

Knowledge and practices of menstrual hygiene in adolescent school girls of urban and rural schools of Gadag district

Dr. Shruti Bhavi Patil

Associate Professor, Department of OBG, Gadag Institute of Medical Sciences, Gadag, Karnataka, India

Corresponding Author:

Dr. Shruti Bhavi Patil

Abstract

Background: Menstruation is generally considered unclean in the Indian society though its a physiological process indicating beginning of reproductive life. Several prohibitions and the negative attitude of parents in discussing the related issues openly have blocked the access of adolescent girls to the right kind of information. Various studies indicate that a huge information gap exists among rural and urban adolescent girls regarding menstrual hygiene. The data about the level of knowledge and practices which are followed by them with respect to menses are beneficial in planning a program for improving the awareness level with respect to their quality of life.

Materials and Methods: A community based cross sectional study was conducted from July 2018 to September 2018 on 708 school going adolescent girls of Gadag district, Karnataka. Girls between age group 11 to 18 years were included. Data was collected by a predesigned, pretested questionnaire.

Result: Awareness of menstruation was only among 12.07% of rural school girls and 38.09% among urban school girls. The first source of information regarding menstruation was mother in 80% and only 17% from friends in both urban and rural girls. 18% of urban school girls always missed school and 35% of urban girls missed sometimes. Only 5.39% girls in rural areas always missed and 15.57% in rural areas missed sometimes. 76.22% girls from rural schools used sanitary pads and 68.31% of girls used in urban schools. Around 50% of girls both in rural as well as urban schools changed their pads twice a day. It was found that among the urban school girls 70.45 % of them disposed the sanitary pads by wrapping it in a paper, 10.82% flushed it in the toilets. In the rural schools, surprisingly 71.53% of them buried the sanitary pads, 7.56% flushed it and only 20.83% of them wrapped it in a paper. 40.93% of urban girls and 34.52% of rural school girls still practiced in the social taboos like diet restrictions, not attending religious functions or places of workshop.

Conclusion: There a need for adequate information both in rural and urban school girls. The knowledge about hygienic practices is lacking. There is also a need to address social taboos in both the groups. There is a need to emphasise on significance and physiological implications of menstruation.

Keywords: Menstruation, awareness, sanitary pads, menstrual hygiene, social taboos

Introduction

Though menstruation is a normal physiology in females, there is substantial lacunae in the knowledge about menstruation among young girls. Menstruation is generally considered unclean in the Indian society though its a physiological process indicating beginning of reproductive life. Insufficient and incorrect information regarding menstruation is often a cause of unnecessary restrictions in the daily activities of the menstruating girls creating various psychological issues. The lack of knowledge and awareness also lead to some poor hygienic practices during menstruation making them more vulnerable to reproductive tract infections.

Several prohibitions and the negative attitude of parents in discussing the related issues openly have blocked the access of adolescent girls to the right kind of information. Various studies indicate that a huge information gap exists among rural and urban adolescent girls regarding menstrual hygiene^[1,2]. Good hygienic practices and proper use of sanitary methods are essential during menstruation.

The data about the level of knowledge and practices which are followed by them with respect to menses are beneficial in planning a program for improving the awareness level with respect to their quality of life. Hence the present cross-sectional study was carried out.

Material and Methods

A community based cross sectional study was conducted from July 2018 to September 2018 on 708 school going adolescent girls of Gadag district, Karnataka. Prior permission from DDPI Gadag was taken. Both urban and rural schools were included. Verbal Consent was taken. Girls between age group 11 to 18 years were included. Data was collected by a predesigned, pretested questionnaire. It was a cross sectional study involving 708 adolescent girls of rural and urban schools of Gadag district. The adolescent girls 11 to 18yrs were included in the study. Those who did not answer the questionnaire were excluded from the study. The statistical analysis was done by percentages and T-test. Statistical significance of differences was tested. The P value ≤ 0.05 was significant.

Results

Out of total of 708 girls, 177 were from rural and 492 were from urban school. 39 girls were excluded from the study as they had not answered the questionnaire. Table-1 shows the distribution of girls among urban and rural schools. Table-2 shows the comparison of fear, embarrassment and confusion regarding menstruation among urban and rural school girls. In this study most of girls experienced fear and embarrassment as their first experience of which 54% from rural experienced embarrassment when compared to 35% of urban. The P value was 0.001, highly statistically significant.

As depicted in table-3 prior awareness about menstrual hygiene is generally low of which rural school girls were less aware. It was only among 12.07% of rural school girls and 38.09% among urban school girls. P value was 0.000 and is statistically significant. In this study the first source of information regarding menstruation was mother in 80% and only 17% from friends in both urban and rural girls which is well shown in table-4.

In this study as shown in table-5, 18% of urban school girls always missed school and 35% of urban girls missed sometimes. Only 5.39% girls in rural areas always missed and 15.57% in rural areas missed sometimes. The P value being 0.000 which is again significant. Table-6 show that 79% of rural school girls and 60% of urban school girls did not participate in sports or other physical activities in school. P value being 0.000 highly significant statistically.

In our study 76.22% girls from rural schools used sanitary pads and 68.31% of girls used in

urban schools as shown in table-7. P value was 0.3 and was not statistically significant.

In our study we found that around 50% of girls both in rural as well as urban schools changed their pads twice a day. However 45.16% of girls from rural schools and 25.14% of girls from urban schools changed pads three times a day as depicted in table-8.

In our study as shown in table-9, it was found that among the urban school girls 70.45 % of them disposed the sanitary pads by wrapping it in a paper, 10.82% flushed it in the toilets. In the rural schools, surprisingly 71.53% of them buried the sanitary pads, 7.56% flushed it and only 20.83% of them wrapped it in a paper. The differences in the results were highly significant statistically (P value 0.0000).

Table-10 shows that 40.93% of urban girls and 34.52% of rural school girls still practiced the social taboos. The differences in the results were significant. (P value 0.000).

As shown in table-11, 72.67% girls from rural schools and 63.16% girls from urban schools were hesitant to talk about menstruation. And 60% of girls both urban and rural schools took menstruation as a burden as depicted in table-12. However the P values being 0.17 and 0.7 respectively and not statistically significant.

Table 1: Distribution of girls among Urban and Rural schools

		Number	Percent
	Rural	177	25.0
	Urban	492	69.5
	Total	669	94.5
Not answered		39	5.5
Total		708	100.0

Table 2: Comparison of fear, embarrassment and confusion regarding menstruation among urban and rural school girls

	A= Fear	B=Embarrassment	C=Confused
Rural	21.51%	54.65%	23.84%
Urban	48.98%	35.77%	15.24%
Total			

Table 3: Comparison of awareness of menstruation among rural and urban school girls

	A= yes	B=No
Rural	12.07%	87.93%
Urban	38.9%	61.1%

Table 4: Comparison of first informant about menstruation among rural and urban school girls

	A=mother	B=Friends	C=Relatives	D=Social Media
Rural	80.7%	17.54%	1.75%	0%
Urban	80.61%	17.14%	2.04%	0.2%

Table 5: Comparison of missing school during periods among rural and urban school girls

	Yes	No	Sometimes
Rural	5.39%	79.04%	15.57%
Urban	18.66%	46.96%	34.38%

Table 6: Comparison regarding participation in sports and physical activities during periods among rural and urban school girls

	Yes	No	Sometimes
Rural	8.28%	78.98%	12.74%
Urban	20.76%	60.38%	18.86%

Table 7: Comparison of use of ready-made sanitary pads among rural and urban school girls

	Yes	No
Rural	76.22%	23.78%
Urban	68.31%	31.69%

Table 8: Comparison of frequency of changing sanitary pads per day between rural and urban school girls

	Once	Twice	Thrice
Rural	4.52%	50.32%	45.16%
Urban	24.3%	50.56%	25.14%

Table 9: Comparison of mode of sanitary pad disposal among rural and urban school girls

	A = Flush in toilet	B = wrap in paper and throw	C=Burn/Bury
Rural	7.64%	20.83%	71.53%
Urban	10.82%	70.45%	18.73%

Table 10: Comparison of belief in social taboos related to menstruation among rural and urban areas

	A=Yes	B=No
Rural	34.52%	65.48%
Urban	40.93%	59.07%

Table 11: Comparison of hesitancy in talking about menstruation among rural and urban areas

	A=Yes	B=No
Rural	72.67%	27.33%
Urban	63.16%	36.84%

Table 12: Comparison on taking menstruation as a burden between rural and urban areas

	A=Yes	B=No
Rural	63.16%	36.84%
Urban	63.79%	36.21%

Discussion

From our study we found that prior awareness about menstrual hygiene is generally low of which rural school girls were less aware. It was only among 12.07% of rural school girls and 38.09% among urban school girls. Similar study conducted by Patle *et al.* [3] found that 63.38% girls in urban and 47.57% girls in rural area were aware of menstruation. These results were comparable to our study. Similarly a study done at West Bengal showed that 37.52% of girls were aware of menstruation prior to menarche of which 44.72% were urban and 30.07% were rural [4]. The results were comparable to study done by Gupta *et al.* [5] were 68% of adolescents were unaware.

In this study most of girls experienced fear and embarrassment as their first experience of which 54% from rural experienced embarrassment when compared to 35% of urban.

In this study the first source of information regarding menstruation was mother in 80% and only 17% from friends in both urban and rural girls. The results were comparable to the study done in West Bengal where the main source of information was mother [4]. Study done in Nagpur supported our study, where the first informants were mothers in 71.33% [6].

In this study 18% of urban school girls always missed school and 35% of urban girls missed sometimes. Only 5.39% girls in rural areas always missed and 15.57% in rural areas missed sometimes.

In this study 79% of rural school girls and 60% of urban school girls did not participate in sports or other physical activities in school.

Surprisingly in our study 76.22% girls from rural schools used sanitary pads and 68.31% of girls used in urban schools. The reason behind this could be free availability of sanitary pads to the schools by the government in rural schools.

Though our study showed more use of ready-made sanitary pads in rural school girls than in girls of urban schools, the overall use of ready-made sanitary pads in both groups was high and the results were comparable to each other. In contrast to our study Patle *et al.* [3] showed that in their study the use of sanitary pads was higher among girls in urban school that is 50% in comparison to rural schools 19%.

The study done by Narayan *et al.* [7] found that only 1.7% in rural area and 8.3% girls in urban areas used commercially available sanitary pads. When compared to our study, the study done by Nair *et al.* [8] found 24% used ready-made sanitary pads. Hence our study shows higher use of sanitary pads.

In our study we found that around 50% of girls both in rural as well as urban schools changed their pads twice a day. However 45.16% of girls from rural schools and 25.14% of girls from urban schools changed pads three times a day. Hence we observed that the rural school girls had a higher frequency of changing pads when compared to urban girls. The reason for this could be that most of the rural schools did not have separate toilet facility and hence the girls were allowed to go to their homes for changing the pads.

In our study it was found that among the urban school girls 70.45% of them disposed the sanitary pads by wrapping it in a paper, 10.82% flushed it in the toilets. In the rural schools, surprisingly 71.53% of them buried the sanitary pads, 7.56% flushed it and only 20.83% of them wrapped it in a paper. The differences in the results were highly significant statistically (P value 0.0000). In a similar study done by Tanvi *et al.* [9]. It was found that sanitary pads were wrapped in paper and disposed by 51.67% of girls.

In our study 40.93% of urban girls and 34.52% of rural school girls still practiced in the social taboos like diet restrictions, not attending religious functions or places of workshop. The differences in the results were significant. (P value 0.000). The results were comparable to study done in West Bengal by Baisakhi Paria *et al.* [4]. Were 64.72% of urban and 78.57% of rural girls practiced different restrictions during menstruation. Dasgupta *et al.* [10] showed that 85% girls and Shubhas *et al.* [6] found that 73.64% girls practiced different restrictions during menstruation.

In our study overall 64% of girls hesitated to talk about menstruation. 72.67% girls from rural schools and 63.16% girls from urban schools were hesitant to talk about menstruation. And 60% of girls both urban and rural schools took menstruation as a burden. This pointed towards lack of adequate counselling and knowledge about menstruation as a physiological phenomenon.

Conclusion

It can be concluded that there is a need for adequate information both in rural and urban school girls. The knowledge about hygienic practices is lacking. There is also a need to address social taboos in both the groups. It is essential to counsel the girls and prepare them regarding the physiological changes their body undergoes well in advance at the appropriate age. There is a need to emphasise on significance and physiological implications of menstruation.

Acknowledgements

We thank all the patients who participated in the study and made this study possible. This study does not have any source of funding.

References

1. Thakre SB, Thakre SS, Reddy M, Rathi N, Pathak K, Ughade S. Menstrual hygiene: Knowledge and practice among adolescent school girls of Saoner, Nagpur district. *J Clin Diagn Res.* 2011;5:1027-33.
2. Dhingra R, Kumar A, Kour M. Knowledge and practices related to menstruation among tribal (Gujjar) adolescent girls. *Ethno-Med.* 2009;3:43-8.
3. Patle RA, Kubde SS. Comparative study on menstrual hygiene in rural and urban adolescent. *Int. J Med Sci. Public Health.* 2014; 3:129-32.
4. Baishakhi Paria, Agnihotri B. A comparative study on menstrual hygiene among Urban and Rural adolescent girls of West Bengal. *J Family Med Prim Care.* 2014 Oct-Dec;3(4):413-417.
5. Gupta J, Gupta H. Adolescence and menstruation. *J Family Welfare.* 2001;47:1-13.
6. Subhash B, Sushma S, Monica R. Menstrual Hygiene: Knowledge and Practice among adolescent school girls of Soener, Nagpur.
7. Narayan KA, Srinivastava DK, Pelto PJ, Veerapmmal S. Puberty Rituals, Reproductive Knowledge and Health of Adolescent Schoolgirls in South India, *Asia-Pacific Population Journal.* 2001;16:225-238.
8. Nair P, Grover VL, Kannan AT. Awareness and practices of menstruation and pubertal changes amongst unmarried female adolescents in a rural area of East Delhi. *Indian J Community Med.* 2007;32:156-157.
9. Tanvi ND, Supriya SP, Supriti BG, Patil SR, Durgawale PM. Menstrual hygiene among adolescent girls-A study from urban slum area. 2018;7:1439-1445.
10. Dasgupta A, Sarkar M. Menstrual hygiene: How hygienic is the adolescent girl? *Indian J Community Med.* 2008;33:77-80.