

Research Article

A Study of Knowledge, Attitude and Practices Regarding Menstrual Health among Adolescent Girls in North Goa

Kalyani S¹, Abhishek Bicholkar², Jagadish A Cacodcar³

^{1,2}Post Graduate Student, ³Professor and Head, Department of Preventive and Social Medicine, Goa Medical College, Goa, India.
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Corresponding Author:

Kalyani S, Department of Preventive and Social Medicine, Goa Medical College, Goa, India.

E-mail Id:

kalloose1705@gmail.com

Orcid Id:

<https://orcid.org/0000-0003-4170-3784>

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A B S T R A C T

Introduction: Menstruation and menstrual practices are still bound by social and cultural restrictions and taboos resulting in ignorance among adolescent girls regarding scientific facts and proper menstrual hygiene practices. The issue of poor menstrual hygiene has been inadequately addressed in our society. Hence, the present study was undertaken to assess the knowledge, attitude and practices followed by adolescent girls in a higher secondary school in North Goa.

Materials and Methods: A cross-sectional study was conducted among 236 adolescent girls studying in XI and XII standards of Science, Commerce and Arts streams of a Higher Secondary School in Bardez Taluka of North Goa. The study participants were interviewed using a pre-tested structured questionnaire. Data was analyzed using SPSS version 22 and descriptive statistics was used to analyze and present the data.

Results: A total of 236 adolescent girls were included in the study. More than half i.e. 130 (55%) of the study participants had heard about menstruation prior to attaining menarche. The source of information among 217 (92%) of them was their mother. The most common custom followed by 109 (46%) study participants was restricted entry to Pooja room and restricted access to Holy scriptures during menstruation. As much as 17 (7%) of the girls regularly used cloth as an absorbent during their periods. 52 (22%) of them reported that they missed school during menses due to various reasons like fear of staining, pain, vomiting, and sometimes lack of proper toilet facility in schools.

Conclusion: The study findings revealed that menstrual hygiene was satisfactory among most of the study participants. A few of the study participants were poorly informed about the various aspects of menstruation and menstrual hygiene which should be addressed through extensive information education communication as well as behaviour change communication. Mass media and peer educators can be utilized to bring about an improvement in the knowledge, attitude and practices regarding menstruation and menstrual hygiene among adolescent girls.

Keywords: Adolescent Girls, KAP, Menstrual Health, Menstrual Hygiene

Introduction

WHO has defined adolescence as the age ranging from 10-19 years. It is the period between childhood and adulthood, marked by enhanced food requirement and basal metabolic activities and biochemical activities, endogenous processes like hormonal secretions with their influence on various organ systems.¹ Adolescence in girls has been recognized as a special period which signifies the transition from childhood to adulthood.² It is a crucial period in the life of a girl and brings with it a number of questions regarding menstrual cycle, bodily changes, psychological and behavioural changes, etc. in the girl's mind. Adolescent girls are often misguided and poorly informed about these changes which affects their health status as well as development.

There are many candidates for the title of "last taboo," but in 2013, menstruation has one of the strongest claims on it. The power of this taboo has meant that even in the field of WASH, menstruation has remained imprisoned by silence, stigma and neglect.³ Menstruation and menstrual practices are still bound by social and cultural restrictions and taboos resulting in ignorance among adolescent girls regarding scientific facts and proper menstrual hygiene practices. These taboos and myths have a deleterious effect on not only the health of adolescent girls but also their dignity. Isolation of menstruating girls and restrictions imposed on them in the family have reinforced a negative attitude towards this physiological phenomenon.⁴ Unhygienic menstrual practices can affect the health of girls and there is an increased vulnerability to reproductive tract infections, pelvic inflammatory diseases and other related complications.

Due to the indirect effects of menstruation on gender discrepancy and school absenteeism, poor menstrual hygiene and management may gravely hamper the realization of Millennium Development Goal (MDG)-2 on universal education and MDG-3 on women empowerment and gender equality.⁵ The issue of poor menstrual hygiene has been inadequately addressed in our society. Also, very few studies on menstrual hygiene and practices have been conducted in the state of Goa. Hence, the present study attempts to assess the knowledge, attitude and practices followed by adolescent girls in a higher secondary school in North Goa.

Materials and Methods

The present cross-sectional study was conducted among adolescent girls studying in XI and XII standards of Science, Commerce and Arts streams of a Higher Secondary School in Bardez Taluka of North Goa using purposive sampling method. The self-administered questionnaire was administered to the study population prior to a health talk on menstrual hygiene organised by the author. All

the adolescent girls present for the health talk and willing to participate in the study were included. Those who did not give consent were excluded from the study. The questionnaire included brief information about the study and necessary instructions needed to participate in the study. Considering the fact that most adolescent girls attain menarche by the age of 15 years, students were selected from XI and XII standards, all of whom were 16 years or above.

The study was conducted over a period of two months from July 2018 to August 2018. A total of 236 adolescent girls studying in XI and XII standards Science, Commerce and Arts streams of a Higher Secondary School in Bardez Taluka, North Goa were interviewed using a pre-tested structured questionnaire. The questionnaire contained information regarding the socio-demographic details, pattern of menstrual cycle of the study participants, details regarding knowledge like mechanism of menstruation, source of bleeding, attitude of the participants towards certain customs and beliefs during menstruation and hygienic practices during menstruation like use of sanitary pads, proper disposal of used pads, regular bathing and maintenance of good vaginal hygiene. Also, there were questions regarding reasons for school absenteeism during menstruation among the study participants.

Ethics clearance was taken from the Institutional Ethics Committee of Goa Medical College. Prior to starting the survey, the participants were informed that answering the questionnaire implies they give their full consent to use their responses for the study and for research publication without revealing their identity in any form. The study participants were free to refuse consent to participate. Confidentiality was assured and maintained.

Data was analyzed using SPSS version 22. Descriptive statistics were used to describe and present the data.

Results

A total of 236 adolescent girls were included in the study. A majority i.e. 149 (63.1%) were 17 years of age. 79 (33.5%) of them were 16 years old and 8 (3.4%) were 18 years old. Of the total study participants, 123 (52%) were Hindu by religion whereas Christian and Muslim students were 101 (43%) and 12 (5%) respectively.

Table 1, shows distribution of study participants according to knowledge about menstruation. More than half i.e. 130 (55%) of the study participants had heard about menstruation prior to attaining menarche. The source of information among 217 (92%) of them was their mother. As much as 203 (86%) study participants were aware that uterus was the organ that bleeds whereas less than half of them, i.e. 109 (46%) knew that menstruation was a physiological process occurring due to hormonal changes.

Table 1. Distribution of participants according to their knowledge about menstruation (n=236)

Knowledge	Frequency (%)
Heard about periods prior to menarche	
Yes	130 (55%)
No	106 (45%)
Source of information	
Mother	217 (92%)
Teacher	7 (3%)
Relatives	5 (2%)
Friend	6 (2%)
Organ from which bleeding occurs	
Correct (uterus)	203 (86%)
Incorrect	33 (14%)
Mechanism of menstruation	
Correctly reported	109 (46%)
Incorrect reported	127 (54%)

Table 2, shows the distribution of study participants according to their attitude towards menstruation. Most of the study participants, i.e. 151 (64%) were comfortable to talk about menses with their family and friends though 90 (38%) felt ashamed to buy sanitary pads from shops. The most common custom followed by 109 (46 %) study participants was restricted entry to Pooja room and restricted access to Holy scriptures during menstruation.

Table 2. Distribution of participants according to their attitudes towards menstruation (n=236)

Attitude	Frequency (%)
Comfortable to talk about menses to family/ friends	151 (64%)
Ashamed to buy sanitary pads from shops	90 (38%)
Restrictions	
Did not enter a pooja room/ read holy book	109 (46%)
Did not play/ exercise	63 (27%)
Did not go to school	9 (4%)
Did not talk to boys	9 (4%)
Did not enter kitchen	21 (9%)
Did not visit other's houses	35 (15%)
Did not attend family functions	31 (13%)
Stayed inside a room alone	0 (0%)
Avoided certain food items	85 (36%)

Table 3 and Table 4, show the distribution of study participants based on their menstrual practices. A majority of the study participants, i.e. 144 (61%) followed the correct practice of recording the date of periods whereas 153 (65%) study participants changed 2-3 pads per day. Proper disposal of pads was followed by 219 (73%) study participants. A high number of study participants i.e. 227 (96%) also properly wrapped the pads before discarding. As much as 17 (7%) of the girls regularly used cloth as an absorbent during their periods.

A majority of the study participants followed proper hygienic practices during menstruation. 233 (99%) of the study participants reported that they took bath daily during menstruation. Majority i.e. 210 (89%) study participants reported that they cleaned their private parts regularly while 158 (67%) cleaned more than 2 times per day. 52 (22%) of them reported that they missed school during menses due to various reasons like fear of staining, pain, vomiting, and sometimes lack of proper toilet facility in schools.

Table 3. Distribution of participants according to their practices during menstruation (n=236)

Practices	Frequency (%)
Recorded the date of periods	
Yes	44 (61%)
No	92 (39%)
Type of absorbent used during periods	
Sanitary pad	219 (93%)
Cloth	17 (7%)
Number of pads changed in a day	
≥4 pads	50 (21%)
2-3 pads	153 (65%)
<2 pads	33 (14%)
Method of discarding used pads	
Dustbin	5 (21%)
Flush in toilet	12 (5%)
Burn	219 (73%)
Whether wrapped the pad before discarding	
Yes	227 (96%)
No	9 (4%)

Table 4. Distribution of participants according to their hygienic practices during menstruation (n=236)

Practices	Frequency (%)
Take bath daily during periods	
Yes	233 (99%)
No	3 (1%)
During menstruation, whether private parts cleaned regularly	
With soap and water	210 (89%)
Only water	26 (10%)
How often private parts were cleaned/day?	
≤2 times	78 (33%)
≥2 times	158 (67%)
Whether bunked school during periods	
Yes	52 (22%)
No	184 (78%)
If yes, reasons for bunking? Out of 52 students	
Fear of staining/leaking	9%
Pain/vomiting	9%
Lack of proper toilet facility in school	5%

Discussion

In the current study, more than half of the study participants, (55%) had heard about periods before attaining menarche as compared to a study by Upashe SP et al.⁶ in Western Ethiopia in which 80% of the girls had heard about it. Also in similar studies done by Shanbhag D et al⁵ and Ghimire et al⁷, out of the total participants, 99.6% and 80% respectively had heard about menstruation. This stark difference in knowledge might be due to the shame and silence surrounding menstruation in India and also due to low educational status of their mothers who were in many similar studies, the key informant about menstruation to their daughters. More than two thirds of the girls in our study knew about the organ that bleeds during menstruation as opposed to a study by Tegegne TK et al.⁸ in which only 23% were aware. In a similar study by Thakre SB et al.⁹, only 18% of the participants knew about the mechanism of menstruation whereas in the present study, almost 46% girls could correctly identify it. This distinction in knowledge about the physiology of menstruation might be due to the fact that most of the study participants were from the Science stream in the school and were educated about it. Almost half of the adolescent girls followed customs at

home during menses, primarily restricted access to religious practices. Similarly, in a study done by Shoor et al.¹⁰ in Tumkur, 54% girls followed such religious restrictions. But in studies done by Prajapati J et al.² in Gandhinagar and Thakre SB et al.⁹ in Nagpur district, the percentage of girls following restrictions were respectively 87.5% and 95%. Also, in a study conducted by Seenivasan P et al.¹² in Chennai, 92.7% of girls never attended religious functions during menses. This reflects the progressive mentality regarding the customs surrounding menstruation over the years and that the attitude towards menstruation has gradually taken a positive turn in Goa.

Amongst the hygienic menstrual practices' evaluation, 93% of the participants reportedly used sanitary pads, but 7% still used cloth as absorbent. In contrast, a study done by Subhash et al⁹ in Nagpur showed that 49% of girls used cloth. Also, in a study done in Wardha district by Mubey AB et al.¹³ showed 46.67% of adolescent girls used cloth as absorbent. This proper hygienic practice among girls in the present study might be because of better awareness and education regarding menstrual hygiene in Goa. 89% of the girls used soap and water for intimate hygiene. These findings were consistent with a study done in Gandhinagar by Prajapati J et al.² in which 82% of them followed the same. The similarity may be due to better hygienic practices followed in educated urban communities.

In a study done in Ethiopia by Tegegne TK et al.⁸ for assessment of school absenteeism among girls during menstruation, almost 55% girls were absent from school during their last menstrual period. In the present study, only 7% of the study participants were absent from class during menses. This discrepancy in findings may be due to the type of schools and infrastructure in both studies due to which there was no basic toilet facility for girls in the study area in Ethiopia. In addition, most of the adolescents, i.e. more than 60% used pieces of clothes or rags than disposable sanitary napkins as menstrual absorbent which increased the fear of staining or leaking among them. Only very few students in the current study group voiced the same fear due to which they were absent from school.

Apart from the limitations arising out of its cross-sectional design, the current study included a limited number of adolescent girls from a single higher secondary school. Thus, the study findings cannot be extrapolated to the general population. The analysis included only descriptive statistics which does not assess risk factors and association. Also, the study lacks qualitative data which could have enhanced the quality of the study findings.

Conclusion

The study findings revealed that menstrual hygiene was satisfactory among the adolescent girls. Lack of sufficient

knowledge and awareness among some of the students regarding hygienic practices can be due to low level of education among their mothers who were the key informants regarding menstruation. A few of the study participants were poorly informed about the various aspects of menstruation and menstrual hygiene which should be addressed through extensive Information Education Communication as well as Behaviour Change Communication. Mass media and peer educators can be utilized to bring about an improvement in the knowledge, attitude and practices regarding menstruation and menstrual hygiene among adolescent girls. Incorrect restrictions, myths, beliefs associated with menstruation should be discouraged with the active involvement of parents and teachers.

Recommendation

Education regarding reproductive health and hygiene should be a part of the school curriculum. The teachers need to be trained in adolescent health and hygiene. All mothers should also educate their daughters regarding menstruation before attaining menarche. Hence, maternal education through existing health programs like ICDS should be enhanced. Incorrect restrictions, myths, beliefs associated with menstruation should be discouraged with the active involvement of parents and teachers. Better hygienic practices can be adopted by making sanitary pads available at affordable prices as well as offered freely through educational institutions and promoting them through social marketing.

Educational television programs, trained school health personnel, motivated school teachers and empowered parents can together play an important role in transmitting the critical messages of correct menstrual hygiene practices among adolescent girls.

Conflict of Interest: None

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