

Knowledge Attitude and Practice Regarding Menstrual Health and Hygiene Among Adolescent Girls

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Abstract

The goal of the study is to assess and improve Knowledge Attitude and Practice regarding Menstrual Health and Hygiene among study subject and to identify possible risk associated with unhygienic menstrual practices among study subject. An educational interventional study was carried out among 166 samples in selected schools and colleges of North Bengaluru. The data was collected by using self-designed content validated questionnaire and responses were recorded. All information's were processed and analyzed by using Microsoft Excel. It was found that most of the subject's knowledge towards menstruation was found to be improved after suitable intervention. As well as Attitude and Practice were also improved among study subjects. Menstrual hygiene practices can be improved by imparting appropriate educational interventional strategies and implementing various community awareness programs related to menstruation hygiene knowledge, attitude, and practice.

Keywords: Adolescent, Menstrual Hygiene, Menstrual Health.

1. Introduction

Puberty is the foremost significant turning point in adolescence, which is the period between childhood and adulthood and the time when fertility increases, variety of symptoms, such as physical and psychological changes, are present during this point, which is brought on by the activation of sexual gland. Most of females experience menarche between the ages of 10 and 16, yet there show remarkable variations (1). Adolescent age begins with the development of secondary features such as hair growth in the pubic and underarm areas, breast development, the onset of the menstrual cycle, increases in height and weight, an active sweat gland, acne, and mood swings (2). During menstruation, the endometrium lining gradually thickens and sheds. Menstruation typically lasts 3-5 days, however it can occasionally last up to seven days. During menstruation, approximately two thirds of the uterine lining are shed. Along with blood, the menstrual discharge also contains mucus and vaginal secretions. Every girl feels it differently (3). About 5–8% of women thus experience from Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD). The symptoms that some women may feel in the weeks leading up to their period are known as PMS. PMDD is a rare form in which only a tiny percentage of women experience more severe PMS. while PMS are comparable to PMDD, PMDD symptoms are far more severe and can significantly worsen the everyday activities and quality of life of women. During menstrual period it is important to maintain hygiene practices (4,5). Menstrual Hygiene Management (MHM) refers to “Women and

adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials” (6).

2. Need for study

Girls and women in low-income environments are less aware of hygienic behaviors, and there is a lack of culturally appropriate MHM materials. Menstruation and related activities are cloaked in secrecy, shame, and social taboos, which further present themselves in societal customs that restrict freedom of movement and access to daily activities. In India, around 43% and 88% of girls prefer washable cotton cloths than disposable sanitary products. Reusable materials, however, might not be properly disinfected given that washing is commonly done with no soap and dirty water, and drying may be done indoors, away from the sun, due to societal taboos and restrictions. Activities related to managing menstrual hygiene (MHM) were connected to several reproductive tract infections (RTI), such as bacterial vaginosis (BV) and vulvo-vaginal candidiasis (VVC), as well as psychosocial stress consequences. These behaviors can be unpleasant and unhygienic, especially in places with little access to clean water. Our study aims to assess and improve knowledge, attitude and practice toward menstruation and menstrual hygiene management(7,8).

3. Research Methodology

The methodology section outlines the plan and method that how the study is conducted. This includes Universe of the study, sample of the study, Data and Sources of Data, study’s variables, and analytical framework. The details are as follows;

3.1 Population and Sample

The study was conducted at selected schools and colleges in Bengaluru District. A total of 186 subjects were collected out of which 166 subjects were selected for the study. Inclusion criteria was adolescent girls with age group of 10-19 years index.

3.2 Data and Sources of Data

For this study we conducted pretest and posttest among study subjects of different school and colleges in Bengaluru district among 166 subjects.

3.3 Study Procedure

This was an educational interventional study; subjects for the study were identified by the investigators by conducting a school and college visit based on the inclusion and exclusion criteria. The purpose of the study was explained to the subjects and the consent was obtained. Relevant data was received from adolescent girls as a part of pre-test by providing study tools consisting the topics like basic knowledge about menstruation, hygienic practices, and health related complications. A counseling session using suitable aids such as power point presentation was carried out among the study subjects and later after a time gap the same study tools was used to obtain the post-test response. The data thus obtained was entered in Microsoft Excel Sheet and was analyzed appropriately.

3.4 Statistical Analysis

All recorded data were entered using MS Excel software for determining for the statistically significant. The results were expressed in proportions and descriptive statistics like mean, standard deviation and standard error of mean were calculated. To compare the knowledge group student paired t test was conducted.

4. Result

Students were asked about the basic questions regarding menstrual hygiene. A pretest followed by a class regarding the basic knowledge about menstruation was conducted followed by one month time interval we conducted a post-test regarding knowledge attitude and practice and we observed the below mentioned details:

4.1 Distribution of subject based on menarche age distribution:

Sl. No	Menarche Age	No: of students	Percentage %
1	<12	23	13.85%
2	12-13	105	63.25%
3	≥14	38	22.9%

Table 4.1: Distribution of subject based on menarche age

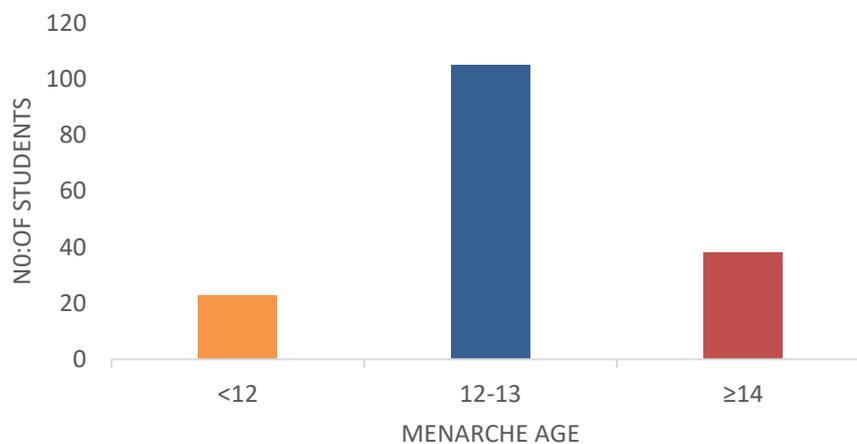


Figure 4.1: Distribution of subject based on menarche age

The mean age of menarche was found to be 12.65 Year (± 1.164). The graphical representation shown in figure 4.1. indicates the different menarche age distribution.

4.2 Students' distribution based on response to source of information

Sl. No	Source of Information	Number of Students	Percentage (%)
1	Mother	118	71.08%
2	Teacher	18	10.84%
3	Friends	17	10.24%

4	Others	13	7.83%
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Table 4.2: Distribution of subject based on source of information

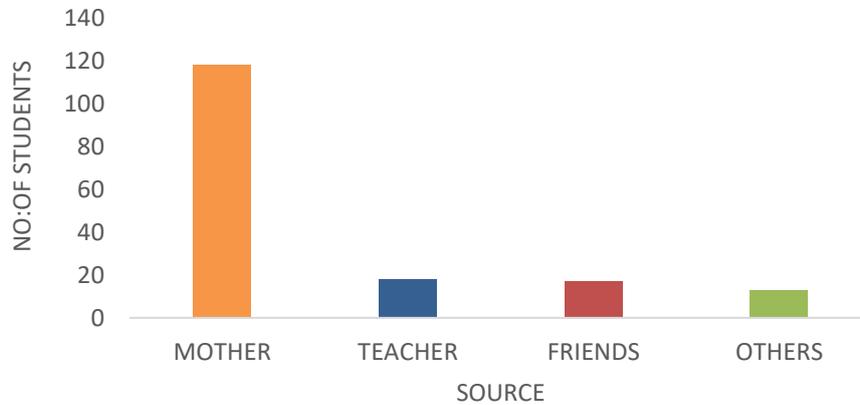


Figure 4.2: Distribution of subject based on source of information

Out of 166 subjects about 118(71.08%) subjects answered their source of information was mother. Following 18(10.84%) answered as teacher, 17(10.24%) answered as friends and 13(7.83%) answered as others. The graphical representation shown in figure 4.2. indicates the different source of information regarding menstruation.

4.3 Distribution of students based on response to whether they heard menstruation before menarche:

Sl. No	Regularity	Number of students	Percentage (%)
1	Yes	128	77.10%
2	No	35	21.08%
3	Not sure	3	1.08%

Table 4.3: Distribution of response to “whether they heard about menstruation before menarche”

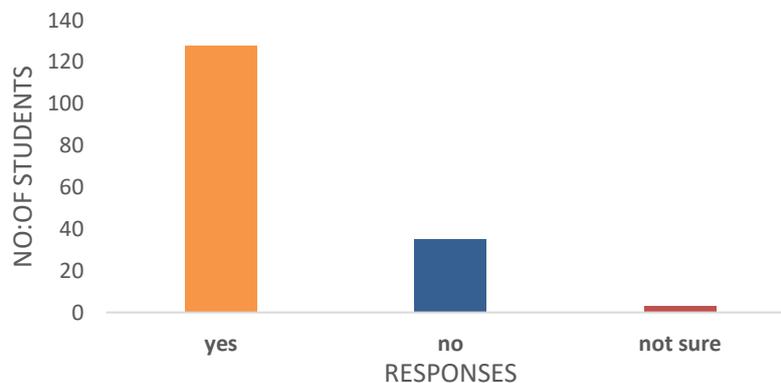


Figure 4.3: Distribution of response to “whether they heard about menstruation before menarche”

Out of 166 subjects 128(77.10%) subject heard about menstruation before menarche age, 35(21.08%) subjects did not hear about menstruation before menarche and following 3(1.80%) where not sure about whether they heard about menstruation. The graphical representation shown in figure 4.3. indicates the distribution of students based on response to whether they heard menstruation before menarche age.

4.4 Distribution of students based on information regarding regularity of menstrual flow:

Sl. No	Regularity	Number of students	Percentage (%)
1	Yes	115	69.27%
2	Most often	33	19.87%
3	No	18	10.84%

Table 4.4: Distribution of subject based on regularity of menstrual flow

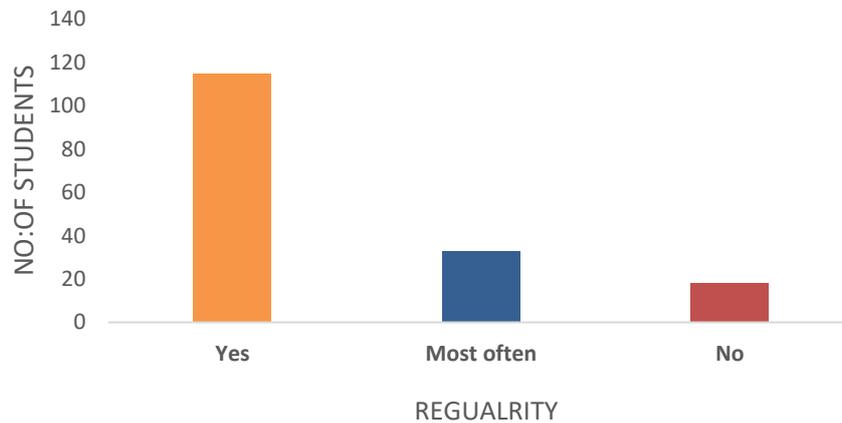


Figure 4.4: Distribution of subject based on regularity of menstrual flow

Out of 166 subjects 115(69.27%) of study subject have regular menstrual flow and 33(10.84%) of study subject have irregular menstrual flow and a response of 18(19.87%) of study subject have most often regular menstrual flow as seen in table 4.4. The graphical representation shown in figure 4.4. indicates the regularity of menstrual flow among study subject.

4.5 Distribution of students based on response to length of bleeding.

Sl. No	Length	Number of students	Percentage (%)
1	3-5 days	61	36.74%
2	5-7 days	92	55.42%
3	7-10 days	12	7.228%
4	> 10 days	1	0.60%

Table 4.5: Distribution based on length of bleeding

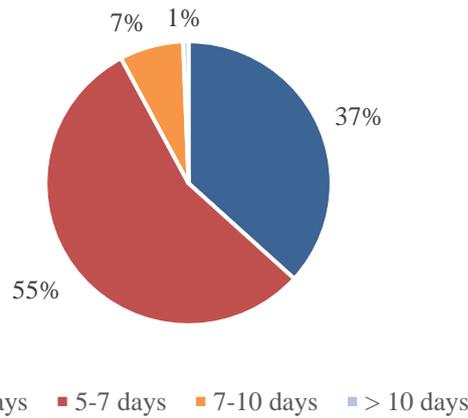


Figure 4.5: Distribution based on length of bleeding

Out of 166 subjects 61(36.74%) and 92(55.42%) have bleeding length from 3-5 days and 5-7 days respectively. While 12(7.228%) and 19(0.60%) subjects have menstrual bleeding length of 7-10 days and >10 days respectively.

4.6 Response to knowledge questions:

QUESTIONS	PRE-TEST		POST-TEST	
	N	%	N	%
K1	69	42%	155	93%
K2	105	63%	148	89%
K3	80	48%	150	90%

Table 4.6: Distribution of subject to knowledge question

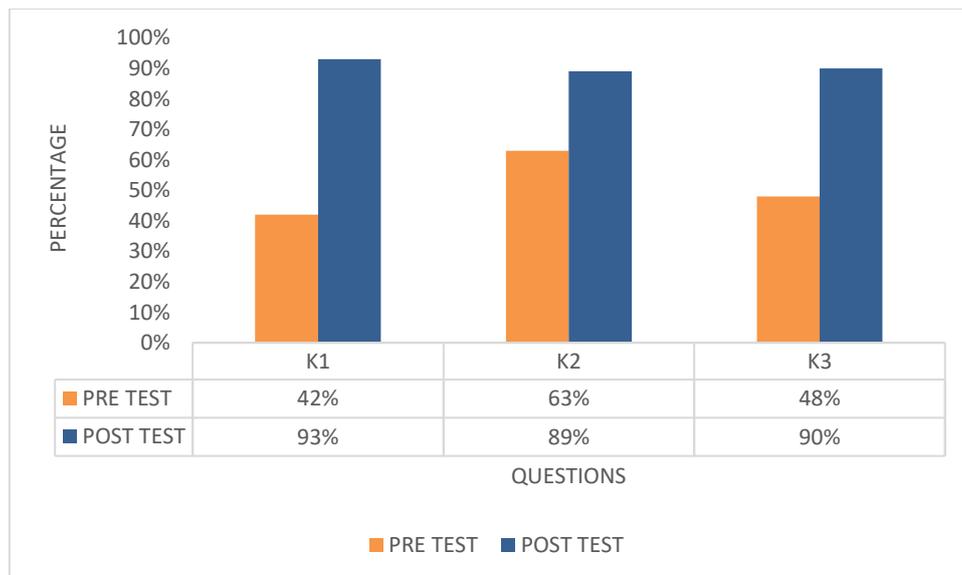


Figure 4.6: Distribution of subject to knowledge question

Knowledge questions were assessed in the table 4.6.

Question 1: What is the most appropriate term used to denote the monthly bleeding that women go through?

Question 2: How often is this monthly bleeding cycle observed in a healthy woman?

Question 3: How long is each cycle in healthy women?

A pre-test and post-test were conducted among adolescent girls and there was significant improvement in their knowledge as interpreted from the above table.

4.7 Response to attitude questions:

QUESTIONS	PRE-TEST		POST-TEST	
	N	%	N	%
A1	17	10.24%	40	24.09%
A2	49	30%	55	33%
A3	158	95.1%	158	95.1%

Table 4.7: Distribution of subject to attitude question

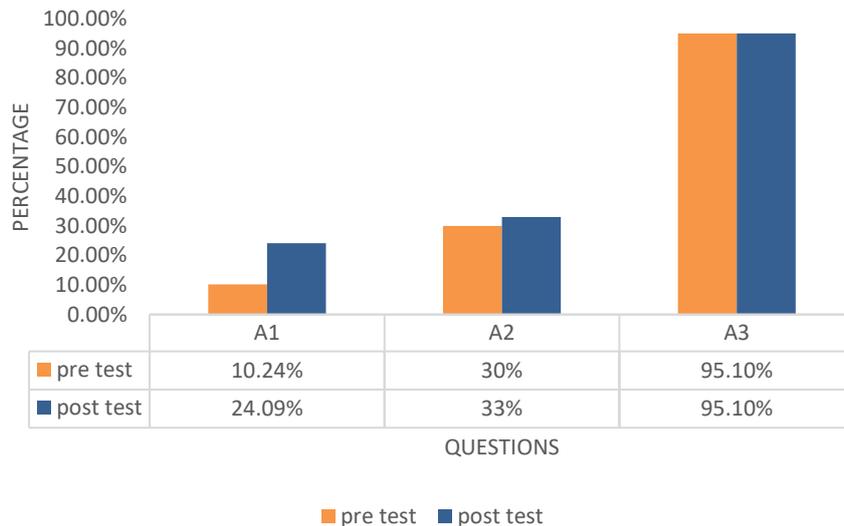


Figure 4.7: Distribution of subject to attitude question

Attitude questions were assessed in table 4.7.

Question 1: Do you prefer self-medication for your menstrual main/cramp?

Question 2: Have you taken any medical advices for your menstrual bleeding/ menstrual pain?

Question 3: Have you consumed pill(s) to delay your menstruation?

A pre-test and post-test were conducted among the study subject and there was an improvement in attitude which was mentioned in the above table.

4.8 Response to practice questions:

QUESTIONS	PRE-TEST		POST-TEST	
	N	%	N	%
P1	125	75%	145	87%
P2	151	91%	166	100%
P3	158	70%	158	87%
P4	115	69%	146	88%

Table 4.8: Distribution of subject to practice question

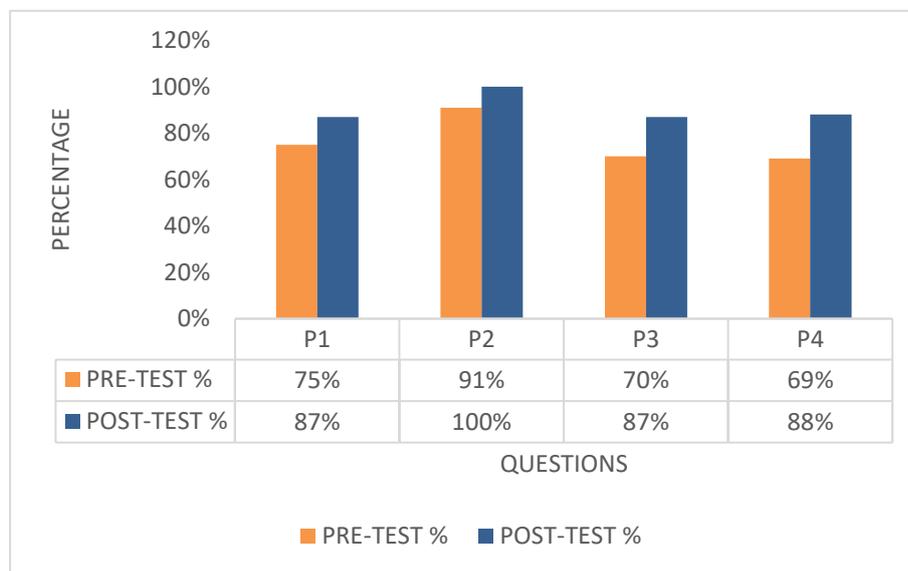


Figure 4.8: Distribution of subject to practice question

Practice questions were assessed in table 4.8.

Question 1: How often do you change your absorbent?

Question 2: What type of washing do you prefer during menstruation?

Question 3: How do you clean your genitals during menstruation?

Question 4: Do you skip your food during menstruation?

A pre-test and post-test were conducted among study subject and there was an improvement in practice which is mentioned in the above table.

4.9 Distribution of students based on history of infection in urinary tract/genital:

Sl. No	Parameter	Number of students	Percentage (%)
1	UTI	8	4.81%
2	ITCHING	4	2.40%

3	RASHES	1	0.60%
4	NIL	155	92.16%

Table 4.9: Distribution of students based on history of infection in urinary tract/genital

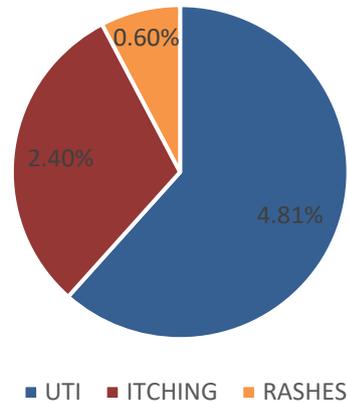


Figure 4.9: Distribution of students based on history of infection in urinary tract/genital

Out of 166 subjects, 8(4.81%) subjects had Urinary Tract Infection, 4(2.40%) had itching and 1(0.60%) had rashes in vulva as found in table 4.9.

5. Discussion

An educational interventional study was performed in the selected schools and colleges in Bengaluru district by enrolling 166 study subjects conducted for a period of 6 months. When the participants were asked about the basic knowledge about menstruation there is a slight increase in the knowledge among study subject as compare to pre-test. When the participants were asked about the regularity of menstrual cycle majority of study subject had regular menstrual cycles, with cycles lasting a maximum of 3-7 days, Similar findings were reported in a study conducted by *Parikh et al., in Gujarat* (9).

In our study, most of participants self-administered medication to relieve menstrual cramps or pain, which is consistent with research done in the Nablus district by *Shalabi-Abbas E et al.* From the study it was evident that there was a lack of Menstrual Hygiene Management practices like changing of menstrual aid, cleaning of genitals etc. among study population which was later improved in post intervention (10).

According to the current study, infections such as urinary tract infections, rashes, and itching caused by unhygienic practices are only seen in a small proportion of individuals. However, the same studies conducted by *Parikh et al.*, revealed issues such as itching, rashes, and burning micturition (9).

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7. References

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