Effect of structured lecture on the knowledge and practices of menstrual health in adolescent girls of urban slum

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ABSTRACT

Background: Menstruation is natural physiological processes. Psychosocial and religious taboos around it make it complicated as health issue. Poor menstrual health is not only associated with health and well-being of women, but also reflects on morbidity and mortality patterns of female population. Aim and Objectives: The study aims to assess the effect of a structured lecture on the knowledge and awareness about practices of menstrual health in adolescent girls of urban slum.

Materials and Methods: A cross-sectional study was conducted among adolescent girls of slum area in Aurangabad city of Maharashtra. Pre-structured Questionnaire to assess the knowledge and practices about menstruation and menstrual hygiene was given. Structured lecture was organized and postlecture questionnaire was taken.

Results: 72% were in age group of 10–14 years and mean age of menarche was 12.7 years. Before lecture 64% had poor awareness about hygienic menstrual practices, 24% had fair, 12% had good awareness. But after the lecture, the majority of girls, that is, 56% showed good awareness, 30% had fair while 14% girls still showed the poor awareness. This difference was found statistically significant. The reasons behind the unhygienic practices most commonly quoted were poverty, high cost of sanitary pads, ignorance and lack of privacy.

Conclusion: If perception and attitude of adolescent girls toward menstrual hygiene is improved then it will definitely enhance their reproductive health. Moreover, awareness created among them will indirectly affect their mother’s reproductive health and their next female generation as well.

KEY WORDS: Menstruation; Adolescent Girls; Menstrual Hygiene

INTRODUCTION

Adolescence stage is defined by the World Health Organization as period between 10 and 19 years of age.[1] The adolescents group contributes major proportion in population. Hence, the health issues related to this group needs to be addressed as adolescent health plays a key role in optimum wellbeing of adulthood. Nowadays, urban slums are growing since chunk of rural population is shifting toward urban area. The psychosocial health issues linked to this migration necessitate to through light at proper time.

Adolescence period of girl’s life cycle is marked with onset of menarche.[2] Menstruation is one of the vital processes of female’s reproductive physiology. Menstruation is an exceptional phenomenon in which woman undergoes certain physiological changes from stage of menarche till achieving menopause. Adolescence period in girls is considered as special period because it is the stage of physical, psychological,
emotional and reproductive development leading to transition from puberty to legal adulthood which demands specific and special attention. Even though menstruation is natural physiological processes, psychosocial and religious taboos around it makes it complicated as health issue. 

Because of the lack of scientific knowledge, many girls residing in slum areas are unaware of proper understanding and related care of menstruation. The less open talk regarding menstruation in community makes adolescent girls uncomfortable and they continue to adapt poor menstrual practices. The misperceptions and misbelieves leads to faulty practices regarding menstruation which affects female reproductive health adversely. The hygienic menstrual practice is an inevitable part of woman’s menstrual life. Moreover, this period is at risk of developing any kind of reproductive tract infections, urinary tract infections, and various sexually transmitted diseases. Poor menstrual health is not only associated with health and well-being of women, but also reflects on morbidity and mortality patterns of female population.

Thus, it is essential to address the menstrual hygiene issue among girls. Although literature on various aspects of menstrual hygiene is available however, till date the studies conducted were focused on quantitative measurements of menstrual knowledge, awareness of hygiene practices during menstruation and related morbidities. Very few studies had focused on slum area adolescent school girls in our locality. Besides, in our study, an attempt was carried out to furnish knowledge through lecture. Therefore, this study was planned with the aim to assess the effect of a structured lecture on the knowledge and awareness about practices of menstrual health in adolescent girls of urban slum. The finding of this study offer important information for health service providers, administrators, and policy makers in planning, programming and implementing appropriate interventional programs.

Objectives
1. To estimate the prevalence of knowledge about menstrual health among adolescent school girls in urban slums
2. To assess awareness about menstrual health practices among adolescent girls in urban slum
3. To evaluate the effect of a structured lecture on the knowledge and awareness of practices of menstrual health among adolescent school girls in urban slum
4. To identify the reason behind the faulty practices of menstrual health among adolescent school girls in urban slums.

MATERIALS AND METHODS
The present cross-sectional study was conducted among adolescent girls of 10–17 years living in a slum area in Aurangabad city of Maharashtra. Taking prevalence of satisfactory awareness about menstrual hygiene as 48% with 95% confidence level and a relative error of 10%, sample size came out to be 100. The formula used was \( n \geq Z^2 \times \frac{pq}{L^2} \).

The study was conducted from February 2019 to March 2019 after obtaining the institutional ethical clearance. With the help of the school authority, the girls along with their mothers were called on to attend the informative lecture on menstrual hygiene at a predetermined date and time.

Inclusion Criteria
All the girls in the adolescent age group who were present on the data collection day and had given voluntary consent were included in the study.

Exclusion Criteria
Not willing to participate. All the participants were briefed about the nature of the study and consent of their mother was obtained. A valid, pretested, and reliable structured questionnaire was used to assess the knowledge and practices about menstruation and menstrual hygiene among adolescent girls. General data regarding age, mother’s education, socioeconomic status was recorded.

The pre-structured questionnaire pertaining to menstrual hygiene comprised of four parts. The first one had two questions, age at menarche and primary source of knowledge about menstruation. The second part had five questions assessing the adolescent girl’s knowledge about menstruation which included, cause of menstruation, days of menstrual bleeding, concept of menstrual blood, site from where menstrual blood comes out and about whether they have ever heard of the term menstruation before menarche.

The third part had seven sections exploring practices which comprised of whether they use sanitary napkins or cloths, frequency of changing the cloth/sanitary napkin, method of disposal of absorbent material, if they are using cloth whether they sun-dry the used washed cloth, number of times the cloth is reused (after wash), whether they wash their hands after disposing off the absorbent material and wash their genitalia during menses. The last part was an open ended question asking about the reasons behind these practices.

First, the girls were given the pre-structured questionnaire. It was in Marathi. The questions were explained individually if a girl was not able to understand the question. A predetermined time was given to complete the questionnaire. Then, a structured lecture on menstrual hygiene was delivered to them. At the end of the lecture queries of the girls as well as of mothers were answered. The counseling was done to encourage them to practice hygienic habits during menstruation. After completion of the session, again same
questionnaire about knowledge and hygienic practices was given. Both questionnaire and lecture content were made approved by obstetrician.

The data were then entered; scores and percentages were calculated using Microsoft Excel. Chi-square test was utilized as the test of significance for checking the difference between variables. \( P < 0.05 \) was considered statistically significant. We categorized adolescent girls knowledge, attitude, practice scores into three categories based on the percentage of maximum possible scores: “poor” (0–50%), “fair” (51–75%) or “good” (76–100%).

RESULTS

This study was done with the aim to assess knowledge about menstruation and awareness about hygienic practices among school going adolescent girls in a slum area in Aurangabad. The results of the study are discussed below.

Total 100 girls participated in the study. The majority of girls, that is, 72 (72%) belong to 10–14 years adolescent age group. The mean age of menarche was found to be 12.7 years. The majority of mothers of the participant, that is, 52 (52%) were found to be illiterate. The primary source of knowledge for majority of participants was their mother i.e. 49 (49%). The most of I, that is, 69 (69%) were belonging to lower socioeconomic status.

The present study revealed that prior to lecture on menstrual hygiene 66% girls had poor knowledge about menstruation, 28% had fair knowledge and only 6% had good knowledge. It was found that after the lecture on the menstrual hygiene, majority, that is, 83% girls showed good knowledge, 16% fair knowledge and only 1% girls showed poor knowledge about menstruation. The difference was found to be statistically significant Table 1.

In the present study, 65% girls knew that cause of menstruation is natural physiologic process. Even then majority of girls, that is, 90% had the concept that the menstrual blood was impure. In this study, we have found out that only 42% had knowledge about normal duration of blood flow. The majority of girls 75% had heard about the term menstruation before menarche.

The present study has found that prior to lecture on menstrual hygiene majority of girls, that is, 64% had poor awareness about hygienic menstrual practices, 24% had fair awareness and only 12% had good awareness about hygienic menstrual practices. However, after the lecture on menstrual hygiene, the majority of girls, that is, 56% showed good awareness about menstrual hygienic practices, 30% showed fair awareness while 14% girls still showed the poor awareness. The difference was found to be statistically significant Table 2.

The present study revealed that majority of girls, that is, 78% use cloths while only 22% use sanitary napkins. The frequency of changing the cloth/sanitary napkin was found to be unsatisfactory in majority of girls, that is, in 74%. Only few (i.e., 43%) among those who were using the sanitary napkin knew about proper method of disposal of sanitary napkins.

The present study revealed that when inquired about the reasons behind the unhygienic practices, most commonly quoted were poverty, high cost of sanitary pads, ignorance and lack of privacy. Majority of girls, that is, 66% belong to late adolescent age group (15–19 years) Table 3. Most of mothers of the participant, that is, 52 (52%) were illiterate, followed by having completed primary school education, that is, 34 (34%) Table 4.

Table 5 shows that 69 (69%) of participants belong to lower socioeconomic status followed by upper lower socioeconomic status, that is, 31 (31%). Table 6 shows that the primary source of knowledge for majority of participants was their mother, that is, 49 (49%), followed by their elder sister 27 (27%).

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<th>Table 1: Comparison between knowledge about menstruation pre- and post-lecture</th>
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The Chi-square statistic is 132.9504. The \( P < 0.00001 \). The result is significant at \( P < 0.05 \)

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<th>Table 2: Comparison between awareness about hygienic menstruation practices pre- and post-lecture</th>
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The Chi-square statistic is 61.1885. The \( P < 0.00001 \). The result is significant at \( P < 0.05 \)
The present study intended to explore the knowledge and practice of menstrual hygiene among adolescent girls residing in urban slum. This study shows that the age of menstruation were in range from 11 to 16 years with maximum number of girls between 11 and 14 years of age. Similar study conducted by Dasgupta and Sarkar[6] reported that the age of menstruating girls ranged from 14 to 17 years with maximum number of girls between 14 and 15 years of age. The mean age of menarche was in present study 12.7 years. Whereas in a study conducted in West Bengal by Dasgupta and Sarkar, the mean age at menarche was found to be 12.8 years. In other study conducted by Khamna et al., mean age of menarche was reported to be 13.2 years.[7]

Majority of girls preferred cloth pieces and used to wash them and then drying in a private area so that no one can see them. Among those who used cloth pieces, the frequency of washing, no sun drying and reusing the same cloth might contribute to reproductive tract infections, urinary tract infections, and various sexually transmitted diseases. In our study girls, using pads did not practice proper disposal technique. 43% of the girls used proper disposal method of paper wrapping the sanitary pad and then throwing it. In study by Dasgupta and Sarkar, 57.5% of girls disposed the pad properly.[8] In this study, only 22% of the girls used sanitary pad, whereas 78% used old cotton cloth. This pads using practice was found to be less than that reported from a study by Patavegar et al. in which 85.92% were using sanitary pads.[11] Only 11.25% girls used sanitary pads in the study by Dasgupta and Sarkar in which 85.92% used sanitary pads.

For majority of participants, 49% primary source of knowledge was their mother. Consequently, educational statuses of the mother influence the menstrual practice and knowledge of their daughter. Our study found almost half (52%) of mothers were illiterate and 69% belongs to low socioeconomic status. Similar findings were reported from Deshpande et al. study on adolescent girl of urban slum area showing that in 84% cases mother was the first informant and 47% mothers were illiterate.[8]

The girls of the present study, 66% showed poor knowledge. The probable causes for this are mothers education and low socioeconomic status reflecting on daughter’s perception and practices. Other reason for poor menstruation knowledge and hygiene practices could be that adolescent girls were residing in slum areas and the most of them were school dropouts. Only 75% girls had heard the term menstruation before menarche, whereas in a study by Dudeja et al. 56.4% girls were knowing about menstruation before menarche.[9]

Our study found 65% girls were aware that cause of menstruation is natural physiologic process. This was in contrast to study of Deshpande et al.[8] reporting only 20% were aware of cause of menstruation and in study by Misra et al. 62% were unaware of the cause.[9]

In this study, only 22% of the girls used sanitary pad, whereas 78% used old cotton cloth. This pads using practice was found to be less than that reported from a study by Patavegar et al. in which 85.92% were using sanitary pads.[11] Only 11.25% girls used sanitary pads in the study by Dasgupta and Sarkar[6] in a study conducted by Khanna et al. in Rajasthan[7] one-fifth used readymade sanitary pads and three-fourths of the girls used old cloth during their periods. In contrast study done by Johnson and Vala in 1st year female medical students in Jammnagar Gujrat reported that 98.48% were using sanitary napkins as absorbent material.[12] This difference could be because of the higher educational status of medical student leading to more awareness about hygienic practices. It appears that, low socioeconomic status, poverty, high cost of sanitary pads and to some degree ignorance discourages girls for utilizing the menstrual absorbents in the market.
Another study conducted in Nagpur district only one-third of girls cleaned their external genitalia twice or less a day.[14]

The present study revealed that post to lecture menstrual knowledge and hygiene awareness had improved significantly. Thus our study showed poor knowledge and unhealthy practices in adolescent urban slum area. If perception and attitude of adolescent girls toward menstrual hygiene is improved than it will definitely enhance their reproductive health. Moreover, awareness created among them will indirectly affect their mother’s reproductive health and their next female generation’s as well.

Menstrual hygiene awareness can be created through; Informative lectures, road shows, street play, role plays television advertisement and programs, radio talk shows, campaign through social media. Furthermore, inclusion of information of safe menstrual practices in school curriculum in creative ways impactful work by ASHA workers, NGOs, socially concerned groups including those of teachers and doctors will definitely help to bring the positive change in adolescent mindset toward menstruation.

Strength of the Study

The structured lecture delivered in our study had significantly improved the knowledge and awareness regarding the menstrual hygiene.

Limitation

The participant was limited to urban slum area of single city so finding could not be generalized. The purposive sampling was done and sample size was limited to 100; this may affect the observations in the study. Most of the population was belonging to low socioeconomic status; this might have affected the results. The more number of participants and diversified sample population might had given more authentic results.

CONCLUSION

Reproductive tract infections had come out as a silent epidemic devastating women’s life; in turn, it is closely interrelated to poor menstrual hygiene knowledge and practices. Thus menstrual hygienic practices are of major concern in terms of reproductive health and development of women folks. This study uncovered that menstrual hygiene was unsatisfactory and inadequate among adolescent girls of urban slum. This was because of low level of education, poverty, ignorance about healthy menstrual practices, overcrowded living condition, lack of privacy, scarcity of water, psychosocial taboos around menstruation and inappropriate assumption about the phenomenon of menstruation. Hence, it is very essential to educate them about the physiological facts of menstruation, wipe down falsehood taboos, and direct them toward proper hygienic practices.

REFERENCES


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