Knowledge and Practice Gap for Menstrual Hygiene among Adolescent School Girls of Tribal District of Maharashtra, India: A Cross Sectional Study

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Abstract

Introduction: Hygiene-related practices of adolescents during menstruation are of importance, as poor hygiene might increase vulnerability to reproductive tract infections (RTI). Therefore, increased knowledge about menstruation right from childhood may escalate safe practices and may help in mitigating the suffering of women.

Aims and Objectives: (1) To assess the knowledge and practices about menstrual hygiene among school going adolescent girls. (2) To evaluate health seeking behaviour among the study subjects.

Methodology: This was a cross sectional study done in three randomly selected Government High Schools in tribal District Palghar from Jan-Feb 2018. A pre-designed, pre-tested and structured questionnaire was used. Data were compiled in an Excel sheet and were analysed by using EPI info statistical software (version 2.3.1).

Results: A total of 277 girls were interviewed, the mean age was 14 years. Majority of girls were aware about menstruation prior to the attainment of menarche. Mothers were first informant in about 69.6% girls. But correct reason and source of bleeding was not known to most of respondents. Overall 63.8% adolescent girls were using sanitary napkins as menstrual absorbent while 36.1% were using old used cloth and 13.7% were using both.

Conclusion: There is need to educate the girls about menstruation, its importance and hygiene maintenance so as to enable them to have healthy and productive life in future.

Keywords: Girls, Menarche age, Menstrual absorbents, Menstrual hygiene, Practices

Introduction

The World Health Organization (WHO) has defined adolescence as the age group of 10-19 years. There are an estimated 238 million adolescents in India who

comprise 19% of the total Indian population.¹ 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 year. Adolescent girls constitute a vulnerable group, particularly

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in India where female child is discriminated in the society and people in India are still living in a conservative society. Menstruation is still regarded as something unclean or dirty in India, although menstruation is normal process, it is linked with several misconception and practices which sometimes result into adverse health outcome.² Poor personal hygiene and unsafe sanitary conditions have also primarily resulted in gynecological problems among the adolescent girls. It was also reported that repeated use of unclean napkins or the improperly dried cloth napkins before its reuse results in harboring of micro-organisms and causing vaginal infections.³

Many studies have revealed that most of the adolescent girls had incomplete and inaccurate information about the menstrual physiology and hygiene. Good hygienic practices such as the use of sanitary pads and adequate washing of the genital area are essential during menstruation. Women and girls of the reproductive age need access to clean and soft, absorbent sanitary products which can in the long run, protect their health.⁴

Palghar is the 36th district of Maharashtra created by bifurcating the Thane district on 1st August 2014. It is small tribal district with variable geographic terrains from plain area to coastal areas. Very few studies from this district have been published on the knowledge, practices of adolescent girls regarding menstruation hygiene and menstrual problems. This study attempts to throw some light on the magnitude of the problem in the area, so that interventions can be planned in near future.

Objectives

The objectives of the study are:

- To assess the knowledge about menstrual hygiene among school going adolescent girls.
- To evaluate practices regarding menstrual hygiene and health seeking behaviour among the study subjects.

Materials and Methods

This was a cross sectional study done from Jan-Feb 2018 in three out of ten randomly selected High Schools in rural area of the Palghar District. After taking permission from the school authority, the class teachers of the respective classes were explained the objectives of the study. The study population included all the girls studying in 8th, 9th and 10th standards. The study includes only those girl students of these three standards who have attended their

menarche. 277 girl students of 8th, 9th and 10th standards were enrolled in the present study.

The study carries out on only two days of week i.e. Wednesday and Friday of January and February of 2018 in afternoon from 2 to 4 PM to avoid disturbance of their routine classes. Initial micro planning was done to execute the study and on each day of data collection, only one section of each standard which comprises on an average 25 girls were select The students were explained the purpose of the study and were briefed about the questionnaire in their local language. After obtaining an informed consent, the questionnaires were administered to them. The study tool used was a pre-designed, pre-tested, structured and self-administered questionnaire which was developed and translated into local language. The questionnaire included Socio- demographic profile, Perceptions included Knowledge and Attitudes regarding the process of menstruation, menstrual history, Practices during menstrual cycles and menstruation related problems.

Specific time duration was given to answer all the questions. This was followed by a talk on the normal physiology of menstruation, the importance of maintaining hygiene and safe hygienic practices during menstruation. Queries and concerns of the participants were also addressed. Data were then compiled in an Excel sheet and were analysed by using Epi info statistical software (version 2.3.1).

Inclusion criteria

Girls who were studying in class 8,9 and 10th standard and who had attain menarche and give consent.

Exclusion Criteria

Girls who are absent during data collection.

Results

Knowledge Regarding Menstruation

A total 277 girls were enrolled in present study studying in 8th, 9th and 10th standard. The mean age of the respondent is 14 years. 79.06% of the girls correctly described the age of menarche i.e. 12-16 years of age. Participants recommend that modal duration of flow and modal duration of Cycle is 4.6 days and 28.78 day respectively. 54.1% of girl consider age is the causative factor for beginning of menstrual cycle and only 34.4% girls told about Uterus being the organ involved in it.

Table 1. Knowledge and practices among study population

Parameters	Frequency (n = 277)	Percentage
A. Age at menarche (in years)		
<12	30	10.83%
12 to 16	219	79.06%
>16	28	10.1%
B. Cause for menstruation		
Age	150	54.15%
Hormones	105	37.9%
Curse	7	2.5%
Enzymes	15	5.1%
C. Organ		
Bladder	27	9.74%
Uterus	95	34.4%
Fallopian tube	44	15.8%
Vagina	111	40.1%
D. Informer		
Mother	185	69.67%
Friend	43	15.8%
Relative	6	2.8%
Teacher	28	11.5%
Other	15	2.5%

Social stigma is still associated with menstrual cycle, 214 (77%) are not allowed to attend any religious occasion. Food taboos were common during menstruation, 19% avoided certain food items. Mother was the first informant in, 185 (69.6%) subjects and friends in 43 (14.8%). Other sources of information were teachers and closed relatives etc.

Table 2. Practices

A. Age at menarche		
10 to 11	16	5.7%
12 to 14	243	87.7%
15 to 16	18	6.4%
B. Absorbent use		
Pad	177	63.80%
Cloth	100	49.80%
Both	38	13.70%
C. Frequency of change of absorbent		
2 pads/day	66	23.80%
3 pads/day	153	55.20%
4 pads/day	58	20.90%
D. Cleaning practices - cloth user		
Water	2	1.4%
Soap & water	112	81.15%
Antiseptic solution	24	17.4%
E. Area of drying for cloth user		
Sunshine	62	44.9%
Bathroom	45	32.6%
Hidden place	31	22.4%
F. Reasons for not using pads		

Cost	82	59.40%
Lack of knowledge	12	8.60%
Nonavailability	44	31.80%
G. Menstrual irregularity		
Delayed	65	23.4%
Polymenorrhoea	41	14.8%
Dysmenorrhoea	44	15.8%
Menorrhagia	32	11.5%
No complains	95	34.2%
H. Menstrual problems		
White discharge	93	33.5%
Itching	26	9.3%
Burning micturition	13	4.6%
No complains	145	52.3%

Practices during Menstruation

Out of the total 277 students studied, the modal age of attainment of menarche is 13 years. 138 (63.8%) girls were using sanitary pads during menstruation, 100 (36.1%) girls old used cloth and 38 (13.7%) both cloth and pads. Among the study population who used cloth as absorbent large proportion of girls used soap and water to clean them. 17.1% used antiseptic solution along with water, only 62 (44.8%) girls dried these washed clothes in the sun, 32.6% in the bathroom and 22.4% dried in hidden places. The query on the frequency of change of cloth or pad during the time of menstruation revealed that, 153 (55.2%) changed three times a day, 66 (23.8%) twice a day and 58 (20.9%) four times a day. The main reasons for not using sanitary napkins during menstruation is the cost as mentioned by 82 (59.4%) study subjects, 44 (31.8%) mentioned about non-availability of napkins in nearby area and 12 (8.6%) has lack of knowledge about the napkins.

Figure 1. Menstrual irregularity in study population
Health Seeking Behaviour

Out of 277 study population, 183 (66.01%) girls had experienced menstrual irregularity and dysmenorrhoea. As seen in figure-1, 65(23.4%) had delayed menses, 41(14.8%) had polymenorrhoea, 44(15.8%) had dysmenorrhoea and 32 (11.5%) had menorrhagia. Queries regarding complains associated with menstrual problems 132 (52.3%) had

complains. Large number of girls 93 (33.5%) in study population complains about white discharge, 27 (9.3%) about itching at genital area and 13 (4.6%) complains about burning micturition. When these girls were asked about, from whom they took advice or treatment for the same complains, 78 (59.1%) took advice from mother, 9 (6.8%) from private doctors and 6 (4.5%) from government hospitals while 38 (28.7%) did not seek any advice.

Discussion

Menstrual hygiene is taboo, a topic that most women in India are uncomfortable discussing in public. This is compounded by gender inequality which excludes women and girls from decision making process.⁵ Hygiene related practices of women during menstruation are of considerable importance as it affects health by increasing vulnerability to infection especially the infections of urinary tract and perineum.² This study was planned to know the knowledge and practices of adolescent girls in tribal district of Maharashtra, so that results can further be used for some intervention according to needs.

This study revealed that the modal age of the menarche in girls was 13 years. Another researcher reported that the age of the menstruating girls ranged from 12-17 years, with the maximum number of girls being between 13-15 years of age.⁶ In our study population, only 34.4% girls were having correct knowledge about the source of bleeding during menstruation, similarly in study of South India one third of girls identified uterus as source of bleeding while as many as 28% girls identified the urinary bladder as its source.⁷

Most of the girls were aware of menstruation before menarche. It was observed that the most common source of information were mothers which retells the fact that mothers of adolescent girls should be essential part of all programs on adolescent health and especially menstrual hygiene so that hygienic menstrual practice will go a long way in maintaining a healthy reproductive tract for each and every girl child, who after she becomes a mother, will disseminate this healthy message to her offspring. It was seen that though almost all girls had heard about menstruation, the level of knowledge was poor which is similar to study by Shanbhag D et al.⁸ Other sources of information were friends, teachers and close relatives for the study girls.

Different restrictions were practiced by most of the girls in the present study, possibly due to the different rituals in their communities; the same were practiced by their mothers or other elderly females in the family, due to their ignorance and false perceptions about menstruation. These findings were consistent with those of other studies.^{2, 4, 9}

Even if the sanitary pad is hygienic and safe option as an absorbent, it was seen in the present study that two out

of five girls were using old reused cloth as absorbent. A similar study which was undertaken among adolescent school going girls in Saoner, in the Nagpur district reported the use of old clothes in 45.74% of the subjects.⁶ Our study group reported that majority of girls who used old cloth, washed the cloth with soap water and dried them in bathroom or any hidden place such practices may be harmful and leads to reproductive tract infection. Other researchers, in their studies, also reported that more than three fourth of the girls used cotton clothes and reused them after washing them.^{4, 10, 11}

Very few girls from the tribal areas used sanitary pads which were available in the market; due to cost of napkins, lesser availability of the pads and lack of awareness.

Present study showed 11.5% girls suffered from dysmenorrhea. Comparatively high prevalence had been reported by Sharma A, Taneja DK, Sharma P, et al. (33%), Nag (33.84%).^{12, 13}

Conclusion

This study reveals that menstrual hygiene is not very satisfactory among a large proportion of the adolescent girls. It also shows that majority of the girls trusted on mothers for advice on reproductive health problems or nutrition or any other health problems.

Recommendations

Health professionals should organize educative sessions for parents especially mothers (as they were trusted as adviser by most adolescent girls) so that they can be trained to give adequate knowledge on reproductive health problems to their children.

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Conflict of Interest: None

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