

KNOWLEDGE, ATTITUDE AND PRACTICE OF MENSTRUAL HYGIENE AMONG NURSING COLLEGE STUDENTS

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Abstract

Introduction: Worldwide every year approximately about 10% of women are exposed to genital infections including urinary tract infections and bacterial vaginosis, and more than seven-tenths of women have a history of a genital infection. Pregnancy and poor hygienic status both Perineal and menstrual hygiene are the common risk factors for vaginal infections. The issue of menstrual hygiene is inadequately acknowledged and has not received proper attention. Good hygienic practices, such as use of sanitary pads and proper washing of the genital areas, are important during menstruation period.

Materials and Methods: A cross sectional study was done among the nursing college students, Government Nursing College, Kurnool. 400 nursing college students were included in the study. 100 students belonging to each year. After explaining the nature of the study, verbal permission was taken from each participant. Participation in the study was voluntary and the participants had a choice to refuse to participate. The questionnaire did not include participant names and they were assured that the information collected would be confidential throughout study. A self-structured questionnaire was used as study tool to collect data from students.

Results: The mean age of the study subjects who were studied was 17.5 years, while their age range was 15-20years. Majority of study subjects (61%) hailing from urban residences and 49% from rural areas. Majority of study subjects were belonging to middle class (43.5%) and lower middle class (48%). A total 95% of our participants regarded menstruation as a physiological phenomenon, yet there remained 5% who doesn't agree this. Nearly 70% students feel uncomfortable to discuss about menstruation. Only 214 (53.5%) of our study group could boldly deny the anxiety associated with menstruation. 124(31%) students still consider menstruation is debilitating, annoying and bothersome.172 (43%) students were neutral about carrying sanitary products to college, while 228 (57%) felt cautious.

Conclusion: Most of the students have good knowledge attitude and practice of menstrual hygiene, but few of them still have moderate and poor knowledge and attitude although there is no poor practice among them. This demonstrates a need to design acceptable awareness creation and advocacy programs for adolescent school girls and the public to improve the knowledge and safe hygienic practice of their menstrual flow.

Key Words: Pregnancy, menstrual hygiene, knowledge, attitude, practice.

INTRODUCTION

Worldwide every year approximately about 10% of women are exposed to genital infections including urinary tract infections and bacterial vaginosis, and more than seven-tenths of women have a history of a genital infection. Pregnancy and poor hygienic status both Perineal and menstrual hygiene are the common risk factors for vaginal infections.¹ The issue of menstrual hygiene is inadequately acknowledged and has not received proper attention. Good hygienic practices, such as use of sanitary pads and proper washing of the genital areas, are important during menstruation period.²

Adolescent girls enter puberty annually, unaware, unprepared and get confused by physical changes and emotional challenges that come with it. Although menstruation is common issue of everyday life, it is associated with negative attitude in young girls. Lack of practical life skills to effectively manage menstruation would reduce the adolescent girl self-esteem, impair their health and truncate their education.³ During period of Menstruation women are most vulnerable for developing any kind of reproductive tract infections, urinary tract infections, and various sexually transmitted diseases. In some cases, the consequences of RTI are severe and having significant negative impact on women's health like chronic pelvic pain, dysmenorrhea and infertility in severe cases.⁴

The practice of good menstrual hygiene reduces the incidence of reproductive tract infections (RTI). There is a need to educate young girls on right strategies of menstrual hygiene, attitude and practice.⁵ Menstrual hygiene management refers to specific hygiene and health requirements of girls and women during menstruation. Several studies have shown that, the knowledge regarding menstrual cycle is inadequate and insufficient. The religious practices, restrictions and myths related to menstrual cycle create more confusion about the correct practice.

AIMS AND OBJECTIVES

- 1) The aim of the study is to understand the awareness level of menstrual health and hygiene among college students and also the problems associated with menstruation
- 2) To find out mean age of menarche among the study group
- 3) To inculcate safe hygiene practices during menstruation

MATERIALS AND METHODS

Study design: A cross sectional study

Study setting: The present study was done among the nursing college students, government nursing college Kurnool

Study population: 400 nursing college students were included in the study. 100 students belonging to each year.

Study tools and technique: A pre designed, pretested and structured questionnaire was used in the study. The data collection technique was a personal interview of the study subjects.

Methodology:

After explaining the nature of the study, verbal consent was taken from each participant. Participation in the study was voluntary and the participants had a choice to refuse to participate. The questionnaire did not include participant names and they were assured that the information collected would be confidential throughout study. A self-structured questionnaire was used as study tool to collect data from students. The questionnaire had different sections consisting of socio demographic variables, menstrual cycle variables and questions used to assess knowledge of young girls towards menstruation and their attitude and questions to measure hygiene practices towards menstruation. Respondents KAP were measured by using a set of ten knowledge related questions, ten practice related questions and ten attitude related statements. The scores for knowledge and practice items were given one for each correct answer and a score of zero for an incorrect answer. Later all scores were

summed up and classified into two categories, adequate knowledge (more than 70% score) and inadequate knowledge (score<70). Similarly, all the attitude statements were measured and score is given. Later, all scores were summed up and classified into two categories, positive attitude (more than 70% score) and need improvement (below 70% score).

RESULTS

The mean age of the study subjects who were studied was 17.5 years, while their age range was 15-20years. Majority of study subjects (61%) hailing from urban residences and 49% from rural areas. Majority of study subjects were belonging to middle class (43.5%) and lower middle class (48%).

Table 1: Socio demographic status of respondents

Socio demographic class	Number of patients
Class 1	2
Class 2	22
Class 3	174
Class 4	192
Class 5	10

The mean age of menarche of the participants is 12.89 years with in a range of 11-15 years. Which is comparable to the study conducted in Rajasthan by Khanna A et al, who reported the mean age of menarche to be 13.2 years and a study conducted by Jain K et al, where mean age of menarche was noted to be 13.16 years²⁻³. Most of the students claimed to have regular menstrual cycles (68%), with normal flow (76.5%), with an average duration of 3-7 days (88.75%), with occasional passage of clots in 63.5 %. About 128(32%) students claimed to have irregular cycles .10% of students seemed to have menorrhagia. Study showed that 371 (92.75%) students used sanitary pads, about 29 (7.25%) students used clothes.

Table 2: Menstrual cycle variables

Age of menarche	N	Percentage
<11 years	24	6%
12 years	96	24%
13 years	194	48.5%
14 years	70	17.5%
>15 years	16	4%
Menstrual cycle		
Regular	272	68%
Irregular	128	32%
Sanitary protection used		
Clothes	29	7.25%
Sanitary pads	371	92.75%
Menstrual cups	0	0
Duration		
<2 days	15	3.75%
3-7 days	355	88.75%

>7days	40	10%
Amount of menstruation		
Scanty	38	9.5%
Normal	306	76.5%
Excess	56	14
Passage of clots		
Occasional	254	63.5%
Always	146	36.5%

Source of information and knowledge on menstruation

Majority of students (58.5%) did not have information regarding menstruation before their menarche. A systematic review in India revealed that less than half of the adolescents in India have menstrual information prior to menarche (Van Eijk et al) ⁴. Of 166 students having menses related information before the onset of menses, 81(48.79%) students mentioned mother as the main source of information and 48 (28.91%) students got such information from their peers. Other source of information were teacher 8%, friends 9%, media 4.8%. Mothers followed by friends and sisters were the more common sources of information. An Indian council for medical research (ICMR) study and research carried out by A Dasgupta A and Sarkar M, Omid25var S and Begum K, Ray S et al, and other researchers also reported similar findings⁵⁻⁷. Only 62% of students knew that the bleeding occurs from uterus, whereas the other students have no proper idea of the source of menstrual blood. There were numerous supernatural and traditional perceptions and beliefs attributed by adolescent school girls towards menstruation. "Restriction at home necessary" and "harmful for a woman if she runs or dances during menstruation" were common misconceptions endorsed by 39.5% and 46.5% students, respectively. Around 234(58.5%) students believed that frequently changing pad was known as menstrual hygiene. Nearly two third 266 (66.5%) of students have a good overall knowledge about menstruation.

Table 3: Knowledge of Menstrual hygiene management

Knew about menstruation prior to menarche	N	Percentage
Yes	166	41.5%
No	234	58.5%
Source of knowledge		
Mother	81	48.79%
Sister	48	28.91%
Teacher	14	8%
Friends	15	9%
Media	8	4.8%
Normal age of menarche		
Know correctly	264	66%

Incorrect information	136	44%
Knows normal duration of cycle normal flow		
Know correctly	88	22%
Incorrect information	312	78%
Source of menstrual blood		
Uterus	248	62%
Vagina	148	37%
Abdomen	4	1%

Perceptions and attitudes toward menstruation

A total 95% of our participants regarded menstruation as a physiological phenomenon, yet there remained 5% who doesn't agree this. Nearly 70% students feel uncomfortable to discuss about menstruation. Only 214 (53.5%) of our study group could boldly deny the anxiety associated with menstruation. 124(31%) students still consider menstruation is debilitating, annoying and bothersome. 172 (43%) students were neutral about carrying sanitary products to college, while 228 (57%) felt cautious. The role of food and exercise on menstruation was accepted by 288(72%) of our respondents. 75.5% students still believe that some foods should be avoided during menstruation. A total of 86% of the participants, still believed in the taboo of not visiting temples, entering kitchen or wedding, eating pickles. This is consistent with a study by Sharma S et al, according to which 46.5% girls practiced different restrictions during menstruation, the most common of which was restriction to pray or worship in temples during periods (82%)⁸. Overall, 167 (41%) students have positive attitude towards menstruation

Table 4: Attitude towards menstrual hygiene

Feel uncomfortable to discuss about menstruation	280 (70%)	120 (30%)
Menstruation is a physiological process and external indicator of women's health	380 (95%)	20 (5%)
Menstruation is debilitating, annoying and bothersome	124 (31%)	276 (69%)
Food and exercise has a no role in quantity and duration of menstrual flow	112 (28%)	288 (72%)
There are some food (curd and sour items), girls should avoid during menstruation	302 (75.5%)	98 (24.5%)
Visiting temples, entering kitchen, touching food stuff are restricted	344 (86%)	56 (14%)
Talking about menstruation, sanitary products and practices must be restrictive to small groups of individuals in order to be effective	356 (81.5%)	56 (14%)

There is anxiety associated with menstruation	186 (46.5%)	214 (53.5%)
There is hesitation to carry pads to college or work place	172 (43%)	228 (57%)
Buy sanitary pads without been seen	124 (31%)	276 (69%)
Positive attitude	164 (41%)	
Need improvement	236 (59%)	

Menstrual hygiene management practices

About 29.75% students claimed that menstruation affects their day to day activities.49% students claimed to have dysmenorrhea, 19% of them were able to attend classes by taking medication and 10.5% of them forced to take rest. Total 92.75%of respondents used commercially available sanitary pads, 71.5% of them dispose pads in plastic bags and 93.75% of them wash their hands regularly after changing pads and toileting .7.25% students still use cloth as an absorbent and 28% still do not follow the ideal method of disposal. Practice of menstrual hygiene regarding to material to be used, frequency of changing pads and undergarments was followed correctly by 92.75%, 43% and 80% respectively. Overall, the standards of menstrual hygiene were followed correctly by 284(71%) students

Table 5: Practice of menstrual hygiene

Menstruation affects usual day to day activities	N	Percentage
Yes	119	29.75%
No	281	70.25%
changes how many pads per day		
2	120	30%
3	94	23.5%
More	80	20%
Only when soaked	166	41.5%
Changes pad at college / work place		
Yes	186	46.5%
No	224	53.5%
Hand wash before and after changing		
Yes	375	93.75%
No	25	6.25%
Changing undergarments		
Once	80	20%

Twice	320	80%
Bath daily		
Yes	400	100%
No	0	0
Material used to clean external genitalia		
Only water	24	6%
Soap and water	360	90%
Water with antiseptic solution	4	1%
Intimate wash	12	3%
Experiencing problems		
Stomach ache	196	49%
Back pain	140	35%
Vomiting	38	9.5%
Head ache	26	6.5%
Day to day activities		
Able to attend classes	286	71.5%
Able to attend classes by taking medication	76	19%
Need to take rest	42	10.5%
Dispose sanitary pad used		
Wrapped in paper into dustbin	286	71.5%
Throwing open	26	6%
Burning	48	12%
Flushing	42	10.5%
Fair practice	284	71%
Poor practice	116	29%

DISCUSSION

In this study little above half (62%) of the respondents mentioned that menstruation is the uterine bleeding. 37% of them mentioned that is the bleeding from vagina and 1% stated that menstruation is the bleeding from stomach. A study reported that 1 out of every 3 girls in South Asia knew nothing about menstruation before attaining menarche and another study from India reported that 10% of the girls believed that menstruation is a disease.⁷

The majority (67.0%) of the respondents were surprised during their first menstruation, 54.7% of them mentioned that its normal for them and 44.3% were afraid during first menstruation. A study presented that menstruation is a normal process; but in most parts of the world, it remains a taboo and is rarely talked about.⁸

About 92.75% of the respondent's mentioned that the material used during menstruation was sanitary pad, followed by washed cloth (7.25%). A similar study reported the following practices during menstruation - 11.25% of the girls used sanitary pads during menstruation, 42.5% of them used old cloth pieces and 6.25% of the girls used new cloth pieces.⁹

There were numerous supernatural and traditional perceptions and beliefs attributed by adolescent school girls towards menstruation. "Restriction at home necessary" and "harmful for a woman if she runs or dances during menstruation" were common misconceptions endorsed by 39.5% and 46.5% students, respectively. Around 234(58.5%) students believed that frequently changing pad was known as menstrual hygiene. Nearly two third 266 (66.5%) of students have a good overall knowledge about menstruation. This is similar to the findings of another study conducted in northern part of Nigeria.¹⁰

CONCLUSION

Overall, most of the students have good knowledge attitude and practice of menstrual hygiene, but few of them still have moderate and poor knowledge and attitude although there is no poor practice among them. This demonstrates a need to design acceptable awareness creation and advocacy programs for adolescent school girls and the public to improve the knowledge and safe hygienic practice of their menstrual flow.

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