Girls become sexually mature at the time of puberty. It is a phenomenon quite common [1]. A deviation of two or three days from the twenty-eight day rhythm is 28 days if the woman does not become pregnant during a given cycle. Out of three to seven days. Each period commences approximately every loss depends upon the uterine contraction. The menstrual period lasts hypothalamus-pituitary-ovarian function whereas the amount of blood strain on the cloth—if the stain is strong they don’t use it again. From FGD it was clearly identified that in the time two to three menstrual cycles. However, the girls clarified that the number of times of use also depends on the nature of case of school absenteeism if infrastructure of toilet is present, in many instances basic lock system is missing or not functioning in public school. So they usually go in pairs by taking turns to go to their toilet and wait on each other. About the sanitary pad, they cannot afford always, most of them usually use old cloth material when staying at home and use sanitary pad only when they need to go out. The FGD finding is that on an average one re-useable cloth is used with the alternative of safety pad. Modern safety pads are frequently used in the school times. They re-use a single cloth for two to three menstrual cycles. However, the girls clarified that the number of times of use also depends on the nature of blood strain on the cloth—if the stain is strong they don’t use it again. From FGD it was clearly identified that in the time of menstruation girls are prone to diseases like Hemorrhage, Anemia, Syphilis, over flow of blood, with symptoms like Headache, Back pain, Backbone pain, Leg pain, Lethargy. In the menstrual period most of the girls eat the food as they expressed that first menstruation is often traumatic and very negative experience, culturally girls of brahmins, kshetris caste girls are put in seclusion they are not allowed to see sun and male relatives (brothers and fathers).}

**Conclusions:** 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.

**Keywords:** Knowledge about menstrual hygiene; Practice; Hygiene; Peri-pad; Reproductive age; Genitalia Menstruation

**Abbreviations:** FGD : Focus Group Discussion

**Introduction**

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 [1].

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

*Corresponding author: Ashok Pandey, Assistant Research officer, Nepal Health Research Council (NHRC), Nepal

Received March 13, 2014; Accepted May 02, 2014; Published May 07, 2014


Copyright: © 2014 Pandey A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
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 [2].

During menstruation were considered holy they were not allowed to touch any male, fetch water, enter the kitchen and worship the gods [3]. Adolescent girls often visit the outpatient endocrinological clinic because of menstrual disorders [4]. During menstruation women use homemade sanitary napkins in the villages, they are not cleaned properly. Menstruation period is a risk factor for various infections [5]. The types and frequency of problems related to menstruation among adolescent girls and the effect of these problems on daily lives might be different in Nepal and implication may vary. In the current situation, where there is an absence of menstrual hygiene and management issues in the policy debate, and hence in investments and actions is needed. A female’s urethra is quite short and prone to ascending infections. Adolescent girls might suffer from many problems without even being fully aware of the cause. 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.

Objective
- To assess the experiences and the factors that determines the prevailing practices of adolescent school girls, menstrual hygiene and management.
- To identify issues and challenges faced (including health) by adolescent school girls due to their menstruation.

Methods

An FGD was conducted in the two private and public school of Samakhusi. New Himalayan higher secondary school and Ranidevi School was selected with the help of teachers. Adolescent girls of age 12-18 years from one public school and another private school of Samakhushi, Kathmandu Valley were involved in this study.

FGD was carried out with a total of 11 girls in New Himalayan School and the 10 girls were taken from the Ranidevi School. Out of 21 girls, 12 girls are from class 8, 5 girls are from class 9 and the remaining 4 girls are from class 10. To make the respondents feel ease and express freely on the little discussion issues of menstrual practices closed well ventilated classroom was selected. And verbal consent was taken from the respondent prior to FGD. Ethical approval was taken from Little Buddha College of Health Sciences and concerned school and Verbal informed consent was taken from each respondent. They were assured for the anonymity and confidentiality of the information and allowed to refuse to participate in the study at any time if they wish.

Menstruation (Definition and Cause)

Young girls describe the onset of menarche as a shocking or fearful event. Information was mainly provided about the use of cloth, the practice of rituals in the form of restrictions on their movements and behavior towards males and, of course, the possible effects of her “polluting touch” and the equality polluting potential of the menstrual clot. A girl from newar community said that “menstruation is mentioned like the disease or curse/sin in her family” Normal age for menstruation to begin is affected by Climatic conditions, Balance diet, and socioeconomic conditions.

Rituals Beliefs, Common Beliefs

The socio-cultural beliefs behind are based on the concept of “pollution” surrounding the conditions of menstruation and usually mothers imparted these beliefs to the girls as important how to related to the practices during menstruation. This is evident in what a class X participants from Shindupalchowk said-“A woman is ritually impure during menstruation and anyone or anything she touches becomes impure as well.” Some of the common beliefs reinforced were that pickles go bad, seeds become sterile, fertile land become infertile, cow, buffalo milking become reduced, plants will wither-they might wilt when touched by a menstruating person. Hindu culture women are not allowed to pray or fast nor is she allowed touching the holy book and temple. The girls are relieved from exclusion only after purification after the five days of menstruation. If any activities like touches of something is happened unknowingly then her mother, sister sprinkle the gold water through her body.

Despite these enforced superstitious restrictions, encouraging one pattern has been observed consistently in all FGD. Amidst all these restrictions girls, both in urban and rural areas are challenging these rituals in one way or other either through reflection or straight away defying in their ways. An adolescent girls from Sindhuli shared- “I grew up being told of what to do and what not to do. I know of what I am supposed to… I touch water; I touch food in the kitchen, and I enter every room… I have also touched many fruit trees and none of them have wilted so I think it is not true”. Most of our school girls spray water by touching the gold. This shows that our community is still following our ancestor’s rule.

Absenteism and the personal hygiene maintain during menstruation

Parents are more afraid of committing a sin if their daughters go to school during menstruation than the possibility of the latter failing in exams if they are not sent to school whenever they have a period. Girls in the FGD shared that through physically present in the school they performed poorly in terms of concentration and attention. This was particularly due to constant worry that boys might figure out about their status by their movements and facial expressions. Many also expressed feeling exhausted and weak during menstruation. Another major worry expressed by the girls was having their menstruation coinciding with exams as they would not get adequate time and opportunity to clean and change timely. A girl of class IX from Arghakhanchi shared her utter despair by starting: “I wish I did not have this menstruation! But I know this is not possible.”

Most of the girls bath daily during menstruation period. Some also bath in the third days of menstruation. In case of school absenteeism if infrastructure of toilet is present, in many instances basic lock system is missing or not functioning in public school. So they usually go in pairs by taking turns to go to their toilet and wait on each other. The following quotes from FGD in Kathmandu aptly summarize the challenges of girls during her menstruation when she attends school which lacks basic infrastructure amenities and also the recurrent effect on attendance: “In this public school there is no water facility in toilet-it is so difficult. Also there is no arrangement of disposing the cloth. Sometimes the used cloth has to be put in our bag and dispose of after the school time. Especially during exams and this is expressed through one of the participants’ view- “Menstruation badly affects studies. The school does not give lesson notes. Students are expected to develop their
Hygiene and the safety pad

About the sanitary pad, they cannot afford always, most of them usually use old cloth material when staying at home and use sanitary pad only when they need to go out. Especially during summer as one Adolescent girl from Chitwan shared- "Cloth is okay during winter, however summer it is very uncomfortable. It rubs against the skin and becomes smelly". The FGD finding is that on an average one re-useable cloth is used with the alternative of safety pad. Modern safety pads are frequently used in the school times. They re-use a single cloth for two to three menstrual cycles. However the girls clarified that the number of times of use also depends on the nature of blood strain on the cloth – if the stain is strong they don’t use it again.

Most participants in FGD told that, even if not on other days, they usually take bath on the third or fifth day of menstruation as a purifying ritual. They wash their genitals with water only when they go to toilet. Many of them were confused whether soap could be used or not. Most of them told that they wash their genitals one to two times a day; some told that they wash every time when they go to toilet. If we conceptualize that public school students are comes from low income family. In FGD it was clearly identified that the family income affects the use or the non-use of sanitary pads. The low cost and ease of availability of rag cloth make it the indispensable choice for the girls in both private and public school girls.

Disease associated with Menstruation and sexually transmitted disease (infection)

From FGD it was clearly identified that in the time of menstruation girls are prone to diseases like Hemorrhage, Anemia, Syphilis, over flow of blood, with symptoms like Headache, Back pain, Backbone pain, Leg pain, Lethargy. However, many participants made it clear that they had the relation between Menstruation and STIs. About the bleeding during menstruation. Most of the girls say flow of impure blood materials outside our body. Some of the respondents also told that menstruation is the natural process and hormone is the cause of menstruation. So, there is no any relation of bleeding and the disease. Many girls shared that physical symptoms they feel mentally stressed. They become very cautious their mobility especially in the classroom. They take a lot of care when they stand, sit and walk- all due to the fear accidental blood strain in the uniform or the place when they sit on. FGD participants in Kathmandu consistently shared the effects of the pain on regular tension about menstruation.

Nutrition takes during menstruation

In the menstrual period Most of the girls eat the food as they used to eat. Some of the girls say that (Amilo, Piro) foods were not allowed their mothers in their foods.

Effects, beliefs and feeling for the first times of menstruation

Most of the girls expressed that first menstruation is often traumatic and very negative experience, culturally girls of brahmins, khsetris caste girls are put in seclusion they are not allowed to see sun and male relatives (brothers and fathers). It clearly indicates that there are still large number of traditional beliefs and restrictions surrounding menstruation. Most of the adolescent girls told that, physically present in the school they performed poorly in terms of concentration and attention. Boys might figure out about their movement and the facial expression. Menstruation coinciding with exams as they would not adequate time and support to clean and change timely. Many respondents in FGD expressed that the teachers usually avoided teaching lesions related to reproductive health.

Discussion

Given the findings in the study and reflecting on the objective of the study, it is dear that menstrual hygiene and management is an issue for adolescent's school girls in both public and private school. Their perceptions were heavily influenced by socio-cultural beliefs and symbolism. Mothers have been identified as an important source of information on menstruation for the adolescent girls, as also shown by some others studies a varying degree [6].

Practice of ritual seclusion particularly at or before the attainment of menarche has been identified in this study. Through the practice of sleeping in separate room was found in this study, seclusion in menstrual huts during each menstrual period as practiced by some group or in some areas of Ethiopia, Nigeria and Nepal (Ten, 2007) was not evident. As observed by the researchers, the practice, called chhaupadi, in which menstruating females have to sleep in such menstrual huts (called chhaupadi goth) that are often unhealthful and dangerous is common in far-western region of Nepal [7].

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 [8].

The problem of not having toilet with adequate privacy for managing menstrual hygiene also existed for many participant girls at home which would normally be changed around two to four times during menstruation. Instead the vast majority of women and girls in Nepal use rags. This results in a fundamental infringement of the human rights of female students [9].

Most of the girls feel upset and tension during the first time of menstruation. 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 considered menstruation to be inconvenient or embarrassing [5].

Above all, studies documenting such situation in Nepal are lacking. The types and frequency of problems related to menstruation among adolescent girls and the effect of these problems on daily lives might be different in Nepal and implication may vary. Menstrual hygiene and management is yet to be integrated effectively in overall hygiene promotion interventions in Nepal.

Conclusion

The study has highlighted the need of the adolescents to have accurate and adequate information with challenges about menstruation. The interesting aspect highlighted by the school girls regarding the quality of attendance in school suggest that further studies are needed to explore more at the qualitative aspects of the effect on the daily activities around menstruation, particularly school attendance.

This study found that the knowledge and practice of these Nepalese young girls need to be improved. Still some misconceptions were prevalent on feel upset and tension during the first time of menstruation (menarche). 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, to the best of our knowledge this is the first research done in Nepal.

References