



Original Research Article

Perceptions and Practices about Menstrual Hygiene among Adolescent Girls in a Rural Area - A Cross-Sectional Study

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ABSTRACT

Research question: What are practices among adolescent girls during menstruation?

Objectives:

- 1) To know the awareness regarding menstrual hygiene in adolescent girls.
- 2) To determine practices associated with menstruation.

Setting: Four villages randomly selected in the field practice area of AIMS, BG Nagara

Study design: Cross-sectional

Participants: Girls in the adolescent age group.

Sample size: 199

Methodology: The study was conducted among 199 adolescent girls of rural area with the help of a pre-designed and pre-tested questionnaire. Data was analyzed statistically by percentages and proportions.

Study variable: Socio-economic status, Personal hygiene during menstruation, source of information regarding menarche.

Statistical analysis: Percentages, Chi-Square test.

Results: Out of 199 respondents, 63.31% subjects did not know the source of bleeding, 61.3% girls had knowledge about menopause, 12% of girls are not allowed to do household work, 72.05% of unmarried adolescents used cloth piece as compared to 27.9% married adolescents.

Keywords: Adolescent girl, menstrual hygiene, sanitary pad.

INTRODUCTION

The World Health Organization defines adolescence as young people between the ages of 10 and 19 years. ⁽¹⁾

Adolescence is a vulnerable phase wherein the children are in a transition phase of childhood to adulthood. During adolescence, adolescent girls face challenging situations. One such situation confronted by girls is

menstruation. In the past, menstruation was considered to be an unclean phenomenon. The menstruating female was forbidden to do various household chores, and also she would not know the importance of hygiene. In this technological era also, the outlook does not seem to have changed.

Hence, the present study was undertaken to assess the awareness

regarding menstrual hygiene in adolescent girls and to determine practices associated with menstruation.

MATERIAL AND METHODS

Type of study: Community-based cross-sectional observational study.

Place of study: The present study was undertaken among the adolescent girls in Bellur PHC area, which constituted the field practice area of Dept of Community Medicine, AIMS, and BG Nagara

Duration of study: 6 weeks: From 5th Mar 2009 to 26th April 2009.

Study population: The girls were selected according to the WHO criteria for adolescence that is 10-19 yrs. ⁽¹⁾ Four villages were randomly selected. In these selected villages, all the adolescent girls who had attained menarche and who were found in their houses were interviewed. A total number of One hundred and ninety nine girls were found to be present in these four villages randomly selected so.

Study tool: A pre-designed, pre-tested questionnaire.

Inclusion criteria: All adolescent girls who had attained menarche.

Exclusion criteria: Adolescent girls not willing to take part in the study.

Statistical software used: MS excel and Epi-info

Methodology

Four villages were selected randomly in Bellur PHC area.

After taking oral, informed consent, all adolescent girls in these four villages were interviewed using pre-designed, pre-tested and structured questionnaire. The interview included topics related to awareness about menstruation, source of information regarding menstruation and hygienic practices during menstruation.

To assess socioeconomic status, modified BG Prasad Classification was used.

Statistical analysis: Data obtained was tabulated and analyzed statistically by percentages, simple proportions and chi square test.

RESULTS

Socio demographic profile [Table 1(a)]

In our study, majority of the respondents were in the age group 17 to 19 years of age. 24% of girls were married, of which majority were above 17 years. 75% belonged to lower class, 21% to lower middle class and 4% to upper middle class. 51% of girls were studying in high school followed by 21% who had studied up to pre-university and 16% had studied up to degree College. 76% of the girls were unmarried and 24% were married. 94% of the girls interviewed were Hindus and 6% were Muslims.

During Menstruation [Table 1(b)]

89% girls attended school during menstruation and 10% girls did not attend and only 1% did not attend school on first day of menstruation. Of the 10% girls who did not attend the school, 6% girls did not attend school because of dysmenorrhoea, 2.51% girls were not allowed to attend school by their parents as they felt that their children were impure and should not attend to school or any other public place and 1.5% girls did not attend school because they had the sense of guilt/shame.

Also 54% girls did not experience dysmenorrhoea, whereas 46% girls had dysmenorrhoea during menstruation.

Table 1(a) Socio demographic variables

Criteria	Number N=199	Percentage
Age		
12 – 15	40	20.1
15 – 17	47	23.61
17-19	112	56.28
Socio economic status (according to modified BG Prasad classification)		
Class I	0	--
Class II	0	--
Class III	8	4.02
Class IV	42	21.1
Class V	149	74.87
Education		
Degree	33	16.58
High school	102	51.25
Illiterate	1	0.50
Middle	19	9.54
Pre university	43	21.6
Primary	1	0.50
Marital status		
Married	48	24.12
Unmarried	151	75.87
Religion		
Hindu	187	93.96
Muslim	12	6.03
Attendance at school during menstruation		
No	20	10.05
Not on first day	2	1.00
Yes	177	88.94

Knowledge of Menstruation and menopause [Table 1(b)]

63.31% girls did not know the source of bleeding. 78.8% girls did not know the **Practices during menstruation [Table 1(b), Table 2, Table 3 and Figure 1]**

12% of adolescents were not allowed to do household work. 68.34% of girls used cloth piece as compared to 24.12% who used sanitary pads. 72% of unmarried adolescents used cloth piece as compared to 28% married adolescents [$\chi^2 = 3.61, p = 0.164$]. 48 girls used sanitary pads out of which 56.25% had studied up to high school. Higher education did not significantly increase the frequency of changing of pads.

Table 1(b) Knowledge and practices regarding menstruation

Knowledge about origin of bleeding		
Does not know	127	63.31
Uterus	72	36.18
Knowledge about the cause of bleeding		
Do not know	157	78.89
Physiological process	42	21.1
Pain during menstruation		
No	107	53.76
Yes	92	46.23
Knowledge of menopause		
Does not stop.	12	6.03
Does not know	65	32.66
Yes, at 45-50yrs of age	122	61.30
Is she allowed to do house hold work		
No	24	12.06
Not on first day	3	1.5
Yes	172	86.43
Absorbent used		
Cloth piece	136	68.34
Cotton	15	7.53
Pads	48	24.12

cause of bleeding, 61.3% girls had correct knowledge about menopause and 32.6% did not have any information about menopause.

Table 2 Marital status & absorbent used

Marital status	Married	Unmarried
Cloth piece	38	98
Percentage	27.94%	72.05%
Cotton	3	12
Percentage	20%	80%
Pads	7	41
Percentage	14.58%	85.41%

$\chi^2 = 3.61, df = 2, p = 0.164$

Table 3 Frequency of changing of pads in relation to educational status

Educational status	Number of Pads changed per day				
	1	2	3	4	5
Illiterate	0	1	0	0	0
Primary	0	1	0	0	0
Middle school	0	7	8	3	1
High school	7	53	35	7	0
Preuniversity/+2	3	26	12	1	1
Degree		27	6	0	0
Total	10	115	61	11	2

Source of information [Table 4]

The most common source of information and knowledge of menarche before menarche were friends-11.55% followed by the mother - 9.54% and teacher – 7.53%.

Figure 1 Education and sanitary pad usage

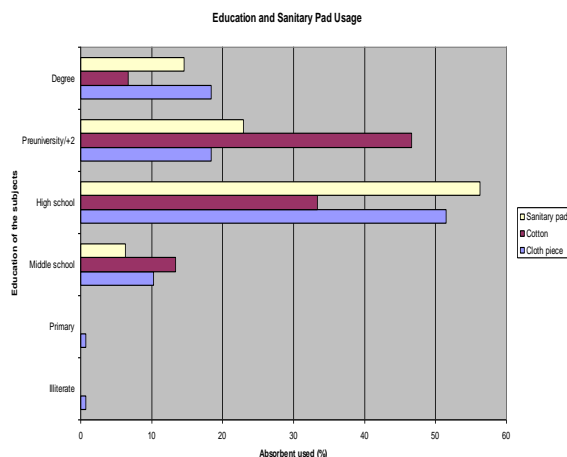


Table 4 Source[s] of information

Source of information	Number	%
Aunt	1	0.50
Batch mate	2	1.00
Elder sister	9	4.52
Friend	23	11.55
Grandmother	1	0.50
Mother	19	9.54
Teacher	15	7.53
Public health Programme in school	1	0.50

Note: multiple responses obtained

DISCUSSION

During Menstruation

Parents have understood that menstruation is physiological and hence are allowing their children who are undergoing menstruation to attend the school as is evident in our study wherein majority (89%) girls attended school during menstruation. Also it was found that 53.76% girls did not have dysmenorrhoea, whereas 46.23% girls reported dysmenorrhoea, which is slightly lesser than that found by Nair et al who reported dysmenorrhoea in 63.75% girls. (2) Agrawal S et al reported dysmenorrhoea in 84% of respondents. (3)

Knowledge of Menstruation and menopause

In rural areas, due to a low level of literacy, knowledge regarding any significant event is transmitted mainly through family members. In this study, the knowledge about the source and the cause of bleeding was found to be poor as 63.31% girls did not know the source of bleeding and 78.8% girls did not know the cause of bleeding. Das Gupta et al reported 97.5% of study subjects did not know the source of bleeding whereas 86.25% girls knew the cause of bleeding. (4) Since menstruation is a physiological process, knowledge should be imparted in rural areas mainly through schools and anganawadis. The parents and teachers should be involved in disseminating of knowledge.

Practices during menstruation

In our study, 12% of adolescents were not allowed to do household work. This is in contrast to Das Gupta et al, (4) who found that 33.82% of girls were not allowed to do household work and Nair et al reported 70%. (2) Also, our study showed that 68.34% of girls used cloth piece as compared to 24.12% who used sanitary pads. This is almost similar to the study in an urban area by Haldar et al in which 61.54% of girls used cloth piece as compared to 28.21% who used sanitary pads. (5) Also Baridalayne et al reported similar findings [60%] in an

urban resettlement area. ⁽⁶⁾ This assumes significance as our study was conducted in a rural area and the practices observed in our study are very much similar to that of urban areas. The use of pads is low (24.12%) and might be because of poverty and lack of availability in rural areas. The use of cloth over sanitary pad might mainly be due to either poor affordability or to lack of knowledge. Pad usage has been reported as low in rural areas by Deo et al. ⁽⁷⁾ Also In our study it was found that sanitary pad usage was the highest among Hindus (23.11%), and also in females who were educated up to high school (13.56%). 72.05% of unmarried adolescents used cloth piece as compared to 28% married adolescents. This might be because of the parental influence or may be because of low level of knowledge regarding hygiene. It was also observed that as age of the respondents increased, sanitary pad usage also increased. (p>0.5, Not significant)

Source of information

The most common sources of information about knowledge of menarche before menarche were friends-11% followed by the mother-9.54% and teacher – 7.53%. Singh AJ in his study found similar findings that friends (72%) were the main source of information. ⁽⁸⁾ Mother was the main source of information in studies conducted by SP Singh et al ⁽⁹⁾ and by Das Gupta ⁽⁴⁾ both reporting 64.9% and 67.5%. Deo et al reported teacher – 27.01% as the main source of information in rural area. ⁽¹⁰⁾ Our study showed a low level of information from the teacher. This might be mainly due to variety of reasons like school dropout after the girl reaches menarche, the subject being considered as taboo in various societies. Friends have been the main source of information in our study mostly because, a girl feels shy to ask her elders about menstruation which is still considered a subject not to be discussed openly in many

societies. This explains the fact that among the study subjects, mother and teacher are the sources of information in just under 10% and under 8% respectively. In schools, menstruation and its hygiene related aspects can be made a part of curriculum. And if it is already in the curriculum, then it should be stressed that the teachers inform girls of the various aspects of menstrual hygiene.

SUMMARY AND CONCLUSIONS

- 63.31% subjects did not know the source of bleeding
- 78.8% girls did not know the cause of bleeding.
- 32.6% did not have any information about menopause.
- 12% of adolescents were not allowed to do household work.
- 68.34% of girls used cloth piece as compared to 24.12% who used sanitary pads.
- 72.05% of unmarried adolescents used cloth piece.

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