

Awareness of Menstrual Abnormality amongst Pre University College Girls (15-18 Yrs) in Belgaum, Karnataka State: A Cross - Sectional Study

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Abstract

Background: Adolescence is a milestone in the journey of life from childhood to adulthood. Menstrual health is one of the major areas of concern in reproductive health. It affects a large number of women throughout their reproductive life starting from adolescence. Moreover, menstrual disorders and improper hygiene practices have direct consequences to fertility and reproductive tract infection. **Materials and Methods:** Four hundred (400) adolescent girls of 15 to 18 years studying in PUC first year and second year at Raja Lakhamgouda Science College, Belgaum were selected for the study. It included the information on socio-demographic variables and information regarding menstruation. **Results:** In our study 95.20% of girls told that menstruation is physiological, 2.00% as pathological and 2.75 % opined that it is a curse. A total of 97.00% of the participants got information regarding menstruation from their mother and 3.00% of them from their sisters. Significant association was found between religion and mothers education with celebration of first menstruation, and praying during menstruation ($p < 0.01$). **Conclusion:** There is a need to provide education and equip the adolescent girls with skills regarding safe and hygienic practices and to make appropriate choices so as to enable them to lead a healthy reproductive life and prevent the risk for reproductive tract infections.

Keywords: Adolescents; Menstrual problems; Dysmenorrhoea.

Introduction

Adolescence is a milestone in the journey of

life from childhood to adulthood. During this stage both physiological and psychological changes take place within an individual.[1] Menstrual health is one of the major areas of concern in reproductive health. It affects a large number of women throughout their reproductive life starting from adolescence. Moreover, menstrual disorders and improper hygiene practices have direct consequences to fertility and reproductive tract infection.

In India school and college systems are

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ambivalent about imparting sex education. Teachers are often too embarrassed and uncomfortable to instruct. Isolation of the menstruating girls and restrictions being imposed on them in the family, have reinforced a negative attitude towards this phenomenon.

Majority of urban and rural population have a strange belief that menstruation is unholy. There is a substantial lacuna in the knowledge about menstrual abnormalities among adolescent girls which can be due to socio-cultural barriers in which they grow up. These differences create various problems for the adolescent girls. The need of the hour for girls is to have the information, education and an enabling environment to cope with menstruation issues.[2,3] Hence the present study has been undertaken to assess the awareness of menstrual abnormalities amongst pre university college girls which will be useful in modifying health promotional educational activities and reproductive health services for adolescent girls.

Material and Methods

This one year community based cross sectional study was undertaken in pre

university college Belgaum. The study was approved by Institutional Ethics Committee, Jawaharlal Nehru Medical College, Belgaum. Four hundred (400) adolescent girls of 15 to 18 years studying in PUC first year and second year at Raja Lakhamgouda Science College Belgaum were selected for the study, by simple random sampling method. After obtaining a written informed consent, the interview was conducted by using pre-designed and pre-tested questionnaire. It included the information on socio-demographic variables and information regarding menstruation. The statistical analysis was done using SPSS statistical software applying chi-square test.

Results

In the present study 72 (18.00 %) of study participants were of 15 years, 128 (32.00%) of 16 years, 92 (23.00%) of 17 years, and 108 (27.00%) of 18 years. Majority 320 (80.00%) of them were Hindus and 200 (50.00%) of girls were currently studying in PUC 1st year and 200 (50.00%) in PUC 2nd year. Fathers of 63 (15.70 %) girls were farmers, 155 (38.75%) of them were in business, 107 (26.80%) in government job and 75 (18.80%) were doing

Table 1: Distribution of participants according to abnormalities

Abnormality	Frequency	Percentage
1 Premenstrual symptoms	23	5.75
2 Dysmenorrhea	274	68.50
3 Oligomenorrhea	25	6.25
4 Polymenorrhea	34	8.50
5 Menorrhagia	38	9.50
6 No abnormality	06	1.50

Table 2: Association - Religion and Celebration of First Menstruation

Religion	Yes	No	Total
Hindu	306 (76.50%)	14 (3.50%)	320
Muslim	22 (5.50%)	22 (5.50%)	44
Christian	18 (4.50%)	18 (4.50%)	36
Total	346 (86.50%)	54 (13.50%)	400

$\chi^2 = 114.087$; $df = 2$; $p < .001$

Table 3: Association between Religion and Praying during Menstruation

Religion	Yes	No	Total
Hindu	86 (21.50%)	234 (58.50%)	320
Muslim	0 (0.00%)	44 (11.00%)	44
Christian	0 (0.00%)	36 (9.00%)	36
Total	86 (21.50%)	314 (78.50%)	400

$X^2=27.389$; $df=2$ $p<.001$

Table 4: Association between Mother Education and Praying during Menstruation

Mother education	Praying during menstruation		Total
	Yes	No	
Illiterate	34 (8.50%)	86 (21.50%)	120
SSLC	108 (27.00%)	0 (0.00%)	108
PUC	60 (15.00%)	0 (0.00%)	60
Graduate	112 (28.00%)	0 (0.00%)	112
Total	314(78.50%)	86 (21.50%)	400

$X^2=255.626$; $df=2$ $p<.001$

private job. A total, 120 (30.00 %) of mothers of study participants were illiterate.

In the present study, 295 (73.80%) girls attained menarche at 12 years, 91 (22.80%) at 13 years and 14 (3.50%) attained at 15 years. In our study, 381 (95.20%) girls told that menstruation is physiological, 8 (2.00%) pathological and 11 (2.75%) girls opined that it is a curse. Majority that is 388 (97.00%) girls got information regarding menstruation from their mother and 12 (3.00%) from their sisters. Out of 400 girls, 389 (97.25%) girls mentioned that menstruation is from uterus, 8 (2.00%) girls told that it was from vagina, 2 (0.50%) girls told that it was from abdomen and 19 (4.80%) girls mentioned it was from kidney.

In the present study, 31 (7.80%) girls told that they don't know about menarche, 8 (2.00%) of them told it is beginning of woman hood and 361 (90.20%) of them told that it is starting of the period. Among 400 girls, 346 (86.50%) celebrated 1st period and 54 (13.50%) did not celebrate. Majority of the study participants that is 293 (73.30%) girls mentioned duration of the blood flow as 2-5 days, 18 (4.50%) as 2-7 days, and 89 (22.30%) girls had for 5 days. Of the total 80 (20.00%) of girls had 20 days gap between two cycles, 50 (12.50 %) had 24 days, 260 (65.00%) girls had

28 days gap and 10 (2.50 %) had 30 days gap between two cycles. A total of 388 (97.00%) girls used sanitary pad as absorbent material, and 12 (3.00%) girls used cotton. In the present study 66 (17.00%) girls used two pads per day, 159 (41.00 %) 3 pads per day, 14 (37.11%) 4 pads per day and 19 (5.00 %) girls used 5 pads per day. Majority 388 (97.00%) girls said that they took bath and 12 (3.00%) girls did not take bath during menstruation.

Menstruation was associated with vomiting and diarrhea in 54 (13.50%) girls. A total of 240 (60.00%) girls attended college during menstruation. In our study, 274 (68.50%) participants had dysmenorrhoea during menstruation for which, 260 (95.00%) participants took tablet. Of 260 girls, 144 (55.50 %) girls took antispasmodics and 116 (44.90%) girls took any pain killers. Of the total participants 23 (5.75%) girls had pre menstrual symptoms, 25 (6.25%) of the participants had oligomenorrhoea, 34 (8.50%) had polymenorrhoea and 38 (9.50%) had menorrhoeagia (Table 1). In the present study, 314 (78.50%) participants were not praying and 342 (85.50%) of participants did not perform any religious activities during menstruation.

Significant association was found between

religion and celebration of first menstruation, and praying during menstruation ($p < 0.01$) (Table 2, 3). The data also reveals that there was significant association between mothers education and praying during menstruation ($p < 0.01$) (Table 4).

Discussion

Nearly one fourth of India's population comprises of adolescents representing a vibrant human resource. Menstrual health during adolescence is an important determinant of reproductive health. Hence it is of utmost importance to strengthen efforts and formulate innovative strategies to channelize adolescents' energies in a constructive direction.

The results of present study showed that majority of study participants were between 15 -18 yrs majority were Hindus and all girls were from class I socioeconomic status. The age of onset of menarche was between 12-15 yrs. Similar results were found in studies conducted in West Bengal, Nigeria, Teheran, Delhi and Pondicherry showed girls were in the age group of 11-19 years.[4, 5,6,7,8]

In our study most of the girls know that menstruation is physiological and few of them think that it is pathological and few of them consider it as a curse and they got the information regarding menstruation from their mothers and sisters. Similar results were also shown in studies[7,9,10,11] conducted in Mysore, Varanasi and other rural areas of east Delhi and Rajasthan.

7.80% girls in the present study told that they don't know about menarche, 2.00% of them told that it is beginning of woman hood and 90.20% of them told that it is starting of the period. Various studies conducted in Lucknow, Gaziapur and West Bengal showed that 60.00% and 45.00% and 30.50% girls did not know about menstruation respectively. [4,7,12]

In the present study, 97.20% participants knew about organ involved in menstruation. A study conducted in Rajasthan showed that

70.00% of the girls knew about organ involved in menstruation.[11]

In our study, 97.00 % of girls used sanitary napkins. And only 3.00% used cotton and 97.00% took bath daily during menstruation. Various studies^{13,14,15} conducted in Kerala, Riyadh, Saudi Arabia and Nepal revealed that most of the girls used sanitary napkins and some used clothes and very few took bath daily. Whereas, study conducted in West Bengal showed that many girls used clothes.[4]

In our study 17.00% participants changed 2 pads per day as they had mild bleeding, 41.00% changed 3 pads per day as they had moderate bleeding and 37.00% changed 4 pads per day as they had heavy bleeding. Where as in a study conducted in Nigeria revealed that 95.50% had little bleeding, 3.50% had moderate bleeding, and 1.00% had heavy bleeding.[5]

In our study we found that 5.75% of girls had premenstrual symptoms, 68.54% had dysmenorrhoea, 6.25% oligomenorrhoea, 8.50% polymenorrhoea, and 9.50% had menorrhagia. Similar study[5] conducted in Nigeria revealed that 9.00% of girls had irregular menstrual cycles, 62.50% had dysmenorrhoea, 12.50% had absenteeism, 29.00% had awareness of abnormality, and only 10.50% decided to seek medical help for problems related to menstruation. One more study conducted in Ghana revealed that 34.00% of participants had irregular cycles and 74.40 % girls had dysmenorrhoea.[16] Another study[17] conducted in Malaysia revealed that 76.00% had dysmenorrhoea, 59.90% had less concentration in the class and 36.00% were away from social and sports activities.

Conclusion

In our study most of the Hindu girls celebrated their menarche. Many girls had mild to moderate blood flow and they used sanitary napkins and some of them used cotton but no one used clothes. Most of the girls had regular cycle but associated with one or the other

problems. Most of the girls remained absent from the classes during menstruation. They stayed away from sports and social activities. Nobody consulted the doctor for their problem. Majority of girls took self medication for dysmenorrhoea.

Significant association was found between religion and mothers education with celebration of first menstruation, and praying during menstruation. There is a need to provide education and equip adolescent girls with skills regarding safe and hygienic practices and to make appropriate choices during menstruation so as to enable them to lead a healthy reproductive life and prevent the risk for reproductive tract infections.

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