

Effect of structured teaching programme on knowledge regarding Menstrual Hygiene among adolescent girls in selected school, Bangalore

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ABSTRACT

Adolescent girls attain menarche very early approximately at around 12 years of age nowadays unlike the olden time, the age was around 15 years. Menstrual hygiene is very important and lack of menstrual hygiene can lead to reproductive tract infections. The present study was aimed to evaluate the effectiveness of structured teaching programme on knowledge regarding menstrual hygiene among adolescent girls in selected school, Bangalore. The objectives of the study were: to assess the knowledge of adolescent girls on menstrual hygiene, to assess the effectiveness of structured teaching programme on menstrual hygiene and to find out the association between knowledge and selected socio demographical variables. Pre experimental one group pre- test post- test design was used for the present study. Structured questionnaire was used to assess the level of knowledge of adolescent girls regarding menstrual hygiene. Data were collected from 30 adolescent girls using simple random sampling technique. The pre -test findings revealed that 60% of students had an average knowledge on menstrual hygiene and 40% had poor knowledge and none had good knowledge on menstrual hygiene and in post- test 56.6% had good knowledge. The present study findings showed that the post test results had improved regarding knowledge about menstrual hygiene at 0.05 level of significance P- value for paired- t was 0.000.

Key Words: Adolescent girls, menstrual hygiene

Introduction

Adolescent girls attain menarche very early approximately at around 12 years of age nowadays unlike the olden time, the age was around 15 years. Menstrual hygiene is very important and lack of menstrual hygiene can lead to reproductive tract infections. Adolescent girls, especially younger girls, are particularly vulnerable because they

face the risks of premature pregnancy and childbirth. There is a lack of menstrual hygiene practices in adolescent girls and women.¹ Every year approximately 10% of women worldwide are exposed to genital infections including urinary tract infections and bacterial vaginosis, and 75% of women have a history of genital infections. Specifically, the common risk factors for

vaginal infections include pregnancy and poor hygiene both perianal and menstrual hygiene. The statistics in India about menstrual hygiene are alarming. Only 18% of the population has accesses to sanitary hygiene. Hygiene during menstruation is an inevitable part of woman's life. Various aspects such as physiology, pathology and psychology of menstruation have been found to associate with health and well-being of women; hence, it is an important issue concerning morbidity and mortality of female population.²

Need for the Study

A descriptive cross-sectional study was conducted by Anjali Mahajan & Kanikaushal "To assess the knowledge and practice regarding menstrual hygiene among adolescent girls of government school of Shimla, Himachal Pradesh" in 2017. In these study 100 adolescent girls were selected as a sample by using convenience sampling technique to conduct study. self-administered, structured, pretested, closed-ended anonymous questionnaire methods were used to collect the data. Results on knowledge scores showed that 29% had adequate knowledge about menstrual hygiene, 71% had inadequate knowledge about menstrual hygiene. The data on practice scores revealed that 19% had poor scores, 69%, had fair scores and 12% subjects had good score of practices regarding menstrual hygiene respectively. Knowledge and practice scores of participants showed positive correlation between the two scores (* $p < 0.001$). This study concluded that 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.³

A cross sectional study was conducted by Manisha Rani & Priyanka kumari on "menstrual practices and knowledge among adolescent girls in rural area of Haryana among adolescent girls in Jan 2019." Descriptive survey research design is used in this study. In this study total of 500 sample were selected by using non-probability purposive sampling technique to conduct study. Structured knowledge questionnaires and checklist were used to collect the data. Result of study regarding the level of practiced score of adolescent girls' revealed that, 9.2% had healthy level (>75%) of practices, 86% had moderately healthy level (50-75%) of practices, and 4.8% has unhealthy level (<50%) of practices. Further results illustrate that 29% had very good level (>75%) of knowledge, 34% had good level (61- 75%) of knowledge followed by 31% with average level (50-60) of knowledge and 6% had below average level (<50%) of knowledge. This study concluded that adolescent girls in rural areas do not have appropriate expressed practice and knowledge regarding menstruation. Efforts should be taken to improve the practice and knowledge of adolescent rural girls regarding management of menstruation.⁴

Methodology:

Research Design: One group pre-test and post-test pre-experimental design was adopted for the present study.

Objectives: The objectives of the study were: to assess the knowledge of adolescent girls on menstrual hygiene, to assess the effectiveness of structured teaching programme on menstrual hygiene and to find out the association between knowledge and selected socio demographical variables.

Hypothesis: There were two research hypotheses which were tested at 0.05 level of significance. H1: There will be a significant difference in the pre-test and post test score on menstrual hygiene among adolescent girls. H2: There will be a significant association between the knowledge score and selected demographic variables.

Setting of the study– Kannamangala High School in Bangalore.

Population: Refers to the school going adolescent girls who are in 14-16 years of age group.

Sample: Adolescent girls those who are 14-16 years studying in kannamangala high school, Bangalore.

Sample size: 30 adolescent girls.

Sampling technique: Total 30 adolescents (8-10 standard) from the age group of 14-16 years were selected by using simple random sampling technique (lottery method) from kannamangala high school, Bangalore.

Inclusion criteria: Adolescent girls of 14-16 years of age group, studying in kannamangala high school, Bangalore, available during the data collection and willing to participate.

Data collection method: Self-responding questionnaires.

Description of the tool: The tool consists of

two sections. Section A- Socio demographic variables, Section B- structured knowledge questionnaire. Scoring procedure: In this study tool consists of 30 questions. The maximum score of the knowledge questionnaire was ‘30’. The minimum score of the knowledge questionnaire was ‘0’. For each correct answer the participants were awarded with the score 1 and for every wrong answer they awarded with score of ‘0.’ If the response of the item is missed participants were awarded with score ‘0’.The reliability of tool established by student researcher using spearman’s test (Test-retest method) $r=0.8660$. Knowledge level category was three namely good knowledge (21-30 Score), Average knowledge (11-20 score), Poor knowledge (≤ 10 score).

Data analysis: The data analyzed by means of descriptive and inferential statistics. Frequency percentage distribution, mean, standard deviation, were described the sample characteristics. A paired t-test was used to assess the effectiveness of structured teaching programme of menstrual hygiene. A fisher exact test, an alternative test of chi-square was used to know the level of association between pre-test score and selected demographic variables.

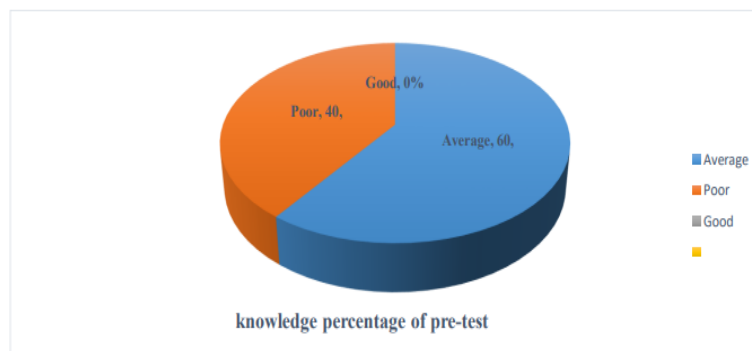


Figure: 1. Pre-test Knowledge among adolescent girls regarding menstrual hygiene

Figure: 1.1 depicts that in pre-test 60% of subjects had an average knowledge and 40% of subjects had poor knowledge regarding menstrual hygiene.0% of subjects had good knowledge.

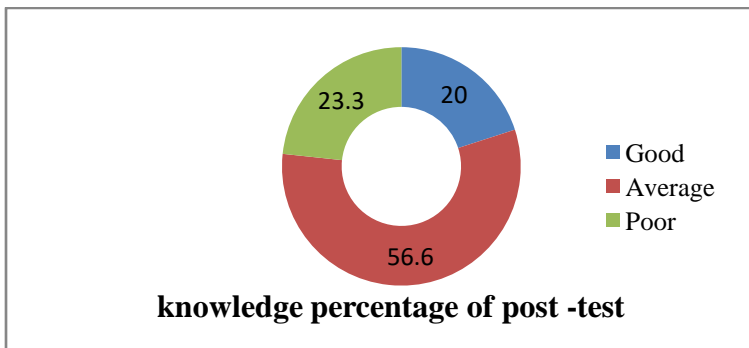


Figure 2. Post-test Knowledge among adolescent girls regarding menstrual hygiene.

Fig 1.2 depicts that in post-test knowledge assessment 20.0% had good knowledge, 56.6% had an average knowledge and 23.3% had poor knowledge regarding menstrual hygiene.

Table 1. Effectiveness of structured teaching programme on knowledge regarding menstrual hygiene

N=30

Sl no	Test	Mean value	Mean difference (md)	Sd	Paired t-test	Df	Level of significance (0.05)
1	Pre-test	10.93%	4	3.321	-5.125	29	0.000 *S
2	Post-test	14.93%		4.934			

Table 1 depicts that mean difference of both pre-test and post-test was 4, paired t-test value was -5.125 and there was statistically significant difference in knowledge.

Table 2. Association between the knowledge and selected socio demographic data

N= 30 df=1

Sl.no	Socio demographic variables	Level of knowledge		P value	Level of significance(0.05)
		Average	Poor		
1	Age 13-14 15-16	5	9	0.2989 df=1	NS
		9	7		
2	Religion Hindu Muslim	13	16	.27689 5 df=1	NS
		1	00		

Sl.no	Socio demographic variables	Level of knowledge		P value	Level of significance(0.05)
		Average	Poor		
3	Class of study			0.2066 55 df=1	NS
	8 th class	3	8		
	9 th class	6	3		
	10 th class	5	5		
4	Occupation of father			0.2226 72 df=1	NS
	Government employee	1	3		
	Private/corporate employee	2	00		
	Self- employee	5	3		
	Others	6	10		
5	Occupation of mother			0.5252 7 df=1	NS
	Government employee	00	5		
	Self- employee	2	3		
	Others	12	8		
6	Family monthly income			0.2656 85 df=1	NS
	Below 10000	6	7		
	10001-20000	5	5		
	20001-30000	3	1		
	30001-40000	00	3		
7	Residential status			0.6255 85 df=1	NS
	Urban	2	13		
	Rural	14	1		
8	Type of house			0.583 df=1	NS
	Kaccha	5	00		
	Pacca	2	5		
	Tiled	1	3		
	Sheet	6	8		
9	Absenteeism			0.2745 52 df=1	NS
	Often	7	11		
	Very often	7	4		
	Long absenteeism	00	1		
10	Academic percentage			0.4381 83 df=1	NS
	40%	00	2		
	65%	4	4		
	75%	5	7		
	Above80%	5	3		

Sl.no	Socio demographic variables	Level of knowledge		P value	Level of significance(0.05)
		Average	Poor		
11.	Age of achieving first menstruation			0.7383 8 df=1	NS
	11	1	00		
	12	3	5		
	13	6	7		
	14	2	3		
12	Material that used to absorb menstrual blood			0.2225 3 df=1	NS
	Menstrual cloth	1	00		
	Reusable pads	00	3		
	Disposable sanitary pads	6	10		
	Tampons	00	2		
	Cotton pad	7	1		

Table 2. shows that there is no statistical significant association between knowledge and socio demographic variables of adolescent girls.

Result and Discussion

In this study results showed that out of 30 adolescent girls majority 83.3% of knowledge were in the subjects having no medical health issues and 16.7% of knowledge were in the subjects having medical health issues.

In the pre-test, investigator found that majorities 60% of adolescent girls were having an average knowledge and 40% were having poor knowledge. Knowledge of mean was 10.933 and standard deviations were 3.321.

In the post test, investigator found that majorities 56.6% of adolescent girls were having an average knowledge and 23.3% were having poor knowledge. Knowledge of mean were 14.93% and standard deviation were 4.934

The overall mean difference of knowledge was 4, paired t- test value was -5.125 and there was significant difference in knowledge.

The result showed that there is no significant association between knowledge and selected socio-demographic variables among adolescents in selected schools. Hence stated research hypotheses were rejected with regard of these variables.

Similarly ShivaleelaP.Upashe et.al reported that 504 (60.9%) and 330 respondents had good knowledge and practice of menstrual hygiene respectively. The findings of the study showed a significant positive association between good knowledge of menstruation and educational status of mothers, having radio/TV. Educational status of the mother and earning

permanent pocket money from parents revealed significant positive association with good practice of menstrual hygiene⁵

Conclusion

The present study found that half (46.6%) of the subject's residing in rural area has a good knowledge in comparison to (6.6%) of the subjects residing in rural area where as (43.3%) of the subjects residing in rural area has poor knowledge in comparison to (3.3%) of the subjects residing in urban area. The study also found that there is a significant difference in knowledge, whereas 't' test shows that there is a significant difference in overall knowledge among the group. The study concluded that there is no significant difference among the group of adolescents in different settings.

As a nurse it is important to educate the community and family members regarding menstrual hygiene as well as services available. Nurse educator should prepare effective future nurses which can be done through active participation of student nurses in giving health talk regarding increasing in positive adaptation i.e. mentally and physically. A nurse can also act as counsellor in promoting menstrual hygiene Nurses can also use opportunities of group leisure activity with adolescents.

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