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Original Research Article

Perceptions, attitudes and practices of menstrual hygiene among rural and urban high school girls in a Northern district of Kerala

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ABSTRACT

Background: Menstrual hygiene practices are poor in developing countries and exist as an insufficiently acknowledged problem. The objective of this study was to assess and compare perceptions, attitudes, and practices among rural and urban high school girls.
Methods: Cross sectional study was conducted in randomly selected 4 rural and 4 urban schools in Kozhikode district by cluster sampling method. 8th and 9th standard school girls who attained menarche were included in study. Data were collected by questionnaire.
Results: Most of the girls gained information prior to menarche. Girls who wrongly perceived cause of menstruation was more in rural subjects compared to urban. Almost half of girls were either unaware or wrongly perceived source of bleeding. 50.9% urban girls were not mentally prepared for menarche as compared to 44.4% of rural girls. Majority of rural girls shared information with mothers compared to urban. 83.9% in rural and 78.2% urban had an attitude of menstruation as an unclean phenomenon. Majority had some form of restrictions during menstruation. Higher proportion of urban girls used sanitary pad compared to rural. 50.3% of urban and 42.8% of rural girls were disposing absorbent in to closet when at school. Among pad users, similar findings were noted at home also. A higher proportion of urban girls (55.9%) practiced good menstrual hygiene as compared to average hygiene practiced by rural girls (48.9%).
Conclusions: The study shows significant rural-urban differences in perceptions, attitudes, and practices on menstrual hygiene in both areas.

Keywords: Attitudes, Menstrual hygiene, Perceptions, Practices, Rural urban high school girls

INTRODUCTION

A healthy adolescence is the corridor to a healthy adulthood. Adolescents comprise 20% of world's total population.[1]

Globally, different forms of beliefs and perception of menstruation exists which either negates or promotes adolescent girl's health. Adolescents usually receive only minimal information because of lack of support from parents and school teachers and also due to restrictions. So, they manage menstruation with unhygienic or inconvenient methods. Good menstrual hygiene practices are still lacking in many settings.[2-5]

The best place to formulate plans concerning menstrual hygiene is the educational institutions.[6]

Women having better knowledge and safe practices regarding menstrual hygiene are less vulnerable to RTIs and its consequences.[3,7,8] Menstrual hygiene practices are poor in developing countries and are still exists as an

insufficiently acknowledged problem.[4,9] There exist misconceptions on menstruation and related hygiene in several cultures. Many school girls in these countries struggle to manage menstruation.[6,10] In India majority of underprivileged girls use dirty cloth, husks and dried leaves. This produces injuries and infections leading to school absenteeism.

Only few studies are available in Kerala about menstruation and related hygiene. Anuradha et al in reported that, majority dealt with menstruation unhygienically. Symptoms suggestive of RTI were reported in 36% of women.[11] In a school study by Nair et al, Thiruvananthapuram (2011), sanitary pad users were only 45.5%. Among cloth users, 75% were drying in sunlight, 76% disposed by burning.[12] In a study in Kochi by Unni et al, 73% of girls were told about menstruation by their parents. But only 8% were aware of all aspects of maintaining menstrual hygiene.[13]

A study focusing on the comparison of various aspects of menstrual hygiene among rural-urban adolescent school girls are lacking in North Kerala. So there is an urgent need to explore the current status in Kerala. In this context the study was undertaken to assess and compare the perceptions, attitudes, practices of menstrual hygiene, among rural and urban high school girls in Kozhikode district.

METHODS

A cross sectional study was conducted in randomly selected 4 rural and 4 urban schools in Kozhikode district from April 2013 to May 2014 by cluster sampling method.

Inclusion criteria

8th and 9th standard school girls who attained menarche and experienced at least 2 menstruations were included in study.

Scoring of menstrual hygiene

The variables and scorings used to score menstrual hygiene were 1) Routine bathing during menstruation (>once=2, once=1, nil=0), 2) Daily washing of genitalia during menstruation (2 times=2, <2 times=0), 3) Storing of absorbent in hygienic place (In the bed room=2, bath room and hidden places=0) and 4) Frequency of changing of absorbent in a day (≥2 times=2, <2 times=0).

Grading of menstrual hygiene

Menstrual hygiene is graded as follows, Good for 7-8, Average for 4-6; and Poor for 0-3.

Data was collected using pre tested, semi structured questionnaire. At the end an interactive session for clearing doubts and health education on menstrual hygiene followed.

Data analysis

All the data collected were coded and entered in Microsoft Excel sheet which was re-checked and analyzed using SPSS 16 statistical software.

Ethical considerations

Study was conducted following submission and approval of study protocol by Kozhikode Medical College Ethics Committee. Written consent from headmaster/ headmistress, PTA; Informed written consent from parents and assent from participants were collected before the study.

RESULTS

Out of 800 selected students from each area, 788 from rural and 792 from urban participated in the study. The response rate in rural is 98.5% and urban is 98.75%.

Socio demographic profile

Majority of the students were from 9th standard in both the rural and urban (61% each) locality and the rest were from 8th standard. Maximum number of students belonged to 13 (42.7%) and 14 (42.9%) years of age. Mean age (with SD) of the study population in rural area is 13.4 (±0.7) years and in urban area is 13.7 (±0.8) years. In this study the mean age at menarche in rural area is 12.3±0.81 and urban area is 12.16±0.92 respectively.

Table 1: Socio economic status (modified Kuppuswamy's scale 2012).

Socio economic categories	Rural (n=788) (%)	Urban (n=792) (%)	
Upper	6 (0.8)	4(0.5)	χ^2=23.08, p≤0.001 at df 2
Middle	207 (26.3)	297 (37.5)	
Lower	575(73)	491(62)	

Majority of the study population in rural area belonged to Muslim community and in urban from Hindu community. Christians constituted a minority in the study groups.

Majority of the mother's in both areas were educated up to 10th standard and above. It is noted that more proportion of mother's in the rural area are educated below 10th standard compared to urban. The entire mothers of study subjects are literate.

Proportion of study subjects belonging to the lower socio-economic class is noted to be more in rural area (73%) as compared to urban (62%). The differences in proportions are statistically significant (p<0.001) (Table 1).

Perceptions towards menstruation

Most of the respondents had information about menstruation prior to attaining menarche. This was found to be more in rural (68.3%) compared to urban (60.4%). This difference is statistically significant with χ^2 and p value as 10.75 and 0.001 at df 1.

The mean age of gaining information among rural and in urban girls were 11.46±1.1 years.

Larger proportion of rural mothers (60.4%) are noted to be the first information providers compared to urban (54.2%) and this finding was statistically significant with χ^2, p value as 30.71, <0.001 at df 4.

Table 2: Perceptions towards menstruation.

Reason for menstruation			
Reasons	**Rural (%) (n=788)**	**Urban (%) (n=792)**	**Statistical inference**
Removal of bad blood from the body	606 (76.9)	569 (71.8)	χ^2=7.89, p=0.019 at df 2
Normal process	155 (19.7)	176 (22.2)	
Others	27 (3.4)	47 (5.9)	
Source of menstrual blood	**Rural (%) (n=788)**	**Urban (%) (n=792)**	
Uterus	378 (48)	367 (46.3)	χ^2=0.449 p=0.799 at df 2
Urinary bladder	180 (22.8)	189 (23.9)	
Don't know	230 (29.2)	236 (29.8)	
Length of menstrual flow	**Rural (%) (n=781)**	**Urban (%) (n=764)**	
<3 days	25 (3.2)	20 (2.6)	χ^2=8.38, p=0.015 at df 2
3-5 days	618 (79.1)	564 (73.8)	
>5 days	138 (17.7)	180 (23.6)	
Absorbent to be used	**Rural (%) (n=762)**	**Urban (%) (n=756)**	
Snitary pad	313 (41.1)	420 (55.6)	χ^2=31.86, p<0.001 at df 1
Cloth	449 (58.9)	336 (44.4)	

However, in the present study higher proportion of girls perceived menstruation as 'removal of bad blood from the body' and this was more in rural (76.9%) compared to urban (71.8%). Only 19.7% rural and 22.2% urban girls considered menstruation as a normal process. These differences in proportion were statistically significant. Curse of god, punishment for sin, diseases and excess fat in the body were perceived by some as other reasons.

Nearly half of the respondents in both groups rightly perceived the source of menstrual blood as uterus. However almost half the girls were either unaware or wrongly perceived the source of bleeding as urinary bladder. 79% in rural area and 73.8% in urban area rightly perceived the length of menstrual flow as 3-5 days. This difference is statistically significant (p=0.015).

55.6% of urban girls perceive sanitary napkin as ideal compared to 58.9% rural girls who perceive cloth as ideal. This difference is also statistically significant (Table 2).

Most of the girls in both areas consider that absorbent is to be changed 2-4 times a day. However, 16.9% of rural and 16.8% of urban girls was not aware of changing. Major complication perceived is infection in a higher proportion of rural girls (44.5%) compared to urban girls (38.1%). Though lesser, a significant proportion of girls were not aware of the complications in both rural (23.9%) and urban area (19.8%). This difference is statistically significant. (χ^2 value 25.57, p value<0.001 at df 4).

Attitudes towards menstruation

Table 3 shows only 6.7 % rural and 6.3% of urban girls were not prepared for menarche. The differences in proportions are statistically significant. Fright and discomfort were the most frequent reaction felt during menarche. Predominant feeling among rural girls was fright and urban girls were discomfort. The differences in proportion were statistically significant (p=0.026). 75.6% of rural girls opted to share information with mothers compared to 62% of urban girls. This difference in proportion is statistically significant (p≤0.001).

Majority of girls had an attitude that menstruation is an unclean phenomenon. This is higher in rural (83.9%) as compared to urban girls (78.2%). The difference in proportion is statistically significant. Majority of girls felt proud of achieving women hood after attaining menarche in both areas, which was slightly higher in urban (95.9%) as compared to rural girls (94%). This was not statistically significant.

More than half of girls in both areas had an attitude that there is harm in continuing daily activities during menstruation with higher proportion in rural (68.6%) as compared to urban girls (65.2%). Majority of girls had some form of restrictions which are similar in both rural (86.4%) and urban (88.8%) area. The most common restriction was for visiting of religious places. The religious restrictions were higher in urban compared to rural (Table 3).

Table 3: Attitudes towards menstruation.

Attitudes			
Mental preparedness	**Rural (%) (n=781)**	**Urban (%) (n=780)**	**Statistical inference**
Well prepared	52 (6.7)	49 (6.3)	χ^2=6.67, p=0.036 at df 2
To some extent	382 (48.9)	334 (42.8%)	
Not prepared	347 (44.4)	397 (50.9%)	
First reaction	**Rural (%) (n=780)**	**Urban (%) (n=783)**	
Fear	294 (37.7)	277 (35.4)	χ^2=11.03, p=0.026 at df 4
Discomfort	257 (33)	295 (37.7)	
Indifferent	143(18.3)	119 (15.2)	
Disgusted	68 (8.7)	58 (7.4)	
Felt Shame	18 (2.3)	34 (4.3)	
Information sharing	**Rural (%) (n=783)**	**Urban (%) (n=780)**	
Mother	592 (75.6)	484 (62)	χ^2=33.79, p<0.001 at df 3
Friends	138 (17.6)	219 (28.1)	
Relatives	19 (2.5)	25 (3.2)	
No one	34 (4.3)	52 (6.7)	
Common attitudes about menstruation			
Menstruating women and girls are unclean			
Rural (%) (n=783)	657 (83.9)	χ^2=8.4, p=0.004 at df 1	
Urban (%) (n=788)	616 (78.2)		
Feel proud of achieving women-hood			
Rural (%) (n=780)	733 (94)	χ^2=3.08, p=0.079 at df 1	
Urban (%) (n=784)	752 (95.9)		
Harm in continuing daily activities during menstruation			
Rural (%) (n=775)	532 (68.6)	χ^2=2.07,p=0.15 at df 1	
Urban (%) (n=776)	506 (65.2)		
A girl should eat separately from the family while having her periods			
Rural (%) (n=771)	170 (22)	χ^2=1.05, p=0.305 at df 1	
Urban (%) (n=771)	187 (24.3)		
Restrictions during menstruation			
Type of restriction (*multiple responses)	**Rural (%)**		**Urban (%)**
Visiting religious places	401 (50.9)		517 (65.3)
Reciting religious books and prayer	385 (48.8)		538 (67.9)
Interaction with boys	144 (18.3)		151 (19.1)
Playing	247 (31.3)		222 (28)
Attend school	45 (5.7)		34 (4.3)

Comparison of practices of menstrual hygiene

Majority of the subjects had the habit of taking routine bath during menstruation. The proportions are more in urban (99.4%) compared to rural (98.1%). The percentage of respondents not routinely bathing during menstruation were higher in rural (1.9%) compared to urban (0.6%). The differences were statistically significant (χ^2 value =5.1, p value =0.024 at df 1).

Majority had a habit of cleaning genitalia 2 or more times a day. Though lesser, a significant proportion of girls in both areas had a habit of washing genitalia only less than 2 times a day which was more among rural (24.4%) girls compared to urban (19.8%) girls. This difference in proportion is statistically significant.

Higher proportion of girls used sanitary pad in the study and this was higher among urban (61.1%) as compared to rural (56.8%). It is noticed that 43.1% in rural area used cloth compared to 38.9% in urban area. Reusing of cloth was observed in majority of respondents. It was higher in rural (92.9%) compared to urban (76.5%). Least observed practice was burial. Burning was noted to be higher in urban area. These differences were statistically significant ($p \leq 0.001$).

Higher proportion of subjects used soap and antiseptics for cleaning of cloth. This was more in urban (61.4%) than rural (52.7%). The next choice was soap and water, noted to be more in rural (40.5%) than urban (28.5%). The differences in proportion were statistically significant.

More than half of rural girls dried the cloth in hidden place or shades. More than half of urban girls dried in sun light. The hidden place includes fire wood shed, kitchen, store room, under the bed or hidden under other clothes. These differences in proportions were statistically significant (p=0.002).

Usual place of storage of absorbent by majority was bed room, in shelf or drawers with other clothes. The proportion was more in rural (90.4%) compared to urban (84.7%). This was followed by hidden places such as under the bed, store room, log wood shed, in terrace, kitchen, inside the fridge in cover etc.

Majority of study subjects in both areas changed absorbent 2-4 times a day with a higher proportion of urban girls (85.9%) doing so compared to rural (78.6%). The proportion of girls changing less than 2 times was higher in rural (9.1%) compared to urban (4.4%). These differences in proportions were statistically significant (Table 4). Majority of schoolgirls in urban area (81.8%) changed the absorbent when at school as compared to 58.7% of rural girls. Majority of the subjects were disposing the absorbent in to the closet. This practice was higher in urban (50.3%) than rural (42.8%) with χ^2 value of 145.1 and p value of <0.001 at df 3 (Figure 1).

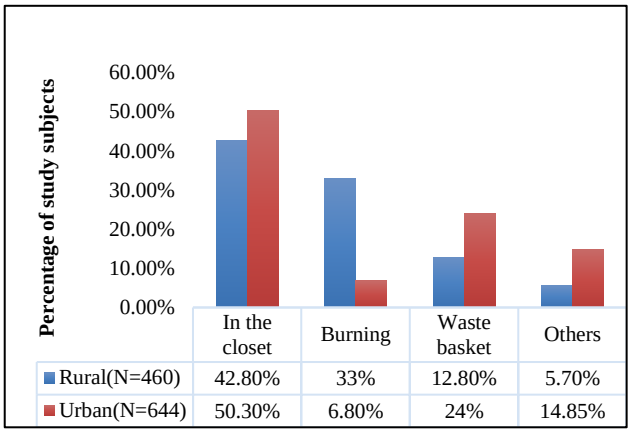

Figure 1: Method of disposal of absorbent at school hours.

Table 4: Comparison of practices of menstrual hygiene.

Practices of menstrual hygiene			
Frequency of cleaning of genitalia	**Rural (n=788)**	**Urban (n=792)**	χ^2=4.73, p=0.03 at df 1
Less than 2 times	192 (24.4)	157 (19.8)	
2 or more times	596 (75.6)	635 (80.2)	
Substance used for cleaning of genitalia	**Rural (n=780)**	**Urban (n=777)**	χ^2=0.757, p=0.384 at df 1
Water only	259 (33.2)	242 (31.1)	
Soap and water	521 (66.8)	535 (68.9)	
Absorbent used	**Rural (n=788)**	**Urban (N=792)**	χ^2=2.96, p=0.085 at df 1
Sanitary pad	448 (56.8)	484 (61.1)	
Cloth	340 (43.1)	308 (38.9)	
Method of management of cloth absorbent	**Rural (n=337)**	**Urban (n=307)**	χ^2=35.96, p≤0.001 at df 2
Reuse	313 (92.9)	235 (76.5)	
Burning	20 (5.9)	68 (22.2)	
Burial	4 (1.2)	4 (1.3)	
Cleaning absorbent cloth	**Rural (n=311)**	**Urban (n=228)**	χ^2=13, df=2, p=0.004
Water only	21 (6.8)	23 (10.1)	
Soap and water	126 (40.5)	65 (28.5)	
Soap and antiseptics	164 (52.7)	140 (61.4)	
Place of drying of cloth	**Rural (n=312)**	**Urban (n=232)**	χ^2=9.434, p=0.002 at df 1
Under sun light	128 (41)	126 (54.3)	
Hidden place or shade	184 (59)	106 (45.7)	
Place of storage	**Rural (n=788)**	**Urban (n=792)**	χ^2=12.4, p=0.002 at df 2
Bed room	712 (90.4)	671 (84.7)	
Hidden place	53 (6.7)	76 (9.6)	
Bath room	23 (2.9)	45 (5.7)	
Frequency of changing absorbent in a single day	**Rural (n=788)**	**Urban (n=792)**	χ^2=17.9, df=2, p<0.001
<2 times	72 (9.1)	35 (4.4)	
2-4 times	619 (78.6)	680 (85.9)	
4-5 times	97 (12. 3)	77 (9.7)	
Changing of absorbent at school	**Rural (n=784)**	**Urban (n=787)**	χ^2=100.8, df=1, p≤0.001
Present	460 (58.7)	644 (81.8)	
Absent	324 (41.3)	143 (18.2)	

Assessment and comparison of menstrual hygiene

A higher proportion of urban girls (55.9%) practiced good menstrual hygiene as compared to average hygiene practiced by rural girls (48.6%). Poor scores in hygiene were higher in rural area (3.6%) compared to urban (2.4%). These differences were statistically significant with χ^2 value as 10.96, p value as 0.004 at df 2) (Figure 2).

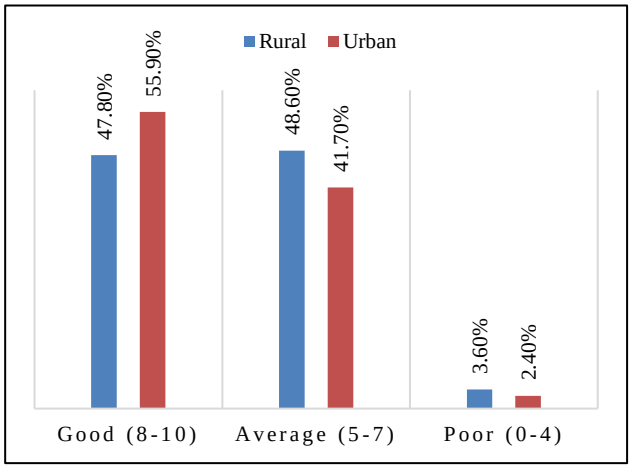

Figure 2: Assessment and comparison of menstrual hygiene.

DISCUSSION

Maximum number of students belonged to 13 (42.7%) and 14 (42.9%) years of age. In rural schools' majority of the study population belonged to Muslim and in urban schools from Hindu community. Majority of the mother's in both areas were educated up to 10th standard and above. Proportion of study subjects belonging to the lower socio-economic class is noted to be more in rural area (73%) as compared to urban (62%). The mean age at menarche is almost similar in rural and urban study subjects.

Girls who perceived menstruation as 'removal of bad blood from the body' was more in rural subjects (76.9%) compared to urban (71.8%). Nearly half of the respondents in both groups rightly perceived the source of menstrual blood as uterus. This was comparable to a study by Dasgupta et al where 86.3% girls perceived menstruation to be physiological in contrast to Subhash et al where 80.6% were not even aware of the cause of the bleeding.[14,15] In a study by Patle et al in Maharashtra, 79.66% urban and 85.42% rural girls did not know about the source of menstrual bleeding.[16]

79% of girls in rural area and 73.8% girls in urban rightly perceived the length of menstrual flow as 3-5 days. In contrast to this, according to a study done by Singh et al and Venkatachalam et al, only 59.1% and 53.3% respectively were aware of the normal length of blood flow.[17,18]

55.6% of urban girls perceive sanitary napkin as ideal compared to 58.9% rural girls who perceive cloth as ideal ($p<0.001$). These proportions are less compared to studies by Thakre et al in Nagpur (76.49%) and Bhattacherjee et al in West Bengal (81.8%).[14,19]

In our study, 50.9% urban girls were not mentally prepared for menarche as compared to 44.4% of rural girls ($p=0.036$) and it is comparable to a study conducted by Tiwari et al in Gujarat where 48.2% of girls were not mentally prepared.[20]

Predominant feeling among rural girls was fright and urban girls were discomfort ($p=0.026$). 74.9% girls in rural area and 70.3% urban girls accepted menstruation, during subsequent menstruations ($p<0.001$). Studies by Abhay et al and Tiwari et al reveal that fright is the predominant emotion felt, followed by guilt, shame, indifference, disgust.[20,21] During subsequent menstruations according to Deo et al, 47.8% in urban, 22% in rural accepted menstruation.[22]

75.6% of rural girls opted to share information with mothers compared to 62% of urban girls ($p<0.001$). Kamath et al in Manipal too noted that 82.2% in urban and 69.6% rural girls discussed with mothers, followed by friends.[23]

Majority in both areas had an attitude of menstruation as an unclean phenomenon. In a study done by Nagar et al in Meghalaya, 42% of girls had the attitude that menstruation is an unclean event.[24] In our study majority felt proud of achieving women hood after attaining menarche. Over 65% girls in both areas had an attitude that there is harm in continuing daily activities during menstruation with higher proportion in rural compared to urban.

Majority of girls had some form of restrictions which are similar in both rural (86.4%) and urban (88.8%) area. The most common restriction was for visiting religious places. All the other religious restrictions were higher in urban compared to rural. Venkatachalam et al in Tamil Nadu (90.1%) also reported higher proportion of girls who were restricted from visiting religious places. Other restrictions were no entry in kitchen, visit other houses, to attend any functions and to do household activities.[17]

99.4% in urban and 98.1% in rural had habit of taking routine bath during menstruation. This was comparable to a study by Ta et al in West Bengal where 80% of rural girls and all periurban girls bathe during menstruation.[25]

Majority had a habit of cleaning genitalia 2 or more times a day. Higher proportion in both areas uses soap and water for cleaning of genitalia with more urban girls (68.9%) doing so compared to rural (66.8%). In contrast to this in studies by Thakre et al in Nagpur, unsatisfactory cleaning of external genitalia was noted in higher proportion of rural girls (79.4%) than urban girls (58.1%)

and by Patle et al in Maharashtra, it was noted in 68% of urban and 83% of rural girls.[14,16]

This study showed a higher proportion of girls using soap and water as compared to studies which showed a lower proportion as done by Shanbhag et al in Karnataka (56.8%) and Yasmin et al in West Bengal (25.9%).[26,27]

Higher proportion of girls used sanitary pads with urban (61.1%) more as compared to rural girls (56.8%). The higher proportion using sanitary pad were similar to studies by Patle et al in Maharashtra and Thakre et al in Nagpur, where 62.03% and 60.6% of urban girls used sanitary pads.[16,28]

Reusing of cloth was higher in rural (92.9%) compared to urban (76.5%). Burning was noted to be higher in urban area. In a study by Juyal et al in Uttarakhand, 51.3% were reusing the cloth after washing.[29]

Higher proportion of subjects used soap and antiseptics for cleaning of cloth and this was more in urban girls (61.4%) than rural (52.7%). Studies by Shanbhag et al in Karnataka city and Patle et al in rural Maharashtra too reported similar findings in which 31.3% and 50.90% girls respectively used soap and water for cleaning. Antiseptic usage in these studies were noted to be lower than our study with 20.1% in urban and 20.86% in rural area using antiseptics.[16,26]

More than half of rural girls dried the cloth in hidden place or shades (p=0.002). In contrast to this, in a study by Nair et al in Thiruvananthapuram, 72.4% dried the cloth in sunlight. Similar observations were made by Juyal et al in Uttarakhand, where 88.1% were dried in sun light, 11.9% in shades or hidden places.[12,29]

Majority in both areas changed absorbent 2- 4 times a day with a higher proportion of urban girls (85.9%) doing so compared to rural (78.6%). The proportion of girls changing less than 2 times was higher in rural (9.1%) compared to urban (4.4%) (p<0.001). The findings in this study is similar to a study by Omidvar et al in who noted 78.3% of the girls changed napkins 2-3 times a day and 16.6% changed once a day. Patle et al reported contrasting figures wherein 21.36% urban and 23.96% rural girls changed only once a day.[16,30]

81.8% of urban girls changed the absorbent when at school as compared to 41.3% of rural girls who failed to do so (p<0.001). Present study noted a higher proportion of urban and rural girls changing absorbent at school as compared to a study in Nagpur by Thakre et al, where only 11.37% changed the absorbent at school.[14] Kamath et al, cited the most prominent reason to be feeling of discomfort among rural and urban girls of Manipal.[23]

50.3% of urban girls and 42.8% of rural girls were disposing absorbent in to the closet when at school (p<0.001). In contrast to this, in a study by Bency et al in Kerala, 23.9% of girls throw the napkins in the dustbin of school toilet, 15.6% and 9.5% take the cloth and pad respectively to home to wash,7.4% flush in toilet and 1.9% in incinerator.[31]

A higher proportion of urban girls (55.9%) practiced good menstrual hygiene as compared to average hygiene practiced by rural girls (48.9%). Poor scores of menstrual hygiene were higher in rural girls (3.6%) compared to urban (2.4%) (p=0.004).

CONCLUSION

This study has highlighted the needs of the adolescents to have accurate and adequate information about menstruation and its appropriate management. Variations in perceptions, attitudes and practices related to menstruation between rural and urban girls are important findings of the study.

As mothers were noted to be the first informant about menstruation in the present study, it is of utmost importance that the mothers be armed with correct and appropriate information on reproductive health. The focus should be on IEC sessions to mothers of adolescent girls. The school PTA is an ideal forum through which this can be achieved.

In this study a higher proportion of urban girls practiced good menstrual hygiene as compared to average hygiene practiced by rural girls. Poor scores were higher in rural girls compared to urban. So this finding points towards a need for incorporating and disseminating menstrual hygiene and related issues in school curriculum. Curriculum based approach will be able to address adolescent girls and boys collectively. This double pronged approach will impart knowledge to boys too. Thereby reducing embarrassment faced by menstruating girls, creating a healthy school environment enabling the adolescent girls to handle menstruation hygienically and with confidence. Developing modules or audio visual aids in schools for adolescent girls towards understanding menstruation and role of hygiene, is an interventional tool to increase awareness and erase negative attitudes and incorrect perceptions.

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