# Knowledge and practice regarding menstrual hygiene in rural adolescent girls of Nepal

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#### Abstract

**Objective:** This study was done in the adolescent girls to evaluate the knowledge and practice on different aspects of menstrual hygiene. **Methods:** One hundred and fifty adolescent girls of age 13-15 years from 3 schools of Shivanagar and Patihani village development committees of Chitwan district were involved in this study. Altogether 27 questions were asked to each of them. **Results:** During our study, we found that they were not properly maintaining the menstrual hygiene. Only 6.0% of girls knew that menstruation is a physiologic process, 36.7% knew that it is caused by hormones. Ninety-four percentages of them use the pads during the period but only 11.3% dispose it. Overall knowledge and practice were 40.6% and 12.9% respectively. **Conclusion:** Although knowledge was better than practice, both were not satisfactory. So, the girls should be educated about the process and significance of menstruation, use of proper pads or absorbents and its proper disposal. This can be achieved by giving them proper training and health education (by teachers, family members, health educators, and media) so that there won't be any misconception to the adolescent girls regarding menstrual hygiene.

Key words: Menstrual Hygiene, adolescent Girls and Nepal

Menstruation is part of the female reproductive cycle that starts when girls become sexually mature at the time of puberty. It is a phenomenon unique to the females. During a menstrual period, a woman bleeds from her uterus via the vagina. The menstrual rhythm depends on the hypothalamus-pituitary- ovarian function whereas the amount of blood loss depends upon the uterine contraction. The menstrual period lasts from three to seven days. Each period commences approximately every 28 days if the woman does not become pregnant during a given cycle. A deviation of two or three days from the twenty eight day rhythm is quite common.

The menarche or time of onset of menstruation varies with race and family, but the average for most girls is from 10 to 14 years until 45 to 55 years. Geographical conditions, racial factors, nutritional standards, environmental influences and indulgence in strenuous physical activity can all affects the age of menarche. A woman will have approximately 500 periods in her lifetime. The estimated blood loss is between 50 ml and 200 ml.

Talking about menstruation is just another piece of that continuing conversation. But don't wait until your daughter asks about menstruation before you

begin talking about it. The girls emphasized the need emotional support and assurance menstruation was normal and healthy--not bad, frightening, or embarrassing. Before bringing any change in menstrual practices they should be educated about the facts of menstruation and its physiological implications. The girls should be educated about the significance of menstruation and development of secondary sexual characteristics, selection of a sanitary menstrual absorbent and its proper disposal. There is a need for compulsory sex education and health education on menstrual hygiene so that they can discuss freely about it without hesitation. Hence, this study was done to evaluate the knowledge and practice of menstrual hygiene in rural adolescent girls of Nepal.

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### Material and methods

The study comprises adolescent girls of age group 13-15 years in 3 schools of Shivanagar and Patihani village development committees of Chitwan district. The study was conducted over a month period from November to December 2005. There were 150 young girls involved in this study. Altogether 27 questions on different aspects of menstrual hygiene were asked to each of them. Out of 27 questions,3 questions includes demographic characteristics, 10 includes knowledge regarding menstrual hygiene and 15 questions about the practices. Data analysis was done by simple manual analysis using frequency and percentage.

#### Results

All the girls were between 13 to 15 years age group while they studied from class-8 to class- 10. (Table 1). Around 52.0% of girls mentioned that menstruation begins at the age of 12 years. Hundred

percentage of girls told that they don't cook food during the menstrual period and around 70.7% girls do not go to schools during period. Around 92.7% women do not sleep in their house in first period. On asking to the cause of menstruation only 36.7% replied that it is due to hormones. Their knowledge seems to be inefficient because only 25.3% know that bleeding is from uterus. (Table 2). Results show that these Nepalese girls (100.0%) do not eat their food on the same place during period. Around 100.0% of women use pads during period but only 29.3% changes their pad daily. But still the kind of pad they use were piece of clothes by 98.0%.

Though 24.0% of girls were taught about menstruation by their guardian's friends and teachers still 98.0% of girls have a view that these things are not taught them properly. There are only 18.0% of girls who clean their genitalia for menstrual purpose while only 11.3% use soap while cleaning. (Table 3).

**Table 1:** Demographic characteristics of the participants

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1.Age group	13-15 years	150	
		(100.0)%	
2.Education	8-10 class	150	
		(100.0%)	

Table 2: Knowledge regarding menstrual hygiene

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1. What is the normal age for	12	78(52.0%)	
menstruation to begin?	13	48(32.0%)	
	14	19(12.7%)	
	15	5 (3.3%)	
2. What is the normal flow?	3-5 days	124(82.7%)	
	5-7 days	26(17.3%)	
3. How long does the normal cycle	26-30 days	125(83.3%)	
last?	30-35days	25 (16.7%)	
4. Can girls go to school during	Yes	44(29.3%)	
period?	No	106(70.7%)	
5. Can girls cook food during	Yes	0(0%)	
period?	No	150(100.0%)	
6. Where do u sleep during period?	Same place	4(2.7%)	
	Separate room	131(87.3%)	
	Next house	15(10.0%)	
7. What is menstruation?	Physiological	9(6.0%)	
	Pathological	18(12.0%)	
	Curse	123(82.0%)	
8. What are the causes of	Aging	8(5.3%)	
menstruation?	Hormones	55(36.7%)	
	Curse	22(14.7%)	
	Enzymes	65(43.3%)	
9. From where bleeding occurs in	Bladder	24(16.0%)	
menstruation?	Uterus	38(25.3%)	
	Fallopian tube	48(32.0%)	
	Vagina	40(26.7%)	
10. Who should be teaching you	Course book	98(65.3%)	
during menstruation?	Teachers	16(10.7%)	
	Parents	10(6.6%)	
	All of the above	26 (17.4%)	

Table 3: Practices regarding menstrual hygiene

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1. Did you sleep in your house	Yes	11(7.3%)	
during first period?	No	139(92.7%)	
2. What others will do if you	Spray waters	137(91.3%)	
mistakenly touch other people?	Nothing	0 (0%)	
	Bath	13(8.7%)	
3. When will you bath during	First day	0(0%)	
period?	Third day	144(96.0%)	
	Daily	6(4.0%)	
4. Where do you eat food on period?	Same place	0(0%)	
, , ,	Outside kitchen	150(100.0%)	
5. Do you use pads during period?	Yes	150(100.0%)	
	No	0(0%)	
6. How often you use?	1 in 1 period	94 (62.7%)	
	Change daily	44(29.3%)	
	Depending on situation	12 (8.0%)	
7. What is the material you use in	Old clothes	147(98.0%)	
pad?	Special pads	3(2.0%)	
8. Will you reuse the pad?	Yes	133(88.7%)	
	No	17(11.3%)	
9. Where u disposes the pad?	Mud	18(12.0%)	
1	Dustbin	4(2.7%)	
	Separate place	128(85.3%)	
10. Who taught you about the	Parents	4(2.6%)	
menstrual hygiene?	Friends	10(6.7%)	
	Course books	22(14.7%)	
	None	114(76.0%)	
11. Did they teach you properly?	Yes	3(2.0%)	
	No	147(98.0%)	
12. Do you clean genitalia for	Yes	27 (18.0%)	
menstrual purpose?	No	123 (72.0%)	
13. What you use while cleaning the	Soap and water	17(11.3%)	
genitalia?	Plain water	133(88.7%)	
14. Do you take rest during period?	Yes	4(2.7%)	
	No	146(97.3%)	
15. What you felt when you had	Normal	5(3.3%)	
menstruation for the first time?	Upset and tension	145(96.7%)	

# Discussion

Menstruation is a very complex process involving many different hormones, the sexual organs and the nervous system. Regular exercise and keeping fit and healthy can help to regulate the menstrual cycle. Menstruation is an awkward subject to talk about — especially with preteen girls, who seem to get embarrassed more easily than any other creatures on the planet.

The knowledge of rural adolescent girls regarding the average flow and duration of cycle seems to be adequate. Study done in university of Alexandria had

the results that over 85.0% of the students were acquainted with age of menarche, length of the menstrual cycle, and duration of menstrual bleeding. Most of our school girls spray water by touching on the gold. This shows that our community is still following our ancestor's rule. Though all girls were literate, only few percentages (6.0%) of women know that menstruation is a physiologic process. Regarding their practices, most of the girl's bath on the 3<sup>rd</sup> day of menstruation.

Sanitary pads or tampons are worn to absorb the blood flow. Sanitary napkins (pads) should be changed as often as necessary, before the pad is soaked with menstrual flow. There is a risk of Toxic Shock Syndrome by using super absorbency materials. It can be lessened or avoided by not using tampons, or by alternating between tampons and pads during the period. In our study around 1/3rd of girls change their pad daily. In similar study done in Nigeria, around 84.0% were not psychologically prepared for the first menses and 66.3% used insanitary materials as menstrual absorbent. 2Study done by Koffe E et al showed that many girls felt uncomfortable talking about menstruation with fathers, wanting them to be supportive but silent; others believed that fathers should be excluded completely.3 These girls of Nepal experienced upset and tension during their 1st period. Study done by Abraham et al among the Australian women revealed that a high proportion (80%) considered menstruation to be inconvenient or embarrassing.<sup>4</sup>

Similar research done in Andhra Pradesh University by Drakshayani et al detected that around 78.5% knew menstrual bleeding originated from the uterus.<sup>5</sup> But our study showed different results. Girls' knowledge of the location and function of reproductive structures was faulty, and most did not understand how they were interrelated.<sup>6</sup>

Received information about menstruation from their mothers from these studies showed that either our mothers were uneducated to express their views on menstruation or they hesitate to express their views to daughters. Study done in Andhra Pradesh revealed that only 4.6% students used water and soap to clean their genitalia.<sup>5</sup> And 58.5% would rest more often during menstruation.<sup>5</sup> but in our girls only 2.7% are taking rest. Girls' needs good information about the menstrual cycle and all the other changes that puberty bring. If other children are her only sources of information, she may hear some nonsense and take it for fact.

# Conclusion

This study revealed that the overall knowledge of Nepalese girls was 40.6%. Regarding practices it's 12.9%. So, we found that the knowledge and practice of these Nepalese young girls need to be improved. We should make Parents/ Teachers/ Health workers to motivate and improve the knowledge and practices about menstruation of these girls. And the government should also focus on this topic by giving different programs on televisions, Radios and

Newspapers. Though this study is done in a small sample, but we are successful to find out the standard of the rural young girls of Nepal. To the best of our knowledge this is the first research done in Nepal.

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