# School Sanitation Facilities and Absenteeism from School during Menstruation in Adolescent Girl in Rural Area of Hapur 

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#### Abstract

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#### Abstract

Introduction: The menstrual related problems are one of the most common problems among adolescent girls and might have an adverse effect on their performance in academic and other activities of daily life which may lead to school absenteeism during menstrual days. School absenteeism due to menstrual problems has been reported previously among adolescent.

Methodology: This is a cross sectional study was conducted in rural field practice area of RHTC (Rural Heath Training Centre) under Department of Community Medicine of a tertiary care teaching hospital in Pilkhuwa, Hapur, Uttar Pradesh. The study population included all adolescent girls in age group of 10-19 year studying in senior secondary school, Pilkhuwa. A verbal consent of the adolescent girls was taken before administering the questionnaires and assured of confidentiality.

Result: In present study as many as 229 ( 41.86 \%) out of 547 girls who attained menarche used to remain absent from school during menstruation. 191 ( $83.4 \%$ ) of girls normally absent for just one day. However, a considerable proportion $20(8.72 \%)$ of girls absent for 2 days while 18(7.86 \%) remain absent for three days. Conclusion: There is a need to improve the conditions with respect to basic facilities at school to cut down the absenteeism.


Key Words: School sanitation, Absenteeism, menstruation, adolescent girl.

## INTRODUCTION

World Health Organization defined a person aged $10-19$ years is considered as an adolescent. ${ }^{1}$ This adolescent period is preparation of safe motherhood, physically as well as monthly also. ${ }^{2}$

About $85 \%$ of total 1.2 billion. adolescent population lives in developing countries. These adolescent girls don't have sufficient information, skills, and readiness to overcome this stressful situation makes them vulnerable. Puberty. begin early or young adolescence ages, 10-14 years in most girls. ${ }^{3}$ Puberty is the age of beginning of Menstruations called menarche and it is a part of reproductive cycle of female ${ }^{4}$

To live healthy, productive and dignified lives for women and girls, it is important that they are able
to manage menstrual bleeding effectively. It is possible if they have access to appropriate water, sanitation and hygiene services, having somewhere private to change clothes or disposable sanitary pads, facilities to dispose of used cloths and pads, and access to information to understand the menstrual cycle and how to manage menstruation hygienically. ${ }^{5}$ Menstruation play an important role in limiting school attendance. ${ }^{6}$
Menstruation not only affects girl's attendance but also attention, and achievement in school in both rural and urban areas. The absence of clean and private sanitation facilities that allow for menstrual hygiene may promote girls for absent from school during their menstruation phase. In addition, a girl feels embarrassment during these period due to lack of knowledge about Menstrual hygiene man-
agement (MHM), she may be forced to stay at home while menstruation. ${ }^{7}$ Adolescent girls experience different feelings including fear, shame and guilt because of lack of information about menstrual management. ${ }^{8}$
United Nations Children's Fund (UNICEF) has stated that school-age girl were absent at puberty due to lack of cleanliness and separate toilet facilities for female students at schools ${ }^{9}$

Dysmenorrhea also associated with school absenteeism and decreased academic performance, sports participation, and socialization with peers ${ }^{10}$

The present study aims to assess the menstrual hygiene knowledge, attitude, practice and absenteeism from school during menstruation among girl students from Hapur school.

## METHODOLOGY

After ethical clearance from college ethical committee, this cross sectional study was conducted in rural field practice area of RHTC (Rural Heath Training Centre) under Department of Community Medicine of a tertiary care teaching hospital in Pilkhuwa, Hapur, Uttar Pradesh. There are eight villages under RHTC. Out of them one village viz. Pilkhuwa was randomly selected. (by using random sampling method). Pilkhuwa is one of the villages in Hapur District in Uttar Pradesh. Pilkhuwa is 18 km far from its District main city Hapur. The study population included all adolescent girls in age group of 10-19 year studying in senior secondary school, Pilkhuwa. A verbal consent of the adolescent girls was taken before administering the questionnaires and assured of confidentiality. School records were used for getting accurate age information. Pre-designed, pre-tested questionnaires (in Hindi language) were distributed. The data collected was compiled in Ms Excel. Statistical significance of any association was tested using the Chi-square test.

## RESULTS

A cross sectional study was undertaken in the inter college located at Pilkhuwa village in the in District Hapur under Rural Health Training Centre (RHTC) . Total 854 girls studying in class 6th to 12th (11-19 age groups) in the school were selected for the study. 411 ( $48.13 \%$ ) of girls belong to early adolescent (10-14years) phase and while majority of girls 443 ( $51.87 \%$ ) belong to late adolescent phase (15-19 years). It was revealed that out of 854; most of the girls 547 ( $64.05 \%$ ) had attained the menarche.

Table-1: Menstrual problem and absenteeism from school ( $\mathrm{n}=547$ )

| Menstrual Problem (\%) | Absenteeism <br> in school (\%) | Present in <br> school (\%) |
| :--- | :--- | :--- |
| Yes [246] (44.97) | $181(79.04)$ | $65(20.44)$ |
| No [301] (55.07) | $48(20.96)$ | $253(79.56)$ |
| Total [547] (100) | $229(100)$ | $318(100)$ |
| P value 0.00001 (df=1) Chi squire $=152.584$ |  |  |

P value 0.00001(df=1) Chi squire $=152.584$

Table -2: Absenteeism in and management of menstruation ( $\mathrm{n}=547$ )

| Substance used | Absenteeism <br> in school (\%) | Present in <br> school (\%) |
| :--- | :--- | :--- |
| Pad (266) | $149(42.45)$ | $117(60.62)$ |
| Cloths (281) | $202(57.55)$ | $76(39.38)$ |
| Total [547] (100) | $351(100)$ | $193(100)$ |
| P value $0.00004979($ df=1) | Chi squire $=16.456$ |  |

Table -3: *Reasons for missing school (n=351)

| Reasons for missing school | Girls (\%) |
| :--- | :--- |
| Feel uncomfortable at school during men- | $84(23.93)$ |
| $\quad$ struation | $67(19.08)$ |
| Forbidden by guardian | $61(17.38)$ |
| Remain sick | $55(15.67)$ |
| Heavy bleeding | $38(10.83)$ |
| No place to change rag/cloths | $34(9.69)$ |
| Feel uncomfortable sitting beside boys dur- |  |
| $\quad$ ing menstruation | $9(2.56)$ |
| Unsanitary toilet | $3(0.85)$ |
| Water supply away from bath room |  |

*Multiple answers

In present study as many as 229 (41.86 \%) out of 547 girls who attained menarche used to remain absent from school during menstruation .The mean number of absent days was 1-0.8. It is noticed that majority 191 ( $83.4 \%$ ) of girls normally absent for just one day. However, a considerable proportion $20(8.72 \%)$ of girls absent for 2 days while 18(7.86 $\%$ ) remain absent for three days.
The prevalence of menstrual disorders among adolescent girls who had attained menarche (547) was 246 ( $44.97 \%$ ). It was revealed that out of 547, $64.05 \%$ girl who attained the menarche, 246 $(44.97 \%)$ girls had one or more menstrual disorders. Nearly 2 out of 3 girls suffered from the commonly prevalent menstrual disorders like dysmenorrhoea ( $58.1 \%$ ) together with many other major menstrual disorders. Table 1 shows that high prevalence 181(79.04 \%) of school absence among rural school going girls who are suffering from menstrual disorders. The chi-square test for statistical association also supports the significant ( $\mathrm{p}=.000$ ) association of school-absence and menstrualdisorder. Like Chi-square test, the odd ratio $=14.68$. The most common reason reported by 84 ( $25.08 \%$ ) girls are Feel uncomfortable at school during menstruation and $67(19.08 \%)$, and $61(17.38 \%)$ respon-
dent mentioned Forbidden by guardian, and Remain sick during menstruation respectively. It appears that social factors responsible for absenteeism in the school.

## DISCUSSION

In the present study the, age at menarche of adolescent schoolgirls ranged between 10 and 15 years with a mean of 13 years. Kumar et al. (13 years). ${ }^{11}$ also mentioned the mean age of menarche students were $12.7+1$ which is consistent with another study by Patavegar et al. ${ }^{12}$. They observed that the mean age of menstruation phase in study population was around 12.5. ${ }^{9}$ In this study $76.58 \%$ of study population had been absent from school during their menstruation period which is inconsistent with other study by Lee et al. ${ }^{13}$ reported that girls were likely less attend the school on the day they had menstruation than other day while Bodat et al. ${ }^{14}$ also reported that $76.2 \%$ girls who attained menarche would remain absent from school during menstruation. The reason for the same results might be due to the similar culture perception of discomfort related to menstruation but this is clear and also observed by many researcher that menstruation may be causing adolescent girls to absent from school in significant number.

Feel uncomfortable at school during menstruation was the foremost factors for the absenteeism in present study, most students did not come to school because of the mistreatment by the other students $84(23.93 \%)$ other common reason for absenteeism were forbidden by guardian, fear of sudden leakage of menstrual blood, and because of the sickness. The reason of uncomfortable feeling, mistreatment by the other students during menstruation were due to the lack of proper knowledge about menstruation, not only among adolescent girls but also boys, teachers and parents also. They even don't know about physiology of menstruation. Present study reported that $(246=44.97 \%)$ suffered from some dysmenorrhea similar results were described by others, Verma et all ${ }^{15}$ and Agarwal et al. ${ }^{2}$ also reported that $50.6 \%$ and $34 \%$ of girls suffered from dysmenorrhea.

School absenteeism was significantly associated and higher among those who did not use disposable sanitary napkins for their menstrual bleeding. Similarly, mother's education was significantly associated with the management of hygiene and the use of disposable sanitary napkins and hence results in to school absenteeism. These results are in line with the studies conducted by Tegegne and $\mathrm{Si}^{-}$ say ${ }^{13}$ and van Eijk et al. ${ }^{16}$. Our study reveals the positive association between the lack of privacy at school and school absenteeism. The same finding
was reported by Grant et al. ${ }^{17}$ who stated that the level of perceived privacy in school toilets is significantly associated with the odds that a female student missed at least one day of school during her last menstrual period.

## CONCLUSIONS

Since mothers are the rule makers at home for all practices during menstruation, they should be counseled to remove their inhibitions about discussing issues related to menstruation and ill effects of adhering to bizarre taboos with their daughters well before the age of menarche.
There is a need to improve the conditions with respect to basic facilities at school to cut down the absenteeism.

Male teachers and school boys should be more informed regarding menstrual hygiene management.

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