

Full Length Research Paper**A Study on Knowledge regarding Menstrual Hygiene among Adolescent School Girls****Angel Rajakumari G***Professor, Department of Obstetrics and Gynecology, Annai Dora College of Nursing, Aundipatty, Tamilnadu, India.***Abstract**

The aim of the study was to assess the knowledge toward menstruation among adolescent school students. A pre experimental one group pretest posttest design was adopted for this study. The study was conducted in Anjali School, suryapet, Telugana, India. The investigator selected 75 school students who fulfilled the inclusion criteria were selected by using simple random sampling technique. Intervention: The school authorities were contacted and informed about the nature and objective of the study. After obtaining the permission from the school authorities, the investigators visited the school as prepare-planned schedule for interviewing the adolescent girls. The adolescent girls were explained about the purpose of the study, and assured of confidentiality. Written consent was obtained from the girls before administering the questionnaire a self administrated questionnaire was used as tool for data collection, it included personal data related to age, age of menarche, and the student's knowledge about menstruation. The study revealed that there were highly statistically significant differences in total knowledge and practice score of the studied sample after implementation of educational program. The present study concluded that adolescents lacked appropriate knowledge and practices about menstruation in the pre program phase. After implementation of the program considerable improvements were noticed in adolescent's girls' knowledge. Therefore the educational programme was successful in attaining its aims of positively changing the knowledge and practice of menstrual hygiene.

Keywords: Knowledge, Menstruation, Menstrual Hygiene, Adolescent Girls

Introduction

Menstruation is a normal, recurrent, physiological event. The onset of menstruation is one of the most important changes occurring in girls during adolescent year. Good menstrual hygiene practices are essential during menstruation; they include 1) regular change of clothing and underwear; 2) change of hygienic pads every three to four hours; 3) daily showering, especially in instances of dysmenorrhea 4) adequate washing of genitalia after each voiding of urine and/or feces; 5) continuing normal routine and daily activities (e.g. going to school, doing physical exercise), and 6) maintaining a balanced diet with plenty of fruits and vegetables rich in iron and calcium.

Adolescent girls in India constitute almost 47 percentage of the population. Adolescent period is the formative period when maximum amounts of changes take place and pubertal change is one of them. The main pubertal change that occurs in girls is menstruation. This is an important landmark in the process of growth and maturation and prepares them for motherhood. Yesterday's girl is today's adolescent and tomorrow's mother.

There is lack of awareness of menstrual hygiene and care during menstruation which is due to the lack of education related to menstruation and menstrual hygiene. A study conducted in Nagpur reported that only 36.95% of the girls were aware of menstruation before menarche. More than three fourth of girls were not aware about the cause and source of bleeding and majority of them had knowledge about the use of sanitary pads. The hygiene-related practices of girls in the adolescent period related to menstruation can have an effect on their health. The event of menarche may be associated with taboos and myths existing in our traditional society which has a negative implication for women's health, particularly their menstrual hygiene. Studies have shown that the girls lack knowledge about menstruation and due to lack of hygiene, they are likely to suffer from RTI's. Attitude of parents and society in discussing the related issues are barriers to the right kind of information, especially in the rural areas. Menstruation is thus construed to be a matter of embarrassment in most cultures.

Materials and methods

The study was carried out in Anjali public schools in suryapet. An approval was obtained from school authorities. Objective of the study and its implication were explained to both schools administrators and the students. A written consent was obtained from students who were willing to participate in the study and attained menarche. All information is confidential. Students were informed that their participation will be in voluntary basis and it will not affect their grades and evaluation. A descriptive cross sectional design was utilized for the study as it suits its descriptive nature in which the relationship and differences exist in between two variables or more groups are examined, also, the cross-section design reports variables changing at one point in time. A written consent was obtained from the girls before administering the questionnaire. A self administrated questionnaire was used as a tool for data collection, it included personal data related to age, age of menarche, and the student's knowledge about menstruation.

Description of research tool

It consists of two sections.

Section A

It consist of demographic variables which includes age, type of school, school grade, parents' educational level, and family monthly income previous exposure to knowledge.

Section B

Multiple choice questions to assess the knowledge of menstrual hygiene

Scoring procedure**Section B**

The total number of knowledge questions was 20. All the questions had four alternatives with one right answer. A score of "one" was given for every correct answer and score of "zero" was given for every wrong answers. The total score was converted into percentage and interpreted as follows,

Adequate knowledge	-	>75%
Moderate knowledge	-	50 – 75%
Inadequate knowledge	-	<50

Results**Section A**

Table 1. Frequency and percentage distribution of pre test Level of knowledge on menstrual hygiene school students.

Different aspects of knowledge	N = 60					
	Inadequate (<50%)		Moderately adequate (51 – 75%)		Adequate (>75%)	
	No.	%	No.	%	No.	%
Menstruation occurs because of hormones	40	66.66	10	16.66	10	16.66
Normal duration of menstrual cycle is 3 – 7 days	32	53.33	18	30	10	16.66
Duration of menstrual cycle (25-32 days)	39	65	10	16.66	11	18.33
Cleaning of External genitalia	40	66.66	10	16.66	10	16.66
Symptoms of during menstruation	39	65	11	18.33	10	16.66
Overall	38	63.33	11.8	19.66	10.2	16.99

Table 1 shows that majority 24 (40%) had adequate knowledge regarding general knowledge of the first aid measures and the majority 36 (60%) had adequate knowledge on airway obstruction, majority 16 (26.67%) had inadequate knowledge on burns and scalds, majority 30 (50%) had inadequate knowledge on fits, majority 36 (60%) had adequate knowledge on bleeding from cuts and wounds, majority 30 (50%) had moderate knowledge on bleeding from nose, majority had adequate knowledge on minor ailments. The overall analysis shows that 33 (55%) of the samples had adequate knowledge on first aid measures and 27 (45%) had moderately adequate knowledge.

Table 2 shows that majority 24 (40%) had adequate knowledge regarding general knowledge of the first aid measures and the majority 36 (60%) had adequate knowledge on airway obstruction, majority 16 (26.67%) had inadequate knowledge on burns and scalds, majority 30 (50%) had inadequate knowledge on fits, majority 36 (60%) had adequate knowledge on bleeding from cuts and wounds, majority 30 (50%) had moderate knowledge on bleeding from nose, majority had adequate knowledge on minor ailments. The overall analysis shows that 33 (55%) of the samples had adequate knowledge on first aid measures and 27 (45%) had moderately adequate knowledge.

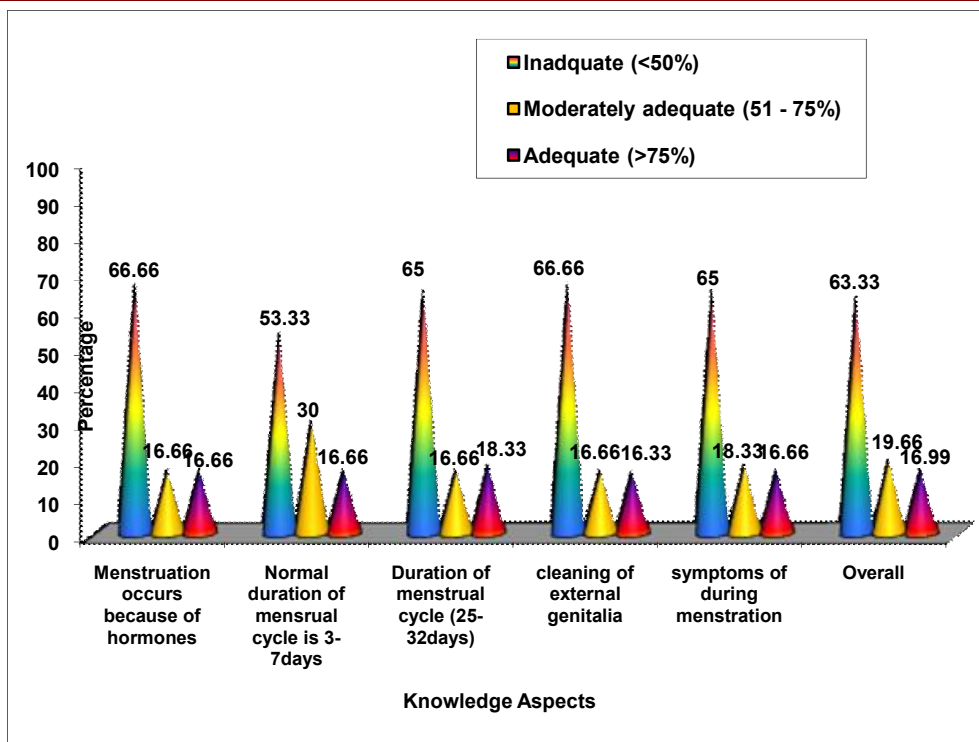


Fig. 1. Percentage distribution of pretest level of knowledge on menstrual hygiene among adolscent school students

Table 2: Frequency and percentage distribution of post test Level of knowledge on menstrual hygiene school students

N = 60

Different aspects of knowledge	Inadequate (<50%)		Moderately adequate (51 – 75%)		Adequate (>75%)	
	No.	%	No.	%	No.	%
Menstruation occurs because of hormones	5	8.33	10	16.66	49	81.66
Normal duration of menstrual cycle is 3 – 7 days	5	8.33	5	8.33	50	83.33
Duration of menstrual cycle (25-32 days)	3	5	5	8.33	52	86.66
Cleaning of External genitalia	5	8.33	5	8.33	50	83.33
Symptoms of during menstruation	5	8.33	5	8.33	50	83.33
Overall	4.6	7.66	6	9.99	50.2	83.66

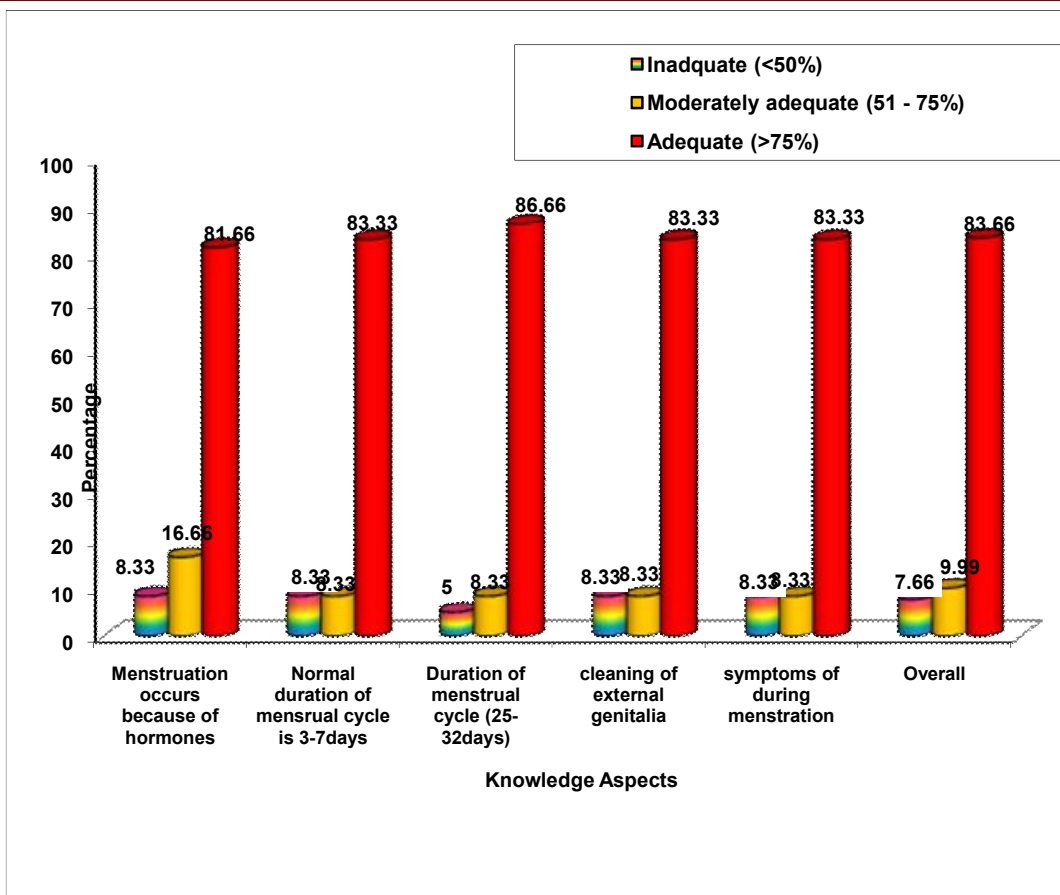


Fig. 2. Percentage distribution of posttest level of knowledge on menstrual hygiene among adolescent school students

Table 3: Comparison between pre and post test level of knowledge on menstrual hygiene of among school students.

N=60

Different aspects of knowledge	Pre test		Post test		't' value
	Mean %	S.D	Mean %	S.D	
Menstruation occurs because of hormones	20	17.32	81	18.1	16.0***
Normal duration of menstrual cycle is 3 – 7 days	34.96	17.04	83	16.69	18.26***
Duration of menstrual cycle (25-32 days)	21.22	12.44	79.0	15.59	18.27***
Cleaning of External genitalia	20.11	17.11	80.0	12.78	8.95***
Symptoms of during menstruation	18.13	15.11	68.67	21.45	7.75***
Overall	22.88	15.80	78.33	16.92	13.84***

Table 3 shows the comparison between pre and post test level of knowledge on menstrual hygiene. The data analysis reveals that pre test knowledge mean score was 22.88 with SD 15.80 where as the post test knowledge mean score was 78.33 with SD 16.92. Paired t' test value was 13.84, which is highly significant at P < 0.001 level.

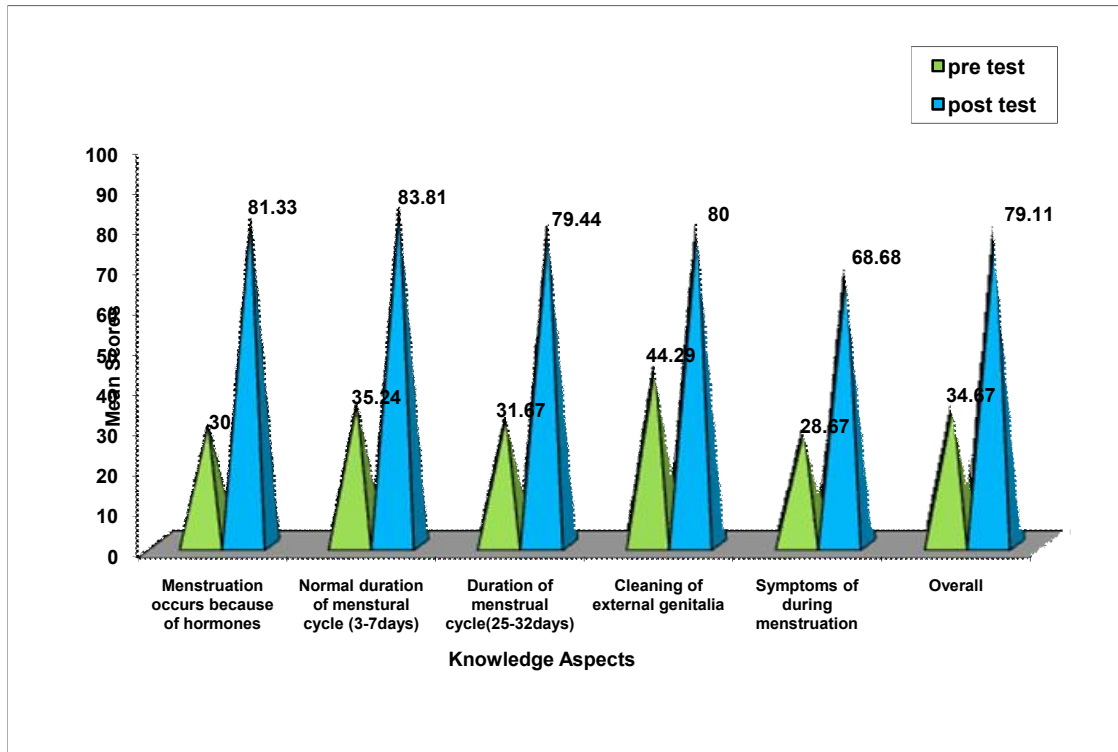


Fig. 3. Comparison between pre and posttest level of knowledge on menstrual hygiene among adolescent school students

Discussion

Menstrual hygiene is crucial in reproductive life of every woman. It is remarkable that poor menstrual hygiene contribute extremely to reproductive and urinary tract infections. Therefore, adolescent girls should have sound knowledge on menstrual hygiene and improve their menstrual hygiene practice. Assessing the knowledge and imparting the knowledge on menstrual hygiene to adolescent girls is one of the essential steps to create the awareness among them.

The findings of the study divulged that the mean age at first menstruation of participants was 12.52 ± 0.79 years. Correspondingly, a study conducted by Thakre SB, Thakre S, Reddy M, Rathi N, Pathak K, Ughade S reported that the mean age at first menstruation was found to be 12.85 years¹¹ whereas it was found to be 13.51 ± 1.04 years in finding of study conducted by Dambhare DG, Wagh SV, Dudhe JY¹⁵. Maximum number of the girls (88.3%) had previous knowledge regarding menstrual hygiene and the major source of their information was health personnel. In the study conducted by Aniebue UU, Aniebue PN, Nwankwo TO mothers were the main source of information (74.7%)¹⁶. This portrayed that mothers, siblings, relatives, teachers, etc are not sufficiently providing the knowledge regarding menstrual hygiene to the girls. Thus, there is the need to educate the mothers, siblings, relatives and teachers regarding menstrual hygiene and motivate them to educate the adolescent girls.

Conclusion

It can be said that among the adolescent school girls in both the urban and rural areas, the knowledge on menstruation is poor and the practices are often not optimal for proper hygiene. Menstrual hygiene is an issue needs to be addressed at all levels. A variety of factors are known to affect menstrual behaviors, the most influential ones being economic status and residential status (urban and rural). Awareness regarding the need for information on healthy menstrual practices is very important. It is essential to design a mechanism to address and for the access of healthy menstrual practices.

The findings of the study illustrated that less than half of the adolescent girls are having good knowledge on menstrual hygiene which indicates that there is still lack of adequate knowledge regarding menstrual hygiene among adolescent girls. Thus, health education programs are required to enhance the knowledge regarding menstrual hygiene to improve their menstrual hygiene practice. The best place to impart the education on menstrual hygiene to adolescent girls is schools. Nursing students, peer groups can be mobilized to conduct these educational programs. In addition to this, further researches should be conducted to cover other schools, areas and different part of the country in terms of knowledge, attitudes and practice on menstrual hygiene.

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