MENSTRUAL HYGIENE- KNOWLEDGE AND PRACTICE AMONG ADOLESCENT SCHOOL GIRLS IN RURAL AREAS OF PUNJAB

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ABSTRACT

BACKGROUND

As per WHO, individuals of 10-19 years age are considered as adolescents. They constitute over 21.4% of the population in India. Menstruation is a phenomenon unique to girls which not only has physical but lot of psychological impact. The psychosocial and emotional problems associated with menarche are of considerable magnitude. Basics of menstrual hygiene and importance of proper care at menstruation needs to be emphasised to avoid reproductive tract infections and infertility later on.

The aim of the study is to assess the knowledge and the practices of menstrual hygiene among rural school going adolescent girls.

MATERIALS AND METHODS

The present study was undertaken among adolescent school going girls in rural area of Ludhiana district, Punjab. The study was conducted in July 2015 on 197 school going girls. A predesigned, pretested and structured questionnaire was used in the study. The data collection technique was a personal interview of all the study subjects.

RESULTS

Most of the girls, 104 (52.79%), were in the age group between 14 - 16 years. Out of 197 girls, only 33 (16.75%) of the girls were aware of menstruation before menarche. More than three fourth of the girls were not aware of the cause and source of bleeding. Most of the girls, 118 (59.89%), were having regular periods. Duration in 164 (83.24% of) girls was between 5 - 7 days. The major source of information about menstruation for them was found to be their mother and sister (67%). A majority, 184 (93.4%), of them had knowledge about the use of sanitary pads. 95 (48%) girls were using 3 pads per day. During menstruation, washing perineal area with soap and water (79, 40.20%), clipping of pubic hairs (136, 69%) and taking bath daily (150, 76%) appeared to be satisfactory. About half of the girls felt menstruation is a stressful condition, felt fatigued and was affecting their concentration and results in class. About one fourth of the girls needed to take holiday from school.

CONCLUSION

Strengthening of menstrual hygiene programmes targeting school teachers, parents and adolescents is the need of the day in India. Reproductive tract infections and infertility is a major health issue because of poor menstrual hygiene.

KEYWORDS

Menstrual Hygiene, Menstruation, Adolescent Girls.

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BACKGROUND

As per WHO, individuals of 10-19 years age are considered as adolescents. They constitute over 21.4% of the population in India.¹ They have the lowest mortality among the different age groups and have therefore received low priority. Everybody forgets that adolescents are mini adults; if they are healthy we will get healthy adults in future. Menstruation is a phenomenon unique to girls, which not only has physical but a lot of psychological impact. The psychosocial and emotional problems associated with menarche are of considerable magnitude. In fact menarche starts a new phase

of her life from girlhood to womanhood. Social prohibitions and negative attitude of the parents in discussing these issues openly have blocked the access of adolescent girls to the right kind of information. Menstrual hygiene and management will directly contribute to the Millennium Development Goal (MDG)- 2 on universal education and MDG-3 on gender equality and women empowerment.¹ However, there is a silence on this issue.² Knowledge about menstruation and menstrual hygiene is the right of all girls, to avoid reproductive tract infections and infertility. Knowledgeable and healthy girls will make good platform in building a disease-free nation. The attention on this issue is far from sufficient. There is a substantial lacuna in the knowledge about menstruation among adolescent girls. The negative attitude of the society about this phenomenon has to be abolished. The key priority is to have necessary knowledge, facilities and the cultural environment to manage menstruation hygienically and with dignity. Very few studies highlighted the detailed aspects of menstrual practices among adolescent girls. This was the reason why this study

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was done in detail to investigate the level of awareness about menstruation among school going adolescent girls.

Aims and Objectives

To assess the knowledge and the practices of menstrual hygiene among rural school going adolescent girls.

MATERIALS AND METHODS

Study Design

Community based cross-sectional study.

Study Setting

This study was undertaken among the adolescent school going girls in the rural areas of Punjab. Students from Swami Ganga Giri Senior Secondary School, Raikot and St. Paula's Public School, Samrala, both in Ludhiana district were enrolled in this study.

Study Population

One hundred ninety seven girls from the abovementioned schools of the 7th to 10th standards were selected for the study. The study was conducted in July 2015. The sample size estimation (197) was also done at convenience.

Study Technique

A predesigned, pretested, structured and validated questionnaire was used in the study. The data collection technique was a personal interview of the study objects.

Methodology

After taking permission from the school authorities and explaining the purpose of the study, the questionnaire was distributed among the girls. This predesigned, pretested and structured questionnaire included topics related to awareness about menstruation, the sources of information regarding menstruation, the hygienic practices during menstruation, queries about the type of absorbent used, the frequencies of changing and cleaning them and how it is affecting their day-to-day activity. A verbal consent was taken and they were assured of privacy of the information being given and the questionnaire did not include their name. It included 16 questions, and the subjects were given half an hour to answer these questions. This was followed by a session educating the girls about the normal physiology of menstruation, the importance of maintaining hygiene and safe hygienic practices during menstruation.

RESULTS

This study was done in rural area, still majority of the study subject families were above poverty line. Only 47 (23.85%) were below poverty line, rest 150 (76.14%) families were above poverty line. Most of the girls, 104 (52.8%), were in age group between 14 - 16 years followed by 41 (20.8%) in 16-18 years and 38 (19.3%) in 12 - 14 years. Only 14 (7.10%) girls were more than 18 years as shown in Table 1 depicting demographic features. Table 2 shows information and perception about menstruation. This study showed that majority of the study subjects, 118 (60%), attained menarche between 12 - 14 years and rest 79 (40%) between 10-12 years. Most of them were having regular periods between 21

to 35 days (118, 59.89%) with duration of approximately 5-7 days in 164 (83.4%) of the study subjects. It was observed that 83.24% of the girls were totally unaware of the cause and source of menstruation when they first experienced it. They thought it was a physiological process, rest believed that it was the wish of God.

Table 2 depicts that the most important source of information was mother or sister in 132 (67%) of the subjects, followed by television and friends. Maximum number of the subjects used sanitary pads (184, 93.4%), followed by cloth 7 (3.5%), and followed by cotton 4 (2%). Most commonly, the subjects used 3 absorbents per day (95, 48%), followed by 2 absorbents per day (60, 30.60%), followed by 4 absorbents per day (27, 13.8%), and followed by those using more than 4 absorbents per day (15, 7.6%). Of the patients using cloth, 113 (57.14%) of the subjects used the cloth once and threw it, while 84 (42.8%) of subjects washed the cloth and dried it under the sun. Most of the girls maintained satisfactory cleaning practice of the external genitalia. Clipping of hairs was done by 136 (69%) of the study subjects with 35 (18%) not clipping the hairs. For the cleaning purpose, 79 (40.2%) of girls used soap and water, 104 (52.8%) used only water, and 14 (7.1%) used antiseptic. Majority of the study population (150, 76%) take bath daily. Stress during periods was found to be sometimes present in 102 (52%) of girls, while 61 (31%) reported no stress and 34 (17%) were always stressed. Concentration in class was also evaluated, with 102 (51.77%) of girls reporting to be tired in class during periods, 42 (21.31%) having no effect, and 30 (15.22%) of girls being irritable, 4 (2.03%) having poor performance, and 19 (9.64%) showing all symptoms. Of the study subjects evaluated, 152 (77.15%) of girls did not take a school holiday during periods, 41 (20.80%) took 1 day leave, 2 (1.01%) of girls took 2 days leave and 2 (1.01%) of girls took 3 days leave. Study by convenient sampling technique since the duration of the study was short duration. The sample size was selected by convenience sampling technique.

Economic Status	Number (N = 197)
APL	150 (76.14%)
BPL	47 (23.85%)
Age of Subject	
12 - 14 Years	38 (19.28%)
14 - 16 Years	104 (52.79%)
16 - 18 Years	41 (20.81%)
>18 Years	14 (7.10%)
Table 1. Demographic Characteristics of the Study Subjects (N = 197)	

Age of Menarche	Number (N = 197)
10 - 12 Years	79 (40.10%)
12 - 14 Years	118 (59.89%)
Intermenstrual Period	
<21	18 (9.13%)
21 - 35	118 (59.89%)
>35	5 (2.5%)
Don't Remember	56 (28.42%)
Duration of Period (Days)	
< 2 Days	10 (5.0%)
5-7 Days	164 (83.24%)

>7 Days	11 (5.5%)
Irregular	12 (6.09%)
Awareness about Menstruation before Menarche	
Yes	33 (16.75%)
No	164 (83.24%)
Awareness about Cause of Menstruation	
Do not know	164 (83.24%)
Physiological Process	11 (5.6%)
Curse of God	22 (11.16%)
Source of Information Before Menarche	
Television	42 (21.30%)
Teachers	3 (1.50%)
Newspaper	0
Friend	20 (10.50%)
Mother/Sister	132 (67%)
Table 2. Information and Perception about Menstruation (N =197)	

Use of Material during Menstruation	Number (N = 197)
Sanitary Pads	184 (93.4%)
Cloth	7 (3.5%)
Cotton	4 (2%)
All	2 (1%)
Number of Absorbents used/Day	
2	60 (30.6%)
3	95 (48%)
4	27 (13.8%)
More than 4	15 (7.6%)
Cloth usage	
Wash and Dry in sun	84 (42.8%)
Use Only Once and Throw	113 (57.14%)
Clipping of Pubic Hairs	
Do not know	0%
Occasionally	26 (13%)
No	35 (18%)
Yes	136 (69%)
Material used for Cleaning of External Genitalia during Menstruation	
Soap and Water	79 (40.20%)
Water	104 (52.8%)
Dettol	14 (7.10%)
No washing	0%
Bathing during Periods	
Yes	150 (76%)
Few	20 (10%)
No	27 (14%)
Table 3. Practice of Menstrual Hygiene	

Stress during Periods	Number (N = 197)
Sometimes	102 (52%)
Never	61 (31%)
Always	34 (17%)
Effect of Periods on Concentration in Class	
No effect	42 (21.31%)
Tired	102 (51.77%)
Irritable	30 (15.22%)
Poor Performance	4 (2.03%)
All	19 (9.64%)
School Holiday	
None	152 (77.15%)

1 Day	41 (20.80%)
2 Days	2 (1.01%)
3 Days	2 (1.01%)
Table 4 Effect of Menstruation on Quality of Life	

DISCUSSION

This study included girls between the age group of 12 - 18 years with the maximum number of girls being between 14 - 16 years. The sample size estimation was also done at convenience. This was in correlation with other study where age range was 12-17 years.³ In the present study, most of the girls, 118 (59.89%), attained menarche between the age of 12 - 14 years which is comparable to the study conducted in Kheda district by Dhara J Prajapati where age of menarche was between 11-15 years.⁴ Ghattargi CH highlighted that the age of menarche was between 12-17 years.⁵ Most of the participants, 118 (59.89%), were having regular periods b/w 21-35 days and 164 (83.24%) of the study subject had periods for 5 - 7 days. It was sad to observe that only 11 (5.6%) of the girls believed menstruation to be a physiological process, whereas 164 (83.24%) of the participants were ignorant of the cause of the menstrual bleeding. This pre-menarcheal knowledge regarding menstruation was only 47.5% in one study⁴ but was much better in other studies. It was 97% in Lawan UM et al study⁶ and 92% in a study conducted in Nepal² indicating good family environment and high literacy rate. Menarche is an important event and mothers should be the main informants at this tender age. However, mother/sister were the first informants for 132 (67%) of the girls in this study. This is similar to the study conducted by P.B. Verma which suggested that in 57.2% girls, mother was the informant.⁷ Other sources of information were friends and teachers, consistent with other studies.^{8,9} It highlights that there should be fewer gaps between mothers and daughters. Education is the only tool which will prevent inhibition between mothers and daughters in discussing about menstruation, its significance, hygienic practices and a healthy attitude. The hygiene related practices of women during menstruation are of considerable importance, as they affect their health by increasing their vulnerability to infections, especially infections of urinary tract and perineum. Television (in 42 cases, 21.3%) also played a vital role in this study. Media is very important in shedding old myths, whenever there are commercial ads on television, mothers should not get up or switch the channel, it is important to discuss then and there only. This will make the girls more confident. Understanding everything by her own, by watching television or reading newspaper will be asking too much from an adolescent. In contrast to other studies,^{3,4,7,9} increased use of sanitary pads (184, 93.4%) was seen in this study population as compared to cloth 7 (3.5%) or cotton 4 (2%). All thanks to commercial advertisements and difficulty faced during cleaning and drying cloth due to lack of water, privacy and a drying place and easy availability and lesser cost. The practice of using old clothes was seen in 7 (3.5%) subjects possibly because of lack of knowledge, illiteracy and poverty. Based on his study, Narayana et al¹⁰ suggested that urban girls had better awareness about menstrual hygienic practices than their rural counterparts. This study showed that 57.36% of the girls preferred sanitary pads as a menstrual absorbent. The apparent reasons for not using sanitary pads, which were observed in the study, were

lack of knowledge in 30.25%, high costs in 30.85%, unavailability and shyness. In our study, number of absorbents used daily were acceptable with most of the girls (95, 48%) using 3 pads per day. In a study by Dhara J Prajapati, most of the respondents (77%) changed absorbent 1 to 2 times a day and 51.5% girls reused cloth piece.⁴ The hygiene related practices of the study subjects during menstruation was considerably acceptable in contrast to other studies.^{3,9,11,12} Clipping of pubic hair was seen in 136 (69%). Frequent (2-3 times) washing of perineal area with water alone was noticed in 104 (52.8%) cases of this segment, with soap and water in 79 (40.20%) and about 14 (7.10%) were washing with Dettol also. Most of them bathed during menses (156, 76.14%) which was quite reasonable. Soap and water were the commonest materials used in 57.23% of girls for cleaning the external genitalia in the study by Subhash B. Thakre.³ Menstruation has a significant impact on the quality of life during those days. Ignorance and false perceptions add to the agony. Menstrual stress is showing decreasing trend with only 34 (17%) of the participants being always stressed. It was observed that 45 (22.8%) have to take leave from school during periods as shown in study by Drakshayani Devi K.¹³ 51.77% of girls feel tired while attending class while 15.22% showed irritability and poor performance was seen in 2.03%. This appears to be due to lack of proper nourishment and burden of various myths associated.

Limitation of the Study

Due to short duration of the study, convenience sampling technique was followed, thus sampling size was also calculated by convenience. The results of the study cannot be generalised due to the potential bias resulting from the sampling technique and sample size estimation.

CONCLUSION

This study showed a positive change in society in rural areas. Most of the girls (132, 67%) had mothers and sisters as the first informant, 184 (93.4%) were using sanitary pads, 150 (76%) were maintaining personal hygiene. But the remaining girls need to be educated by knowing why they were left out, why there is lack of knowledge. To fill the lacunae, initiative should be taken at every step from house to school through several channels (e.g., TV, school, nurses, health personnel, compulsory sex education in school, and knowledgeable parents). Strengthening of menstrual hygiene programmes is the need of the day in India. Awareness, affordability and privacy are some of the major concerns that need immediate attention to promote use of sanitary pads. Social prohibitions and negative attitude of majority of parents in discussing such issues have limited the access of girls to the right information. The mothers should be encouraged to discuss with their daughters regarding the significance of hygienic practices and a healthy attitude towards menstruation. This 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. Commendable results were seen in study done by Dongre A.R. which showed that community health education intervention strategy could bring significant changes in the awareness and behaviour of rural adolescent girls regarding management of their menstrual hygiene.¹⁴

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