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Original Article

Knowledge, attitude and practice of menstrual hygiene among nursing students in a rural medical college

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Abstract

Introduction: Menstruation despite being a natural process is with several misconceptions and false practices, resulting in adverse health outcomes. Nurses are bridge between patient and medical profession. Hence present study was undertaken to assess knowledge, attitude and practice of menstrual hygiene among first year nursing students.

Methods: Cross-sectional study conducted among 100 nursing students from June 2017 to August 2017. Participants were interviewed and data collected, analyzed using Statistical Package for Social Sciences and results expressed in frequency and percentages.

Results: 78% of students were aware of the menstruation. 48% felt discomfort at the time of menarche. 85/100 students had one or more restrictions during menstruation. 74% of them used sanitary pads during menstruation and 65% of those who used sanitary pads discarded them in dustbin and 16% of them burnt it.

Conclusions: From this study we found that knowledge and practices regarding menstruation is satisfactory, still education about menstrual hygiene need to be imparted at the grass root level. Health care workers, teachers and media can play a major role in hygienic menstrual practices.

Keywords: Menstrual hygiene, nursing students, knowledge and practice

Introduction

Menstruation is a unique event in the life of a girl which is also one of the milestones of puberty and adolescence. WHO has defined Adolescence as the period between 10-19 years of life [1]. Adolescent girls constitute about 1/5th of the total female population in the world [2]. The topic of menstruation still remains taboo in many countries and the discussion of menstruation related problems is treated as shameful especially in developing countries [3]. In Indian society, menstruation is considered as unclean and the menstruating girls are being isolated and restrictions are being superimposed on them in the family, which reinforces a negative attitude towards the phenomenon [4].

Good menstrual hygiene practices include use of sanitary pads, its proper disposal and then proper washing of the genital area and then hand wash. The lack of proper knowledge about menstruation not only develops a negative attitude and misconception about this natural physiological process but also leads to unhygienic and unhealthy practices during this period which makes the female vulnerable to reproductive tract infections, pelvic inflammatory disease, urinary tract infection etc [5]. The main source of information about menstruation is from the mothers, friends, teachers, relatives and media [6, 7].

Nurses hold a very important position in the hierarchy of health care providers and act as a bridge between the patient and medical profession so that the assessment of their knowledge and practices about menstruation is of prime importance. Also, they can impart their knowledge to females at grass root level as nurses are the main health care providers in many remote and backward areas in our country. With this background, the present study was undertaken to assess knowledge, attitude and practices regarding menstruation among the 1st year nursing students and also to ascertain their level of menstrual hygiene among them.

Material and Methods

A descriptive cross-sectional type of study was conducted among the 100 nursing students in a rural medical college, Karnataka from June 2017 to August 2017 to identify their level of knowledge, attitude and practice regarding the menstrual hygiene.

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Inclusion Criteria

- First year female nursing students.
- Female nursing students who were willing to participate in the study

Exclusion Criteria

- Unwilling female nursing students or those who refuse to give written consent were excluded from the study

All nursing students who consented for the study were interviewed based upon a predesigned questionnaire.

The questionnaire included two parts

Part 1: socio demographic profile of students.

Part 2: KAP assessment is divided into 3 sections.

Section 1 = questions to assess the knowledge about menstrual hygiene.

Section 2 = questions to assess the attitude towards menstrual hygiene

Section 3 = questions to assess menstrual hygiene practices.

Data was collected by interviewing the individual women with pre designed structured questionnaire, then verified and

complied by computer analysis using SPSS. The data was entered in Microsoft office Excel and all statistical data was analyzed using Statistical Package for Social Sciences and results were expressed in frequency and percentages.

Results**Socio-demographic characteristics of the respondents**

Mean age of the study group was 19.5yrs±2.5yrs. 68% of them were below 20yrs and remaining 32% were above 20yrs of age. Majority of them were unmarried(78%). 60% of them were Hindu by religion and 22% were Muslim and 15% were Christian. 62% of them were from rural area and 38% were from urban. Most of them (63%) belonged to nuclear family. About 52% of the students' mothers had education ≥ HSC and 22% of the students' mothers were illiterate. Mean age of menarche was 13.5yrs. Majority of them (70%) attained menarche between 13 to 15yrs of age, 22% of them attained menarche before 13yrs of age and only 8% of them after 15yrs of age. 64% of them had regular cycles of 21 to 35days cycle and 36% of them had irregular cycles of varying duration. Demographics of the study population are shown in the table 1.

Table 1: Demographics of the study population

Demographic variables	Frequency (N =100)	Percentage
Age in years		
17-20	68	68%
21-25	32	32%
Menstrual history		
Age of menarche		
13-15yrs	70	70%
<13yr	22	22%
>15yrs	8	8%
Regularity of cycles		
Regular cycles	64	64%
Irregular cycles	36	36%
Marital status		
Unmarried	78	78%
Married	22	22%
Religion		
Hindu	60	60%
Muslim	22	22%
Christian	15	15%
others	3	3%
Residence		
Rural	62	62%
Urban	38	38%
Family type		
Joint family	25	25%
Nuclear family	63	63%
Extended family	12	12%
Mother's Education status		
Illiterate	22	22%
Primary school	26	26%
Higher secondary school(HSC)	40	40%
Graduate	12	12%

Knowledge about menstrual hygiene

78% of the students were aware of the right age of menarche and 68% of them knew that it occurs only in females before attaining menarche. Majority of them (82%) were aware of the normal menstrual period in terms of cycle regularity and duration of flow. 78% of them had the knowledge that chances of getting vaginal infection is more if it is not kept clean. 68% of them were aware about the menstruation even before attaining

menarche.

Regarding the source of information about menstruation, we got multiple responses from the students. Most of them got information from mother and sister; and few from friends, relatives and media. 86% of them knew exact source of menstruation as uterus. Majority of the students had a good knowledge about menstruation. Distribution of the study group based on the knowledge about menstruation is shown in table 2.

Table 2: Distribution of the study group based on the knowledge about menstruation

Knowledge	Aware	Unaware
Right age at menarche	78	22
Occur only in females	68	32
Duration of normal menstrual period	82	18
What happens when you do not clean your vagina frequently	78	22
Awareness before menarche	68	32
Source of bleeding during menstruation	86	14
Source of knowledge about menstruation before menarche	Frequency N=68	Percentage
Mother	38	56%
Sister	12	18%
Friend	10	15%
Others (relatives, media)	8	12%

Attitude towards menstrual hygiene

48% of the students felt discomfort when they attained menarche, 18% of them cried and 24% were scared at the time of menarche. 85 students out of 100 had one or more restrictions at the time of menstruation in some or the other form. 53% of them were segregated in the house and were not allowed to enter Pooja room or kitchen during menstruation, around 25 to 30% of them were not allowed to go to school and were not allowed to play outside. 15 out of 100 did not have any such restrictions. 33% of them followed the restrictions by their own wish whereas majority of them (67%) were forced to follow those restrictions. Distribution of the study group based on the attitude towards menstruation is shown in table 3.

Table 3: Distribution of the study group based on the attitude towards menstruation

Attitude	Frequency	Percentage
Reaction at menarche (N=100)		
Cried	18	18%
Scared	24	24%
Casual	10	10%
Discomfort	48	48%
Restrictions during menstruation		
Do not enter Pooja room or read Quran	40	47%
Do not play/physical work/exercise	30	35%
Do not go to school	25	29.5%
Do not enter the kitchen	42	49.5%
Do not attend family functions	20	23.5%
Segregated in the house	45	53%
No restrictions	15	15%
Attitude toward restrictions (n=85)		
By your own wish	28	33%
By the force of family members	57	67%

Practice of menstrual hygiene

74% of them used sanitary pads during menstruation; rest of them (26%) used cloths during menstruation. Out of 74 students who used sanitary pads, 30 felt that it is more comfortable, 23 of them had opinion that it gives adequate absorption and 21 of them felt it won't stain the cloths.

Among those who used cloth (26), 12 of them were comfortable using cloth, 10/26 felt it gives adequate absorption and remaining 4 said it will not stain the clothes. Out of 100 students, 68% of them changed the pad/cloth only after it is fully soaked. 32% of them changes material used every 3 to 6hrs once. 65% of the students who used sanitary pads discarded used pads in dustbin, 19% of them flushed it in the toilet and 16% of them burnt it. 60% of them clean their vagina once or twice in a

day and remaining 40% of them clean more than 2 times in a day. Distribution of the study group based on their practice of menstrual hygiene is shown in table 4.

Table 4: Distribution of the study group based on their practice of menstrual hygiene

Practice	Frequency (N=100)	Percentage
Material used during menstruation		
Sanitary pad	74	74%
Old cloth	7	7%
New cloth	19	19%
Frequency of changing material used		
Every 3 to 6 hrs.	32	32%
After complete soakage of first	68	68%
Perception regarding sanitary pad (n=74)		
Comfortable	30	40.5%
Adequate absorption	23	31%
Do not stain clothes	21	28.5%
Perception regarding cloth (n=26)		
Comfortable	12	46%
Adequate absorption	10	38.5%
Do not stain clothes	4	15.5%
Mode of disposal of pads(n=74)		
Dustbin	48	65%
Flush in the toilet	14	19%
Burn	12	16%
Frequency of cleaning vagina per day		
<2 times/day	60	60%
>2 times/day	40	40%

Discussion

Menstruation is a physiological process and attitude towards menstruation are achieved when girl child is knowledgeable about menstruation. Hormonal changes during puberty bring about sexual maturity, psychological, cognitive and physical changes in an adolescent girl to attain womanhood. This study focuses on nurses as choice of study group, as they are not only the future potentials as mothers but also strong pillars in reproductive health services.

In the present study, mean age of menarche was 13.5 yrs. which was similar to studies conducted by Shanbagh *et al.* and Balasubramanian *et al.* [8, 9] 64% of them had regular cycles which is also similar to studies conducted by Shanbhag *et al.* where 66% had regular cycle [8]. Kshirsagar *et al.* in their study found that 73% had regular menstruation [10].

In our study, 40% mothers of the participants were educated upto high school, while 12% were Graduate. Shanbagh *et al.* in their study found that 52.4% mothers were illiterate while only

9.5% completed their primary education [8]. Good literacy among mothers leads to good menstrual practices and help seeking behavior in case of any abnormalities.

In the present study, 68% of them were aware of menstruation before attaining menarche which is similar to study done by Verma *et al.* where 58% of them had prior knowledge about menstruation [11]. Several studies reported low to satisfying levels of awareness of menstruation at menarche between 39.8%- 73.4% [5, 12-14]. Ideally, every girl child must be aware of menstruation before menarche which has a long role in maintaining the menstrual hygiene and preventing related morbidities.

The source of information about menstruation before menarche was mother in 56% followed by sister in 12% respondents in this study. Prajapati and Patel in their study also found that 48.9% participants have mother as their first source of menstrual information [5]. However some studies found that teachers or friends as the first source of information regarding menstruation like in study conducted at Ghana that might be due to low literacy rate and shyness among parents to discuss this topic with their daughters [14].

In our study we observed that 86% participants were aware that bleeding during menstruation occurs from uterus. In study conducted by Prajapati and Patel this awareness was seen in only 17% [5]. As the participants in our study are nursing students, it is likely that they might know this fact very well.

In our study we found that around 80% of the participants were aware of the natural menstruation process. Shanbagh *et al.* in their study found awareness regarding this to be 73.7% while Prajapati and Patel found it to be only among 33.3% which could be due to low literacy among the study population [8, 5].

In our study, 48% girls felt discomfort, while 18% cried and 24% were scared and frightful on seeing bleeding from genitals for the first time. Studies done by Shanbagh *et al.* found 44% of them experienced fear on attaining menarche [8]. Inadequate knowledge regarding menstruation before menarche may be the reason for such reaction.

In India, different communities follow a different type of restrictions during menstruation. In our study, 53% of them were segregated in house, around 25 to 30% of them were not allowed to go to school and were not allowed to play outside. In a similar study by Mathiyalagen P *et al.*, girls were asked to sleep separately in 58% which was the most common restriction, followed by restricting religious activities seen in 44% [15]. In contrast, Verma *et al.* recorded playing and going outside home were the most common restrictions [11].

In our study 74% participants used sanitary pads during menstruation which is much higher than studies conducted by Prajapati & Patel only 26% and study by Shanbagh *et al.* 44% of them used sanitary pads [2, 8]. The reason behind this might be the selection of study participants who themselves are nursing students so they must be having knowledge regarding hygienic practices during menses. In our study 65% of the students who used sanitary pads discarded used pads in dustbin, 19% of them flushed it in the toilet and 16% of them burnt it. Similarly, 59% of them used dustbin for disposal of sanitary pad in study conducted by Evans in Ghana and 64% participants in the study conducted by Kshirsagar *et al.* [14, 10] Proper disposal of used sanitary pads is equally important in regards to menstrual hygiene, social health and environmental pollution.

In our study 60% of them cleaned vagina more than 2 times in a day which is similar to study by Shanbagh *et al.* 53.8% cleaned their external genitalia after voiding every time [8].

Conclusion

This study was conducted to assess menstrual knowledge and practices among nursing students who are the most important pillar in regards to policy making and implementation of women health. From this study we found that the knowledge and practices regarding menstruation is satisfactory, still education about menstrual hygiene need to be imparted at the grass root level. Anganwadi workers, health care workers, teachers and media can play a major role in safe and hygienic menstrual practices. All mothers irrespective of their educational status need to be taught about the importance of hygienic practices during menstruation, conveying timely and correct information regarding menses to their daughters and also should be encouraged to break the age old myths and taboos associated with menstruation.

References

1. Reid G, Bruce AW. Urogenital infections in women: can probiotics help? *Postgrad Med J* 2003;79:428-32.
2. Water Aid. Menstrual hygiene and management; an issue for adolescent school girls 2009. Available at: www.wateraid.org/nepal.
3. Najwa Karout. Knowledge and beliefs regarding menstruation among Saudi nursing students; *Journal of Nursing Education and Practice* 2016;6(1):23-30.
4. Dhingra R, Kumar A. Knowledge and practices related to menstruation among tribal (Gujjar) adolescent girls. *Etho-Med* 2009;3(1):43-48.
5. Prajapati J, Patel R. Menstrual Hygiene among Adolescent Girls: A Cross sectional study in Urban Community of Gandhi Nagar *JMR* 2015;14:122-125.
6. Gupta J, Gupta H. Adolescents and menstruation. *The Journal of Family Welfare* 2001;47(1):1-12.
7. Amu EO, Bamidele JO. Prevalence of menstrual disorders among adolescent girls in Osogbo, South Western Nigeria. *International journal of adolescent medicine and health* 2014;26(1):101-6.
8. Shanbhag D, Shilpa R, D'Souza N, Josephine P, Singh J, Goud BR. Perceptions regarding menstruation and Practices during menstrual cycles among high school going adolescent girls in resource limited settings around Bangalore city, Karnataka, India; *International Journal of Collaborative Research on Internal Medicine & Public Health* 2012;4(7):1353-1362.
9. Balasubramanian P. Health needs of poor unmarried adolescent girls – A community based study in rural Tamil Nadu. *Indian J Popul Educ* 2005;2:18-33.
10. Kshirsagar MV, Mhaske M, Ashturkar MD, Fernandez K. Study of Menstrual Hygienic Practices among the Adolescent Girls in Rural Area. *Ntl J Com-munity Med.* 2016;7(4):241-244.
11. Verma P, Ahmad S, Srivastava RK. Knowledge and practices about menstrual hygiene among higher secondary school girls. *Indian J Community Health* 2013;25:265-71.
12. Thakre SB, Thakre SS, Reddy M, Rathi N, Pathak K, Ughade S. Menstrual hygiene: knowledge and practice among adolescent school girls of Saoner, Nagpur district. *J Clin Diagn Res* 2011;5(5):1027-33.
13. Dasgupta A, Sarkar M. Menstrual hygiene: How hygienic is the adolescent girl? *Indian J Community Med* 2008;33:77-80.
14. Evans P, Helene A. Relationship between Female University Students' Knowledge on Menstruation and Their Menstrual Hygiene Practices: Study in Tamale, Ghana:

Advances in Preventive Medicine 2016, 1-10.

15. Mathiyalagen P, Peramasamy B, Vasudevan K, Basu M, Cherian J, Sundar B. A descriptive cross-sectional study on menstrual hygiene and perceived reproductive morbidity among adolescent girls in a union territory, India. *J Family Med Prim Care* 2017;6(2):360-365.