

## Knowledge and Practice Regarding Menstrual Hygiene among School Going Adolescents of Kohalpur Municipality

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### ABSTRACT

**Background:** Menstruation is still considered as stigma in our society. The talks and discussion regarding menstruation is not quite acceptable because of shame and fear. Therefore, many girls and women have become the victim of sour incidents like diseases, rape, death, depression etc. We made a small effort to access knowledge and practice regarding menstrual hygiene among school going adolescent girls of Kohalpur municipality through study.

**Methods:** A cross sectional study was conducted from June to September 2021 among 359 students from grade eight, nine and ten of 4 different schools of Kohalpur municipality. Semiopen questionnaire were prepared and analysis was done to access knowledge and practice regarding menstrual hygiene.

**Results:** This research showed that 90.3% females had adequate knowledge about menstrual hygiene while 9.75 % females had poor knowledge. Majority of females were engaged in good menstrual practices.

**Conclusions:** Majority of females had adequate knowledge about menstrual hygiene but it has not been adequately brought into practices and the attitude of females towards menstrual hygiene is still unsatisfactory. As a result, there is a need of awareness programs regarding menstrual hygiene and its management.

**Keywords:** menstrual hygiene; knowledge; practice; menstruation.

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### INTRODUCTION

Menstruation is the visible manifestation of cyclical physiologic uterine bleeding due to shedding of the endometrium following invisible interplay of hormones mainly through hypo thalamus-pituitary-ovarian axis.<sup>1</sup> The WHO has defined adolescence as the age period between 10 to 19 years of age for both the sexes. Total population of Nepal is 29 million, out of which 50.4% is female. This huge figure of girls' population, the building pillar of every nation, is facing problems on health, medical, social and ethical issues. Due to impermissible and unaccepted pursuit of the topic in society the girls are constrained to whisper menstruation related information, which is not so called meant for discussion in public. The brutal event in terms of reproductive tract infection when come to light, the girl had already undergone the brutal sufferings on the part of not revealing the health problems associated with it. Surprisingly not even with family members because menstruation is generally considered as morally impure in the Nepalese society. Hence the girls'

life is full of misconceptions, mal-practices and challenges making the life miserable. The notion behind the intervention is to bring about change in hygienic practices thus inculcating safe hygienic practices in the girls who, in future when land up in reproductive events like child birth, abortion, postpartum complications and many more, would be able to prevent the catastrophic outcome of infections. Considering it, a small step in the community to implicate the concept of preventive social medicine to help the girls to blossom all their life.<sup>2</sup> The objective of this research is to assess the knowledge and practice regarding menstrual health among school going adolescent girls of Kohalpur municipality, to find out average age of menarche and to assess the knowledge regarding reproductive health problems.

### METHODS

We conducted a descriptive cross-sectional study from June 01 to September 30 2019. The study site was selected schools of Kohalpur which offered

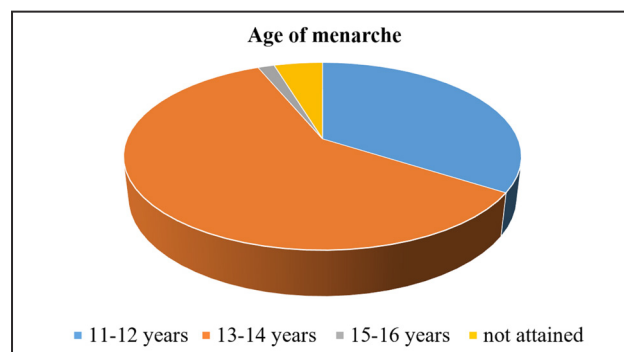
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classes up to 8, 9 and 10. The study population was all the female students studying in class 8, 9, and 10 of those selected schools. The sample size was 359. Schools were randomly selected and no sampling methods were used to calculate total sample size. All the female students of class 8, 9 and 10 were included in study that follows principle of census however schools were selected using principle of PPS. All the schools of Kohalpur were listed and total female students' strength were noted accordingly and thereafter using principle of PPS, 4 schools with high density of female students were selected. Those schools were Deep Jyoti English School, Gorkha united public school, Bageshwari higher secondary school and Ram Janaki English boarding school. A semi open ended questionnaires were prepared for data collection and were filled by the students themselves and then collected. All the female students of class 8, 9 and 10 on day of data collection were included in study and all the female students who were absent on that day were excluded in study. To assess the knowledge a set of 13 questions and to assess the practice a set of 24 questions were asked. The questionnaires were prepared on basis of literature review and author's knowledge on menstrual hygiene. Data was collected at schools with consents from principals of respective schools and the ethical consent for study was obtained from each female student individually. The purpose of study and method of filling the questionnaires was explained to the participants of study. All the collected data via questionnaire were further classified and tabulated in Microsoft Excel. Then descriptive statistics, means of each and all responses were calculated. Later for further statistical analysis, data were done using SPSS and p-value <0.05 was considered as statistically significant.

## RESULTS

Out of 359 participants in study, 214 (59.61 %) of females had menarche at age of 13-14 years. Out of the total 324(90%) students knew about menstrual hygiene and only 283(78.83%) students feel comfortable to talk about menstruation to others. While 314(87.46%) students got information about

menstruation from their mothers, 59(16.43%) from their friends/teachers. Also, 98(27.29%) of students are aware of reproductive tract infections. Only 259 (72.15%) of students know about menstrual problems while 24(7.01%) students are restricted to go to



**Figure 1.** Age of menarche.

schools, 144 (42.10%) restricted to enter kitchen, 15(4.38%) restricted to go out and 254(74.26%) are restricted to go to temples during menstruation, 285(83.33%) students use sanitary pad, 2(0.58%) use old cloth, 5(1.4%) use new cloth and 50(14.61%) use both sanitary pad and cloth during menstruation. While 336(98.24%) students clean their external genitalia during menstruation while 341(99.70%) students wash their hands with soap and water after changing pads during menstruation, 123(35.96%) students are worried of being teased when they have menstruation at school. When the students were asked about how they dispose the absorbent, 161(47.07%) students throw in dustbin, 134(39.18%) students burn the absorbent, 42(12.28%) throw in waste land and 5(1.4%) they reuse it, 319(93.17%) students sleep in their own room during menstruation while 6.73% 23(6.73%) sleep outside of their room, 170 (49.70%) students think that restriction of households works during menstruation is good and 27(37.13%) students think that god will curse if the menstrual taboos are not followed (Table 1).

When the students were asked how they react to menstruation, 35(10.3) students get fear or anxious, 38(11.11) students feel embarrassed, 67(19.59) students feel guilty, 38(95.90%) students feel that it is necessary to increase nutritious foods during menstruation and 281(82.16) students know that menarche signals the body is functioning normally.

Table 1. Knowledge on Menstruation.		
Variables	Response	Frequency (%)
Meaning of Menstruation	Normal physiology	338(94.15)
Source of menstrual blood is	Vagina	244(67.96)
Duration and length of menstrual cycle is	Every 28 days, 5-7 days	246(68.52)
Source of information regarding menstruation is	Mother	314(87.46)
	Friends/teachers	59(16.43)
	Other family members	12(3.3)
	Social media	9(2.5)
Cause of menstruation is	Hormones	80(22.28)
Heard of menstruation before menarche	Yes	303(84.40)
Know about menstrual hygiene	Yes	324(90.25)
Feel comfortable to talk about menstruation	Yes	283(78.83)

Table 2. Knowledge regarding menstrual hygiene.		
Questions	Response	Numbers (%)
Girls go to school during menstruation	Yes	343(95.54)
Aware of reproductive tract infections	Yes	98(27.29)
Symptoms of RTI are	Itching in vaginal region	32(32.65)
	Burning micturition	4(4.085)
	Pain abdomen and vaginal discharge	34(34.69)
	Fever	16(16.31)
	All	28(28.57)
Know about premenstrual symptoms	Yes	108(31.57)
Know about menstrual problems	Yes	259(72.15)
If yes	Painful menstruation	80(30.88)
	Tiredness / backache	160(61.77)
	Loss of appetite	20(7.7)
	Excessive blood	71(27.79)
	No	100(27.85)

## DISCUSSION

This study revealed that most of the female students have fair knowledge regarding menstrual hygiene however the knowledge and practice regarding menstrual hygiene can be further improved. Our study showed that the age of menarche ranged from 10 to 16 years with maximum females having menarche at age of 13 -14 years while mean age of menarche is 12.39 years in study by Ramachandra et al.<sup>12</sup> This study showed that 84.4 % females were

Table No. 2. Practice regarding menstrual hygiene.		
Questions	Response	Frequency (%)
Materials using during menstruation	Sanitary pad	285(83.33)
	Old cloth	2(0.58)
	New cloth	5(1.4)
	Both pad and cloth	50(14.61)
Restricted during menstruation	To attend school	24(7.01)
	To enter kitchen	144(42.10)
	To go out	15(4.38)
	To enter temples	254(74.3)
Times of changing absorbent material	No any restrictions	44(12.86)
	One day	125(36.54)
	Two days	120(35.08)
	More than two days	96(28.07)
How often you bath during period	Don't change	1(0.3)
	Daily	256(74.85)
	Every 2 <sup>nd</sup> day	43(12.57)
	Every 3 <sup>rd</sup> day	38(11.11)
Method of dispose absorbent	At the end of period	5(1.4)
	Throw in dustbin	161(47.07)
	Burn	134(39.18)
	Throw in waste land	42(12.28)
Clean external genitalia during period	Reuse	5(1.4)
	Yes	336(98.3)
Feel shy to buy sanitary pad	Yes	27(7.89)
Wash hands with soap & water after changing pads	Yes	341(99.70)
Feel comfortable to be with boys during period at class	Yes	170(49.70)

aware of menstruation before attaining menarche which is in contrast to the study by Neelkant et al<sup>2</sup> where only 3 % females were aware and study by Vijay Agrawal<sup>15</sup> where only 35.6% females were aware. Mother should be main source of information regarding menstruation, 87.46% females had heard from their mother in our study which is similar to other study.<sup>4</sup> Our study showed that 94.15% females know menstruation is natural process which is very high as compared to other studies.<sup>2,3,14</sup> In our study 30.44% respondents reported the duration and length of menstrual cycle either wrongly or incorrectly which is similar to study done by Manju Varghese.<sup>5</sup> This shows that teachers are still inefficient to describe the topic clearly. Tiredness/ backache was the most common menstrual problem in our study which is in contrast to study by Sapkota.<sup>6</sup> where

<b>Table 3. Practice regarding menstrual hygiene.</b>		
<b>Questions</b>	<b>Response</b>	<b>Frequency (%)</b>
Sleep in your room during periods	Yes	319(93.3)
Restriction of household works during period is good	Yes	170(49.70)
Family reaction while touch other during period	Spray water	47(13.74)
	Bath	28(8.1)
	Abuse you	25(7.3)
	Nothing	253(73.97)
Feel to play sports during menstruation	Comfortable	56(16.37)
	Not comfortable	154(45.1)
	Don't play	13(38.59)
Reason for school absenteeism during menstruation	Non availability of pads for girls	15(4.3)
	No separate toilet for girls	8(2.3)
	Lack of water supply	4(1.1)
	Pain/discomfort	258(75.43)
	Shame/ fear of leakage /staining	40(11.69)
	No absence	26(7.6)
Reason for not using sanitary pads	No knowledge of it	2(28.57)
	High cost	0(0)
	Difficult to dispose	2(28.57)
	No reasons	5(71.42)
Manage menstruation at school	Go home, change and stay	15(4.3)
	Ask to change material in school	311(90.93)
	Go shop to buy any change	6(1.75)
	Do nothing	10(0.9)

dysmenorrhea was most common.83.33% females used sanitary pad during menstruation which is higher than study by Sapkota.<sup>6</sup> and Kamath<sup>13</sup> and lower than study by Pooja Chauhan.<sup>9</sup>59.65% females showed no reaction on their 1<sup>st</sup> menstruation, 10.3% showed fear while 19.59 % were feeling guilty in present study however majority were scared during 1<sup>st</sup> menstruation in study by Neerja Agrawal.<sup>7</sup>74.6% females were restricted to visit temples, 42.12% , 7.01%,4.38% females were restricted to go to kitchen ,school and outside respectively.12.86% had no any restrictions which is less than study by Neerja Agrawal.In our study 98.24% females cleaned their genitalia during menstruation but in study by Adikari only 4.6% females clean their genitalia.<sup>8</sup> Our study shows only 12.2% females know that uterus is the source of menstrual blood which is similar to the study by Pooja Chauhan.<sup>9</sup> In present study 35.08 % female change pad twice a day while in study by Pooja Chauhan 95.6 % change atleast twice a day.<sup>9</sup>In this study 47.07 % dispose pads in dustbin,39.18 %

burn it,12.28% throw in waste land where as in study by Pooja Chauhan 63% dispose in dustbin and 23.6 % throw in waste land.<sup>9</sup>In our study 92.4% admitted to absenteeism during menstruation whereas in other study by Shuva srivastav and Bodat et al, absenteeism rate was 30% and 78.6% respectively.<sup>10</sup>The main reason in our study was pain/discomfort[75.43%] while in other study the reason was lack of separate toilets and disposable facilities in school.<sup>10</sup>Our study showed that 74.85% females had bath daily and only 1.4% females had bath at the end of menstruation which is less than study by Shuva srivastav.<sup>10</sup>This reveals that around 25% females are not aware of menstrual hygiene. In our study, 22.28% females knew the cause of menstruation to be hormonal while 72.42% answered the cause of menstruation to be to remove the impure blood from the body, whereas in other study by Parajuli, 52% females knew the reason to be hormonal.<sup>11</sup>In our study,50.3% females admitted restriction of household works during menstruation not significant while in study by Ram Naresh Yadav,

52.5% find it insignificant.<sup>3</sup>This study revealed that 90.3% females knew about menstrual hygiene which is very high as compared to study by Kanica Kaushal<sup>16</sup> where only 29% females had adequate knowledge about menstrual hygiene while in study by Jyoti Kapoor<sup>17</sup> only 70% females had adequate knowledge about menstrual hygiene.

## CONCLUSIONS

Though the results showed majority of females had adequate knowledge about menstrual hygiene but it has not been adequately brought into practices and the attitude of females towards menstrual hygiene is still unsatisfactory. As a result, there is a need of awareness programs regarding menstrual hygiene and its management in this municipality. There are

only few schools where separate toilets for girls and good facility of water is available. Therefore, school administration needs to be made aware of such issues. Malpractices, restrictions and taboos regarding menstrual hygiene need to be uprooted from society, for which campaigns and awareness programs should be conducted. This study also showed that mother and other relatives were the chief informants about menstruation, thus they need to be armed with adequate and proper information about menstrual hygiene, menstruation related problems as well as reproductive health. Move over the government should make plans and implement those plans to promote the knowledge and awareness on TV, radio and by demonstration programs to improve menstrual hygiene and its practices among females.

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