

RESEARCH ARTICLE

A cross-sectional study on knowledge of menstruation and hygiene practices among first year medical students of Jamnagar, Gujarat

Betsy Johnson, Nileshwari Himatlal Vala

Department of Physiology, M P Shah Government Medical College, Jamnagar, Gujarat, India

Correspondence to: Nileshwari Himatlal Vala, E-mail: drnileshwari.vala@gmail.com

Received: January 03, 2019; Accepted: January 21, 2019

ABSTRACT

Background: Menarche marks the beginning of a multitude of physical, physiological, and psychological changes in the lives of the adolescent girls. The reaction to menstruation depends on awareness and knowledge about the subject. Menstruation and menstrual practices are still clouded by taboos and sociocultural restrictions, resulting in adolescent girls remaining ignorant of scientific facts and hygienic health practices which sometimes result in adverse health issues. **Aims and Objectives:** The aims and objectives of this study were to understand the knowledge of menstruation and menstrual hygiene among 1st year female medical students. **Materials and Methods:** The study was conducted on 66 female medical students, after inclusion and exclusion criteria. They are given a questionnaire containing questions related to relevant personal history, menstrual history, practices, etc., for filling. **Results:** Of 66 students, 74.24% had knowledge about menstruation before they attained menarche, and in 68.18%, mother is the main source of information. 15% has used cloth at some point of time, most of them being from rural areas. At present, 98% are using sanitary napkins. 15% of them are uncomfortable to go to shops alone to buy sanitary napkins. **Conclusion:** Menstrual hygiene is a vital aspect of health education for adolescent girls as it related with health consequences. Since mothers form a major source of menstrual information, educating the mothers can lead to more hygienic practices. Since the practice of using cloth is seen more in the rural areas, increasing the availability of sanitary napkins at an affordable price in the rural settings can result in more hygienic practices in rural areas.


KEY WORDS: Menstruation; Menstrual Hygiene; Adolescent Girls

INTRODUCTION

According to the WHO, the term adolescents refer to young people between the ages of 10 and 19 years.^[1] The first menstruation also called menarche is an indicator of developmental maturation in women whose arrival marks the transition from being a child to a teenager.^[2]

Menstruation and menstrual practices are still clouded by taboos and sociocultural restrictions, resulting in adolescent girls remaining ignorant of scientific facts and hygienic health practices which sometimes result in adverse health issues. The reaction to menstruation depends on awareness and knowledge about the subject. The menses in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche.^[3]

Issues associated with menstruation are never discussed openly, and this burdens young girls by keeping them ignorant of their biological functions. Until now, the poor menstrual hygiene in developing countries has been an insufficiently acknowledged problem. Researchers confirm that, with safe

Access this article online	
Website: www.njppp.com	Quick Response code
DOI: 10.5455/njppp.2019.9.0101121012019	

National Journal of Physiology, Pharmacy and Pharmacology Online 2019. © 2019 Nileshwari Himatlal Vala and Betsy Johnson. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

menstrual hygienic practices, adolescent girls will be less vulnerable to reproductive tract infections.^[4]

MATERIALS AND METHODS

The Institutional Ethics Committee clearance was obtained (Ref. No. Certi/160/09/2018). Female volunteers were invited from the 1st year MBBS student body. Those who have not attained menarche or have menarche-related problems were excluded from the study. Thus, the study was conducted on 66 1st year female medical students over a period of 1 month. The participants were given a questionnaire to fill out. The questionnaire contains questions related to relevant personal history, menstrual history, practices, etc. The participants are required to answer this questionnaire to the best of their knowledge. The statistical analysis was performed by simple proportions using Microsoft Office Excel 2007.

RESULTS

Table 1 shows that 74.24% of students knew about menstruation even before menarche. Moreover, in 68.18%, mother is the primary source of menstrual information. About 15% of the population had used cloth as the absorbent at some point of time, but at present only 1.5% continues to use cloth. About 15% of the students practice acts of separation such as sitting separately, sleeping separately, and not going to worship places. It is also seen that 19% of the students do not enter kitchen during menstruation.

Table 2 shows that, in 68.18%, mother is the main primary source of information regarding menstruation for the students. It is then followed by friends in 20% of the students,

Table 1: Distribution of students in relation to menstrual knowledge and practices

Distribution	Total n=66 (%)
Knew about menstruation before menarche	74.24
Mother as the primary source of information	68.18
Used cloth before using SP	15
Continue to use cloth	1.5
Practice separation during menstruation	15
Do not enter the kitchen during menstruation	19

SP: Sanitary pads

Table 2: Distribution of students with relation to primary source of information

Primary source of information	Total (%)
Mother	68.18
Friend	20
Teacher	11
TV	1

TV: Television

teacher in 11% of the students, and television (TV) in 1% of the students.

Table 3 presents the study data by viewing it through a rural and urban setting. It is found that the knowledge about menstruation before menarche is higher in urban areas (76.9%), with mothers contributing significantly as a primary source of information (75%) in urban areas compared to rural areas. In rural areas, it is also observed that an initial use of cloth as absorbent is more prevalent (28.5%) as compared to urban areas. The proportion of students practicing separation during certain daily activities such as sitting and sleeping separately, not going to worship places, and not entering kitchen was found to be more among the rural areas (50%) compared to the urban areas.

DISCUSSION

The present study, which was conducted on 66 female medical students selected after the inclusion and exclusion criteria, had students from both rural and urban population. Of these, 74.24% ($n = 66$) had knowledge about menstruation before they attained menarche. In general, mother is found to be the main source of primary information about menstruation, which is 68.18% when compared to other sources such as friends, teachers, and TV. However, when comparing rural and urban areas, the contribution of rural mothers is found to be less. It has also been found out that 15% has used cloth at some point of time, most of them being from rural areas, but at present 98% are using sanitary napkins. 15% of them are uncomfortable to go to a shop alone to buy sanitary napkins for themselves. About 15% of the students practice restrictions during menstruation which includes sleeping separately and not entering worship places. It is also seen that 20% of the students do not enter kitchen during menstruation. Moreover, it is seen that the practices of separation and not entering kitchen are seen more among the rural population (50%) when compared to urban population (30.8%).

Comparing the present study values with other studies, it is seen that 74.24% of the students, in our study, had knowledge about menstruation even before menarche, while a study conducted by Patel *et al.*^[4] shows that 84.24% of the students had a knowledge about menstruation even before menarche. Another study conducted by Sharma *et al.*^[2] also shows that 67.61% of the students had a knowledge about menstruation even before menarche. Hence, the above values look quite similar. In the present study, it is seen that, in 68.18% of students, mother is the primary source of information regarding menstruation. The study by Patel *et al.*^[4] also shows that, in 56.73% of the students, mother was the primary source of information. In the present study, 98.48% of the students are using sanitary napkins as absorbents at present. The study by Patel *et al.*^[4] showed that 86.70% are using sanitary napkins, and the study by Sharma *et al.*^[2] showed that 86.36% are using sanitary napkins.

Table 3: Relation between residential area of students and menstrual knowledge and practices

Menstrual knowledge and practices	Total	Rural (%)	Urban
Students	66	14	52
Knew about menstruation before menarche	49	9 (64.2)	40 (76.9)
Mother as primary source of information	45	6 (42.8)	39 (75)
Used cloth before using SP	10	6 (28.5)	4 (11.5)
Continue to use cloth	1	1	0
Practice separation during menstruation	10	2 (14.3)	8 (15.4)
Do not enter the kitchen during menstruation	13	5 (35.7)	8 (15.4)

SP: Sanitary pads

It is seen that since the study was conducted in a smaller sample size, the study was not able to give a larger insight into the current situation, which is a major limitation. However, even in a small sample size, the findings were in agreement with other studies, thus showing the widespread prevalence of the issue.

Thus, we can conclude that mother is the primary source of menstrual information for the students, which is 68.18% in our study and 56.73% in the study by Patel *et al.*^[4] We can also see that a large number of students had knowledge about menstruation before menarche, which is 74.24% in our study, 84.24% in a study by Patel *et al.*,^[4] and 67.61% in a study by Sharma *et al.*^[2] Finally, while the present study showed that 89.48% of students are using sanitary napkins at present, a study by Patel *et al.*^[4] showed that 86.70% are using them and a study by Sharma *et al.*^[2] showed that 86.36% are using sanitary napkins.

CONCLUSION

Of 66 students, 74.24% had knowledge about menstruation before they attained menarche, and in 68.18%, mother is the primary source of information regarding menstruation. However, it is seen that the percentage of mothers contributing to provide primary information is less in rural area with only 42.8%, as compared to urban population which has 75%. Thus, focusing more on the education of mothers, especially in rural area, can be a major milestone in the area of health education of adolescents.

About 15% has used cloth at some point of time, most of them being from rural areas. Since the practice of using cloth is seen more in the rural areas, increasing the availability of sanitary napkins at an affordable price in the rural settings can result in more hygienic practices in rural areas. At present, 98% are using sanitary napkins. 15% of them are uncomfortable to go to shops alone to buy sanitary napkins even after joining a medical college

which shows the need of more awareness among medical students too.

It is seen that 15% of the students practice restrictions during menstruation which includes sleeping separately and not entering worship places. Furthermore, 20% of the students do not enter kitchen during menstruation. Moreover, overall, the practices of separation and not entering kitchen are seen more among the rural population (50%) when compared to urban population (30.8%). Thus, it again highlights the increased need of awareness and education regarding menstruation and hygiene practices, especially in the rural areas.

ACKNOWLEDGMENT

The authors would like to thank Dr. Gitesh Jayprakash Dubal for his valuable support for the study.

REFERENCES

1. WHO/Adolescent Health- World Health Organization. Available from: http://www.who.int/topics/adolescent_health/en. [Last accessed on 2018 Nov 24]
2. Sharma N, Sharma P, Sharma N, Wavare RR, Gautam B, Sharma M. A cross sectional study of knowledge, attitude and practices of menstrual hygiene among medical students in north India. *J Phytopharm* 2013;2:28-37.
3. Dasgupta A, Sarkar M. Menstrual hygiene: How hygienic is the adolescent girl? *Indian J Community Med* 2008;33:77-80.
4. Patel H, Patel R. A cross sectional study on menstruation and menstrual hygiene among medical students of Valsad, Gujarat. *Int J Reprod Contracept Obstetr Gynecol* 2016;5:4297-302.

How to cite this article: Johnson B, Vala NH. A cross-sectional study on knowledge of menstruation and hygiene practices among first year medical students of Jamnagar, Gujarat. *Natl J Physiol Pharm Pharmacol* 2019;9(3):265-267.

Source of Support: Nil, **Conflict of Interest:** None declared.