



Knowledge and practice of menstrual hygiene among adolescent girls of selected slums in Chunabhatti, Mumbai

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Abstract

Background: Menstruation and menstrual practices are still clouded by taboos and socio-cultural restrictions resulting in adolescent girls remaining ignorant of the scientific facts and hygienic health practices, which sometimes result into adverse health outcomes.

Hygiene related practices during menstruation are of considerable importance.

Objectives: (i) To elicit the beliefs, conception and source of information regarding menstruation among the study population and (ii) assesses the existing level of knowledge on menstrual hygiene among adolescent girls. (iii) to assess the compliance the menstrual hygiene

Materials and Methods: Descriptive cross sectional study design was applied and slums of Chunabhatti, Mumbai were selected conveniently as research site. Primary data was collected through interview by using structured pre-designed and pre-tested questionnaire. Data were analyzed statistically by simple proportions.

Results: There were 282 respondents for study. Less than half 121 (42.9%) had adequate knowledge related to menstruation and its hygiene. Two-third 185(65.6%) of the participants used sanitary pads, 183 (98.9%), washed hands after pad change, 271 (96.1%) cleaned perineal

area during menstruation, 227(80.5%) were aware about the myth and 61.9% followed social norms and restriction related with menstruation. Age of the participant, their education level and the income sources were found statistically significant with their level of knowledge on menstruation.

Conclusions: More than half of adolescent girls of slums had inadequate knowledge regarding menstruation and two-third practiced menstrual hygiene.

Keywords: adolescent, slum, menarche, menstruation hygiene

Introduction

Adolescence is the period of attaining reproductive maturity between the ages of 10- 19 years.¹ The onset of menstruation is one of the most important changes occurring in adolescent girls.² Menstruation is a phenomenon unique to the females. The onset of menstruation is one of the most important changes occurring among the girls during the adolescent years. The first menstruation (menarche) occurs between 11 and 15 years with a mean of 13 years.

Mensuration and hygiene practices are still clouded by taboos and sociocultural restrictions.³ Although menstruation is a natural process, it is linked with several

perceptions and practices, which sometimes result in adverse health outcomes.⁴

Adolescent girls constitute a vulnerable group, particularly in India where female child remains the neglected one. Menstruation is still regarded as something unclean or dirty in Indian society. The reaction to menstruation depends upon awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche. Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result into adverse health outcomes.

Hygiene-related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to reproductive tract infections (RTI). The interplay of socio-economic status, menstrual hygiene practices and RTI are noticeable. Today millions of women are sufferers of RTI and its complications and often the infection is transmitted to the offspring of the pregnant mother.

Women having better knowledge regarding menstrual hygiene and safe practices are less vulnerable to RTI and its consequences. Therefore, increased knowledge about menstruation right from childhood may escalate safe practices and may help in mitigating the suffering of millions of women.

Materials & methods

A cross sectional study was conducted over January – April 2022 among adolescent girls from selected slum areas of Chunabhatti, Mumbai.

Out of total slum population (15000 persons),^{6,7} 282 adolescent slum girls were taken for the study who were available at that time of study.

Pretesting of tool was done in similar setting in 10% of sample size (i.e. n=42) and necessary modification of tools was applied after pre-testing.

The predesigned, pretested semi structured questionnaire were used as tool for data collection through interview. Content validity was based on literature review and consultation with supervisors and subject experts.

Only those female who already had menarche were included in the study. Girls who were not available at the time of data collection were excluded. Data were entered into Epi-data and then transferred to Statistical Package for Social Sciences (SPSS) version 22. Descriptive statistics like frequency, mean, standard deviation, percentage chi square test were used for data analysis. The knowledge scores were calculated by recoding knowledge related question with 0 for wrong answer and 1 for the right one; and those variables were computed. The mean (6) was calculated of new computed variables. The less than mean (<6) and more than mean (>7) were considered as inadequate and adequate knowledge level.

Interview was carried out after obtaining informed verbal consent from the respondents. Confidentiality and anonymity of the participants were assured and maintained.

Results & discussion

There were 282 respondents, age between 10 to 19 years (mean 15.3), 211 (74.8%) in age group 13-17 years, 261 (92.6%) were unmarried, 203 (72%) educated up to secondary level (6-10 grade) and 8 (2.8%) had no formal education, 89 (35.6%) was daily wage/laborer with monthly family income of >10,000 and 203 (72%) belonged to nuclear family. Mothers of 171 (60.6%) girls were illiterate and 148 (52.5%) were housemaker. Toilet facility was available in 280 (99.3%).

The mean age at menarche (by recall) was 12.51 year, 264 (93.6%) by the age of 11-14 years and 213 (75.5%) had information on menstruation before menarche from mothers 138 (64.8%) and 4 (1.9%) from mass media about and 195 (61.9%) followed restriction related with menstruation and 62 (31.5%) were forced to practice restriction during menstruation.

For menarche, 154 (54.6%) thought 12-14 years of the age to be normal and 252 (89.4%) were aware that menstruation is a normal process, 271 (96.1%) believed that it as monthly normal bleeding phenomenon, 263 (93.3%) stated the causes of menstruation to be a body process and 4 (1.4%) thought it due to curse of god, 215 (76.2%) believed that menstrual blood is impure, 151 (53.5%) believed that menstrual blood comes from vagina and 11 (3.9%) believed uterus as the main organ and 253 (89.7%) assumed that sanitary pad is the ideal material that used for absorbing menstrual blood.

During menstruation, 185 (65.6%) were using sanitary pad, 17 (6%) used cloth materials and 80 (28.4%) both cloth and sanitary pads, 76 (41.1%) girls changed pad three times a day, 183 (98.9%) washed hands after changing the pad, 150 (81.1%) disposed absorbent by wrapping in paper and discarding it in dustbin, 271 (96.1%) cleaned perineal area during menstruation of which about 171 (34.3%) clean during pad change, 50 (17.7%) participants bathed daily during menstruation and 68 (41.5%) bathed on the fourth day of menstruation. Inadequate knowledge related to menstruation hygiene was seen in 161 (57.1%) girls and adequate in 121 (42.9%). There was statistically significant association in between knowledge and socio-demographic variables i.e. age, education level, source of family income, and no association between overall knowledge and practice of menstrual hygiene,)

Table

Knowledge about menstruation and hygiene of adolescent girls (N=282) of selected slums in Kathmandu valley (N=282)

Variables	N	%
Normal age for Menarche		
8-10 years	5	1.8
10-12 years	112	39.7
12-14 years	154	54.6
above 15 years	11	3.9
Menstruation meaning		
Normal monthly bleeding	271	96.1
Bleeding due to internal injury	7	2.5
Bleeding due to disease	4	1.4
Causes of menstruation		
Body process	263	93.3
Curse of God	4	1.4
Injury in Uterus	15	5.3
Organ from which menstrual blood comes		
Vagina	151	53.5
Urethra	117	41.5
Anus	3	1.1
Uterus	11	3.9
Interval of menstrual cycle		
15-20 days	37	13.1
20-25 days	38	13.5
25-30 days	182	64.5
30-35 days	25	8.9
Normal duration of Menstruation		
2-3 days	38	13.5
4-5 days	189	67.0
6-7 days	53	18.8
> 7 days	2	0.7

Discussion

In this study, the majority of study subjects' were in the age between 10 to 19 years with mean age of 15.3 years. This may be due to nutritional, general health and age difference of study subjects. Our study found that the mean age of menarche is 12.51 years, similar to the various studies reporting of 12.8 years.⁴ The similar studies from India and others found that the awareness of menstruation before menarche was only 37%, while in our study 213 (75.5%) knew about menstruation before their menarche.^{8,9} Similar to our study with 263 (93.3%) believing it was due to normal body process, in other studies too, 86.25% % believed that menstruation is due to normal body process.⁴ The main source of information about menstruation and menstrual hygiene in our study was from family members i.e. from mother 138 (64.8%), sisters 94 (44.1%), friends 119 (55.9%) and only 4 persons heard it from mass media.

In this study, out of 282 girls interviewed, majority used sanitary pad (65.5%), washed hands (98.9%) and disposed pad by wrapping in paper and discarding it in dustbin (81.1%) which is similar to the various studies showing 65.4% to 70% of girls wrapped and disposed of the used materials during menstruation in a closed container.¹⁰ This may be due to target group being adolescent girls and education level. Regarding other menstrual hygiene practices: majority of participants 271 (96.1%) clean their genital areas, different from the study which reports only 42% girls were doing vaginal wash in maintaining menstrual hygiene.^{10,11} These differences may be due to education level and age factor of the study population. Only 50 (17.7%) participants bathed daily during menstruation, lower than the other study in which 90-95% girls took regular bath during period.¹⁰ These contrast is due to their study population was school going

adolescents from general population unlike slum girls of present study.

In this study, more than half of the girls 195 (69.1%) followed restriction related with menstruation which is in contrast to the study on school going adolescents from general population which showed 34% of girls had to practiced restrictions during menstruation.¹² The restriction were that girls had to sit separately, cannot go to religious places, not allowed to attend religious ceremonies, cannot enter kitchen and not allowed to make food and even going out in night time was restricted. These variances could be due to differences in geographical, environmental, nutritional and socio-economic factors.

There are some limitations of this study. The study was confined to adolescent girls of certain area of slums and carried out within short duration of time. Data were collected from participants who were available at the time of data collection. Only five settlements were included with convenient sampling, and thus the findings may not be generalized. This was a one shot study with no follow up.

Conclusion

This study reveals that more than half of adolescent girls of selected slums in had inadequate knowledge regarding menstruation. Menstrual hygiene practice was good among a large proportion of the adolescent girls of slum areas. There was significant association between knowledge with age and education level of participants and family income. The knowledge and practice of menstrual hygiene had no significant association.

Reproductive tract infections, which has become a silent epidemic that devastates women's life is closely interrelated with poor menstrual hygiene. Therefore, proper menstrual hygiene and correct perceptions and

beliefs can protect the womenfolk from this suffering. Before bringing any change in menstrual practices, the girls should be educated about the facts of menstruation, physiological implications, about the significance of menstruation and development of secondary sexual characteristics, and above all, about proper hygienic practices with selection of disposable sanitary menstrual absorbent. This can be achieved through educational television programmes, school nurses/health personnel, compulsory sex education in school curriculum and knowledgeable parents, so that her received education would indirectly wipe away the age-old wrong ideas and make her feel free to discuss menstrual matters including cleaner practices without any hesitation. All mothers irrespective of their educational status should be taught to break their inhibitions about discussing with their daughters regarding menstruation much before the age of menarche.

Lack of privacy is an important problem. In resource poor contexts, where women do not have access to basic facilities such as water, bathroom and privacy, the standard of hygiene one can maintain is severely compromised. There is a need to improve the housing conditions with respect to basic facilities. Universalized use of sanitary pads can be advocated to every girl only by making it available at affordable prices (social marketing).

This study reveals that menstrual hygiene is far from satisfactory among a large proportion of the adolescents while ignorance, false perceptions, unsafe practices regarding menstruation and reluctance of the mother to educate her child are also quite common among them.

Thus, the above findings reinforce the need to encourage safe and hygienic practices among the adolescent girls

and bring them out of traditional beliefs, misconceptions and restrictions regarding menstruation.

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