mohanty JR, Swain T, Sahoo P, Panda B. Association between unhygienic menstrual management practices and prevalence of lower reproductive tract infections: a hospital-based cross-sectional study in Odisha. *BMC Infect Dis.* 2018;18(1).
10. Das P, Baker KK, Dutta A, Swain T, Sahoo S, Das BS. Menstrual Hygiene Practices, WASH Access and the Risk of Urogenital Infection in Women from Odisha India. *PLoS ONE.* 2015;10(6).
11. Van EA, Sivakami M, Thakkar MB, Bauman A, Laserson KF, Coates S. Menstrual hygiene management among adolescent girls in India: a systematic review and meta-analysis. *BMJ Open.* 2016;6(3).
12. Abraham S, Fraser I, Gebiski V, Knight C, DL, Mira M, et al. Menstruation, menstrual protection and menstrual cycle problems. The knowledge, attitudes and practices of young Australian women. *Med J Aust.* 1985;142(4):247-51.
13. India.pdf [Internet]. [cited 2021 Sep 22].
14. Montgomery RE. A Cross-Cultural Study of Menstruation, Menstrual Taboos, and Related Social Variables. *Ethos.* 1974;2(2):137-70. 2021.
15. Sharma R, Negi S, Kunj D, Sharma V, Vardha. Menstrual hygiene among adolescent girls. *Indian J Community Health.* 2015;27(3):376-80.

