

A Cross Sectional Study on Attitude, Knowledge and Practices of College Students towards Menstrual Hygiene Management in Bhubaneswar

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Abstract

Background: The knowledge about menstrual hygiene management is very poor among adolescent girls today. Cultural beliefs about menstruation such as food habits, untouchability and restrictions in attending religious functions have negative impact on dignity, health and education of girls and changing attitude of male members of the society

Objective: The objective of this study was to compare the attitude, knowledge and practice of menstruation among college students (19-25 years).

Method: A cross sectional study involving 90 college students in both government and private colleges of Bhubaneswar was carried out and the information was obtained using a semi-structured questionnaire. Students who had achieved menarche prior to the study were included.

Results: Majority of the girls (77.8%) achieved menarche between 13-25 years. Approximately 73.3. % of the respondents were shy enough to discuss menstruation with a female partner and 84.4 % still bought sanitary pads wrapped in a newspaper. A large number (62.2%) reported of being sick during menstruation while 28.9 percent accepted menstruation as a sign of maturity. Nearly 37% received a pre menarcheal knowledge from their mother and sister. Majority of male respondents (88.89%) reported that blood flow during menstruation was painful while one fourth of the respondents believed that the source of menstrual blood was vaginal. Nearly three fourth of the male participants reported of not having bought a sanitary napkin ever.

Conclusion: There are a lot of challenges regarding proper menstrual hygiene management practices. An effective curriculum should be designed so as to deal with several aspects of adult reproductive health sensitively.

Introduction

Menstruation is a natural process linked to the reproductive cycle of women and girls. It is not a sickness, but if not properly managed it can result in health problems which can be compounded by social, cultural and religious practices. The start of menstruation is one of the most important events in the evolution of women, so that the first menstruation or menarche is considered important event during puberty. [1] Menstrual cycle can generate positive feelings regarding a good reproductive health, however, it is also an event of anxiety for girls as well as a sociocultural event relying on concealment of menstruation concept. [2] Although, menstruation is a natural physiological process of menstruation, but sometimes can be accompanied with the physical and health issues discomfort and might finally can cause physical, emotional and social destructive effects [3]. Studies have reported that the physical problems caused by menstruation can be found on the daily activities, for example in the performance of social and educational activities among adolescent girls [4]. Numerous studies, particularly from low-income countries, show that a very high number of girls start menstruating without having any idea what is happening to them or why [5-7]. Since parents can find it difficult to speak of sensitive and sexual issues with their children, even while admitting it is also their responsibility [8-9]. Menstrual hygiene is also likely to be affected by contextual factors, such as access to places where girls can manage menstruation-related washing in privacy and comfort. These factors are influenced by having access to water, hygiene and sanitation facilities at school or household. [10-11]. Poor MHM may

increase a woman's susceptibility to reproductive tract infections (RTI). [12] Reproductive tract infections, which have become a silent epidemic that devastates women's lives is closely related to poor menstrual hygiene. [13-14]. India has one of the fastest growing youth populations in out of 1.2 billion adolescents worldwide. Young girls up to 20 years of age comprise one quarter of India's female population. [11]. Adolescent years have been recognized as a special period in the life cycle of adolescent women as it requires specific and special attention [10]. This transition phase makes them vulnerable to a number of reproductive health morbidities.

Literature Review

Myths and mysteries have long enveloped the truth about menstruation. It is customary for some girls to restrict their activities during the periods as per their social their activities during the periods as per their social customs and religious beliefs. She is not allowed to touch items of food, growing plants, flowers etc. According to Patel et al most women (73.6%) reported restrictions in their daily activities during the menstruation [13]. Although nutrition and genetics play an important role in age at menarche, psychosocial and environmental factors have also been associated with menarcheal timing. Menarche occurs at an earlier age among girls raised in stressful circumstances, such as father absence or stepfather presence (Jean, Wilkinson, & Spitz et al., 2011; Mendle et al., 2006) [14], or sexual abuse (Mendle, Leve, Van Ryzin, Natsuaki, & Ge, 2011). Lower socio-economic status also has been associated with earlier age at menarche (James-Todd, Tehranifar, Rich-Edwards, Titievsky, & Terry, 2010) [15], although racial differences have been shown (Braithwaite et al., 2009) [16]

McPherson and Korfine [17] conducted a study with college-aged women to explore the relationship between early and current menstrual experiences. First, participants answered a questionnaire about their menarcheal experience and about their preparation for menarche; then, those participants who fell in the upper or lower 25% of both measures were asked about their current menstrual attitudes, experiences, and behaviours. It was found that those women who had extremely negative early menstrual experiences reported more current negative menstrual attitudes than did women with more positive experiences. On the contrary, women who had extremely positive experiences reported more positive body image and better general health behaviours. Furthermore, Estanislau, Hardy, & Hebling [9] conducted focus groups with women aged 21–51 years, and concluded that the way in which menarche was experienced may exert an impact on later women's reproductive health, sexuality, and lifestyle behaviours.

Objectives

This study descriptively analyses the knowledge, attitude, and practice related to menstruation among male and female in

colleges of Bhubaneswar, Odisha. The specific objectives of the study are:

1. To compare the attitude, knowledge and practice on menstruation among both male and female
2. To study the hygiene practiced and health problems during periods among females.

Methodology

Data source

The study is a college based cross sectional study which was conducted in April 2019. The study was conducted in a college selected through multi stage random sampling in urban area of Bhubaneswar, Odisha. The college chosen was NM institute of engineering and technology (NMIET). It is non-govt college affiliated to Biju Pattanaik University of Technology (BPUT), Bhubaneswar.

Sample size

Sample size was calculated by using formula at 95% confidence level, $N = (Z_{1-\alpha/2})^2 PQ / L^2$ followed by a multi stage random sampling method. During the available time period a total of 90 subjects were interviewed for this study.

Study tools

A semi structured questionnaire was developed for the study in English then, it was translated into "Odia" by an expert in that language keeping semantic equivalence to check the translation, and it was back translated into English.

Inclusion criteria

Those undergraduate students who willingly participated in the study were assessed for practice regarding menstrual hygiene.

Exclusion criteria

Students not interested to take part in the study were excluded from the study.

Students who were attending classes were excluded from the study.

Statistical analysis

SPSS version 21.0 (IBM, USA) was used for statistical analysis. Descriptive statistics, univariate and multivariable logistic regression analysis were performed to identify those factors associated with unsatisfactory menstrual hygiene practice, inadequate knowledge and negative attitude towards menstruation with a confidence interval of 95%, $p < 0.05$

Results and Discussion

The mean age group of the participants was in between 19-21 years. Most of respondents belonged to Hindu religion. In the present study all the respondents were pursuing their bachelor degree. 77.8% female started menstruation between 13-15 years while a mere 13.8 % were unaware about the exact time.

Around 51.1% of the participants stated that the bleedings were around 5-6 days in a month which is consistent with most studies around [3-5]. 57% percent complained about menstrual pain, which proves that menstruation brings about several physical discomfort [3]. 73.3 % agreed that they bought sanitary pads wrapped while 80% of them were hesitant to discuss this with a male companion. No doubt menstruation is a natural phenomenon but is still not discussed openly and the shame associated with it still persists [7]. The study revealed that the participants spent 30-40 rupees on an average per month for buying sanitary napkins revealing that sanitary napkins are still a better alternative than reusable cloth [11]. Nearly 80% of the respondents received pre menarcheal knowledge from their mothers which is also revealed in many previous studies [2-4]. Male respondents were unaware of the average cost of sanitary napkins, which denotes lack of knowledge about menstruation and also the shame associated with it.

Practices during menstruation

The use of cloth as sanitary protection was reported in 17.9% of female students, the rest were all using sanitary napkins. Of these, less than half of those who used cloth, washed the cloths with soap and dried them in the sun. Among those using sanitary napkins 37.7% disposed the napkins wrapped in paper and in a separate container, 23.4% burned the used napkins, 25.7% disposed the used napkins in a common bin and 13% flushed the used napkins in the toilet. 28.1% miss college during periods due to various reasons such as abdominal pain, fear of bad smell during menstruation, fear of staining in clothes, lack of safe disposal methods and traditional restrictions. 91.2% took bath during menstruation and 96.6% washed their private parts after changing their sanitary product. 92.2% did not use any products on private parts, whereas 5.4% used talcum powder and 1% used deodorant on their private parts. Almost 99.5% students, had heard of sanitary napkin, and almost 96.9% preferred use of napkins. Among the various other products, 42.7% students were aware of menstrual cup, 12 3.1% students were aware of tampon, 90.2% were aware of cloth and 65.8% were aware of reusable cloth.

Majority (47.7%) of the girls did not feel comfortable talking about menstruation; however, it was found that when their awareness levels are high, women are more comfortable to talk about menstruation compared to women who had lower awareness levels which is statistically significant. This could probably be because of the lack of inhibitions and misconceptions regarding menstruation. This is evident that knowledge is an independent factor to change the attitudes regarding menstruation among women

Attitudes regarding menstruation

Participants were asked whether girls should follow restrictions during menstruation such as should not be allowed

to enter the house/temple, should not be allowed to eat with others/should not be allowed to eat certain food items/ cannot attend functions/cannot play sports etc . Students who reported of that women should follow any one of these restrictions, were considered to have a negative attitude. Negative attitude to menstruation was higher among young men 78.5% compared to 48.4% young women, and this difference was statistically significant

Male respondents' perception and knowledge

62.2% of the male respondents agreed to the fact that female felt sick during the period while the reason cited by them was blood flow. This proves that male participants had no knowledge about the menstrual cramps and thought that blow flow caused sickness in females [5]. Several male participants also agreed that they didn't discuss menstruation at home, revealing that in a home either they are barred to talk so and whenever these issues is mentioned in front of a male it is only in terms of "monthly problem of girls". Negative attitude was found among 78.5% of the young men and 48.4% young women. The restrictions followed in the local region were asked in our questionnaire, and were commonly found to be: some of them were such as not allowed to enter the house, not allowed to go to temple, cannot attend functions, cannot run/play, restriction of certain food items, not allowed to touch regular items etc. In our study we found that 23.8% were not following any of these restrictions and rest of them were following at least one of them. Compared to our study, in a study done in West Bengal, 64.72% were following some restrictions and a study done in Gujarat among school children showed that 48.85% of them were not following any restriction. Though the prevalence of women following some kind of restriction was low in our study, there are still restrictions followed in many places which is deep rooted in the cultures of the people, in spite of urbanization and an increased level of awareness regarding menstruation. These beliefs are present for centuries. A view that persisted into the nineteenth century where Aristotle viewed menstruation as an outward sign of female inferiority. A pioneering nineteenth century Scottish gynaecologist claimed, „young girls should not play music or read serious books because it makes much mischief with their menstrual cycle“ [11]. The cultural dimension represents the way that a phenomenon is perceived within the society [13]. Menstruation is associated with deep rooted taboos and misconceptions in many countries and especially in our country, India. Majority of the girls which constitutes 81.1% of them quoted that they were not happy during menstruation and wished that they weren't born as a girl and only 21.9% of them felt happy during their periods. Around 74.9% felt that they were not confident during their periods. These attitudes will have a bearing on the mental health of the women who are in their vulnerable age group.

Conclusion

Awareness levels were poor among males in comparison to females. Practices regarding menstrual hygiene were adequate. However, misconceptions were widely prevalent among both genders. It was also found that the attitude regarding menstruation was poor in both males and females which indicate the need for the right knowledge and the right attitude to be instilled in these young minds.

The results of this study clearly depict knowledge about early menarche is based on family and the environment, therefore there is a need to involve parents, teachers and social organizations to create awareness about menarche and its management among these young girls to lead a productive life

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