

Knowledge and Practice of Menstrual Hygiene among Adolescent School Girls in Tanahun District

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Abstract

Menstruation is not just a physiological phenomenon but it is also psychological, social as well as behavioral transition for an adolescent girl from girlhood to womanhood. Menstrual hygiene is most important, still neglected area of concern. A cross sectional study was undertaken in a four community schools of rural area of Tanahun district. A pre-designed, self-administered close ended (structured) questionnaire was prepared for collection of data. There were 196 participants for the study. It was marked that 69 percent participants were aware about menstruation before their menarche and the most important sources of information were mothers in 61 percent, 59 percent participants used only sanitary napkin during menstruation, 50 percent changed absorbent 1 to 2 times a day. Although knowledge was better than practice, however, both were not satisfactory level. So, the girls should be educated more about the process and significance of menstruation.

Keyword: Adolescent, Menstrual Hygiene, Menarche, Knowledge and Practice

Introduction

The onset of menstruation is one of the most important changes occurring among girls during the adolescent years. Menstruation is part of the female reproductive cycle starts when girls become sexually mature at the time of puberty (Adhikari et al., 2007). Menstruation is still regarded as something unclean or dirty phenomenon in society due to prevailing various socio-cultural myths misconceptions and restrictions (Thakre et al., 2011). These restrictions cause adolescent girls to develop negative attitudes towards this natural physiological phenomenon.

Adolescent girls often lack knowledge regarding reproductive health including menstruation which can be due to socio cultural barriers in which they belong. Such behavior of the society and family creates physiological disorders and psychological humiliation to them (Singh, 2015). A study from UNICEF revealed that 1 out of 3 girls in South Asia knew

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nothing about menstruation prior to getting it while 48 percent of girls in Iran and 10 percent of girls in India believe that menstruation is a disease (WaterAid, 2013).

Menstruation, though a natural process, has often been dealt with secrecy in many parts of rural Nepal. It is unfortunate that even today this natural phenomenon is still considered as a taboo, stigmatized 'hidden' and rarely discussed in our patriarchal Nepalese society. Social taboos are imposed against menstruated women in Nepal. Girls having first menstruation are kept in the dark rooms or sheds making them vulnerable to infection, cold and other unfavorable circumstances (Adhikari et al., 2007). Menstruation and associated activities are surrounded by silence, shame and social taboos that are further manifested in social practices that restrict mobility, freedom and access to normal activities in Nepal and India (Ten, 2007). Refraining from drinking milk, preparing food, interacting with people or performing religious rituals are major restrictions found in many cultures. In Nepal, the practice of *Chhaupadi*, seclusion, continues, although it has been outlawed by the Nepal Supreme Court since 2005. This practice, which has recently received global media attention, is slowly being challenged by girls, families and communities. However, these practices are slowly being challenged, addressed and changed and the school setting is an ideal intervention setting for providing information and the impetus for change opportunities (Morrison et al., 2018).

Menstrual hygiene is vital to the empowerment and well-being of women and girls worldwide. It is about more than just access to sanitary pads and appropriate toilets, though those are important. It deals with the special health care needs and requirements of women during monthly menstruation. This area of special concern includes choice of the best period protection or feminine hygiene products, how often and when to change the feminine hygiene products, bathing care as well as the supposed benefits of vaginal douching at the end of each menstrual period (Guyaet et al., 2014). Good menstrual hygiene management is defined as being able to use a clean and dry menstrual management material, either a locally made or mass manufactured pad/tampon or a cup, which is changed at least once per day for the duration of a menstrual period and being able to use soap and water for body hygiene (Wasserheit, 1989). The materials used as adsorbents during menstruation in low income countries including Nepal, vary from reusable towels to commercially available disposable sanitary pads (Budhathoki et al., 2018). Types of adsorbents used, hygienic practices and cultural restrictions during menstruation are associated with negative clinical and psychosocial outcomes including reproductive and urinary tract infections, anemia, school absenteeism, and social isolation (Biren et al., 2012). Every day, an estimated 290,000 women and adolescent girls in Nepal menstruate (NFCC, 2012). Due to the lack of information and awareness of good menstrual hygiene management methods push girls

living in rural Nepal deeper into marginalization and reproductive health morbidity (Karki et al., 2017).

Very few studies have included the detailed aspects of the menstrual practices among adolescent girls in Nepal. Therefore, it was considered as relevant to investigate the menstruation related knowledge and practices among the school going adolescent girls in Nepal. The objective of this study was to assess the knowledge and practice of menstruation and menstrual hygiene among adolescent school girls in rural area of Tanahun district. The data about their level of knowledge and the practices which they are following during menstruation, are beneficial for planning and program for improvement of awareness level to promote their quality of life. This study carried out to find out the age of menarche among the girls, the menstrual pattern and menstrual hygiene practice and the prevalence menstrual disorders.

Methods

It was a descriptive community based study with cross-sectional design among adolescent girls studying in 8th to 10th standard. A total 196 adolescent girls of age 12 to 19 years were taken from 4 community schools from rural area of Tanahun district, who were present in the schools on day of data collection. Adolescent girls who had attained menarche were only included in the study and constituted the study population. From the previous studies it was revealed that mean age of menarche was 12.6 years. Hence students of only class 8th onwards were decided to be included in the study. A pre-designed, self-administered close ended structured questionnaire was prepared for collection of data. The schools were visited as per pre-planned schedule for getting information from the adolescent girls. The adolescent girls were oriented about the questionnaire and were assured of confidentiality. A verbal consent was obtained from the participants before filled up the questionnaire regarding the knowledge and awareness about menstruation source of information and menstrual hygiene management. The questionnaire was filled up by individual themselves in separate classroom. Data were compiled and entered in MS-Access database program and imported into SPSS program for analysis.

Results

Table 1 represents the demographic and socio-economic details of the study subjects. The study showed that age of the girls (n=196) varied from 12 to 19 years. Majority 92 percent of the participants were Hindu, 55 percent participants were living in single family, mothers of 38 percent of the study girls had literate with formal education, 37 percent had completed their school education, 21 percent of the mothers were illiterate, and majority 87 percent

mothers were house wife engaged in agriculture. Majority 72 percent of the participates were belonged to rural area. Janajati occupied 47 percent and Dalits 24 percent.

Table 1: Socio-Demographic Profile of the Study Population (N=196)

| Background variables | Number | Percent |
|----------------------------|--------|---------|
| Age (Years) | | |
| 12 | 3 | 1.5 |
| 13 | 22 | 11.2 |
| 14 | 41 | 20.9 |
| 15 | 57 | 29.1 |
| 16 | 52 | 26.5 |
| 17 | 12 | 6.1 |
| 18 | 8 | 4.1 |
| 19 | 1 | .5 |
| Religion | | |
| Hindu | 181 | 92.3 |
| Non Hindu | 15 | 7.7 |
| Types of Family | | |
| Single | 188 | 55.1 |
| Joint | 88 | 44.9 |
| Mother's Education | | |
| Illiterate | 41 | 20.9 |
| Literate/ Formal | 75 | 38.3 |
| School education | 72 | 36.7 |
| Higher education | 6 | 3.1 |
| Mother's Occupation | | |
| Housewife, Agriculture | 160 | 81.6 |
| Job/ Non Agriculture | 36 | 18.4 |
| Place of Residence | | |
| Rural | 142 | 72.4 |
| Urban | 54 | 27.6 |
| Caste | | |
| Brahmin/ Chhetri | 57 | 29.1 |
| Janajati | 92 | 46.9 |
| Dalit | 47 | 24.0 |

Source: Field Visit, 2015

Table 2 shows that the mean age of menarche in the study subjects was 12.77 ± 0.984 years. Among the total participants, 136 (69.4%) participants were aware about menstruation before menarche and the more common source of information was mothers which was 61

percent. It was observed that 101 (51%) girls believed that menstruation was a physical process and 78 (39.8 %) believed it as a natural process. Out of total participants, 127(69 %) girls were knowledge about menstrual hygiene. Around 165(84%) girls believed that frequently changing pad was known as menstrual hygiene and very low 65(33%) believed in balance diet was known as menstrual hygiene.

Table 2: Information Regarding Menstrual Profile and Knowledge in the Study Population (N = 196)

| Age at Menarche | Number | Percent |
|--|----------------------------|----------------|
| 11 | 14 | 7.1 |
| 12 | 66 | 33.7 |
| 13 | 79 | 40.3 |
| 14 | 27 | 13.8 |
| 15 | 8 | 4.1 |
| 16 | 2 | 1.0 |
| Age at Menarche (Mean ± SD) | 12.77 ± 0 .98 Years | |
| Experience of Inter Menstrual Interval by Participant | | |
| 24-26 days | 15 | 10.2 |
| 27-28 days | 35 | 23.8 |
| 29-30 days | 84 | 57.1 |
| 31 and above days | 13 | 8.8 |
| Missing system | 49 | |
| Duration of Menstrual Cycle During Each Period | | |
| 1-2 days | 26 | 13.3 |
| 3-5 days | 96 | 49.0 |
| 6-7 days | 66 | 33.7 |
| 8 and above days | 5 | 2.6 |
| Don't know | 3 | 1.5 |
| Knowledge and Belief Regarding Menstruation | | |
| Pre Menarche Knowledge | 136 | 69.4 |
| Source of Knowledge | | |
| Mother | 83 | 61.0 |
| Sister | 24 | 12.2 |
| Teacher | 16 | 11.8 |
| Friends | 13 | 9.6 |
| Belief Regarding Causes of Menstruation* | | |
| Physical process (blood flow from the vagina) | 101 | 51.1 |
| Maturity cause | 63 | 32.1 |
| Natural process | 78 | 39.8 |

| | | |
|--------------------------------------|------------|-------------|
| Menstrual Hygiene Knowledge * | 127 | 64.8 |
| Changing pad | 165 | 84.2 |
| Bath | 117 | 59.7 |
| Wearing clean undergarments | 82 | 41 |
| Balance diet | 65 | 33.2 |

Source: Field Visit, 2015

Table 3: Distribution of Girls According to Menstrual Practices

| Variables | Number | Percent |
|--|---------------|----------------|
| Use of Material during Menstruation(n=196) | | |
| Sanitary napkin | 116 | 59.2 |
| Old clothes | 36 | 18.4 |
| New clothes | 44 | 22.4 |
| Frequency of Change (n=196) | | |
| 1-2 in a day | 98 | 50.0 |
| 3-4 in a day | 93 | 47.4 |
| More than 5 in a day | 5 | 2.6 |
| Method of Disposal(n=196) | | |
| Cloth pieces reused | 73 | 37.2 |
| Thrown indiscriminately | 46 | 23.5 |
| Bury in ground | 34 | 17.3 |
| Disposed in dustbin | 32 | 16.3 |
| Disposed by burning | 11 | 5.6 |
| Reason for Not Using Sanitary Pad(n=80)* | | |
| Costly | 36 | 45.0 |
| Easily not to get | 36 | 45.0 |
| Difficult to dispose | 13 | 16.3 |
| Cloths are cheap | 76 | 95.0 |
| Time Taking to Reach Place to Buy Pad (n=116) | | |
| Less than 15 minutes | 74 | 63.8 |
| 30-45 minutes | 36 | 31.0 |
| More than 45 minutes | 6 | 5.2 |

Source: Field Visit, 2015

*Multiple answers were allowed.

Table 4: Prevalence of Menstrual Disorders in the Study Population (N=145)*

| Symptoms | Number | Percent |
|-----------------|--------|---------|
| Pain in abdomen | 135 | 68.9 |
| Over bleeding | 49 | 25.0 |
| Headache | 7 | 3.6 |
| Nausea/Vomiting | 16 | 8.2 |

Source: Field Visit, 2015

*Multiple answers were allowed.

Table 4 shows associated symptoms with periods. Pain in abdomen was the most common associated symptom among 69 percent girls, followed by over bleeding 25 percent, nausea/vomiting and headache were the other associated symptoms.

Discussion

The study reveals that the mean age at menarche in the study subjects was 12.77 ± 0.98 years. Age at menarche of the participants ranged between 11 to 19 years which is comparable to study conducted by Karki et al. (2018) in slum area of Kathmandu was 12.51 ± 1.101 years, Sapkota Det al. (2013) conducted the research in Panchakanya VDC Sunsari was reported 13.1 ± 0.9 years. These small variances of mean age at menarche could be due to differences in geographical, environmental, nutritional and socio-economic factors or number of cases observed.

Regarding pre-menarche of knowledge in this study revealed that 69.4 percent know about menstruation before their first menarche. The similar study from rural Kheda district in India conducted by Prajapati et al. (2015) report found that the pre knowledge regarding menstruation of the study subjects was 47.5 percent where, 92 percent in a study conducted in Nepal, WaterAid / Anita Pradhan et al. (2009). This study revealed that the major sources of information regarding menstruation and menstrual hygiene was mother 61 percent, sister 12 percent, teachers 16 percent and friends 9.8 percent. Similarly study of Panchakanya VDC of Sunsari Nepal conducted by Sapkota D et al. (2013) findings has been reported for source of information, majority were informed by mothers, which was in accordance with the findings from other studies. The study conducted in Kathmandu by Karki et al. (2018) reported that from mother 64.8 percent, sisters 44.1 percent, friends 55.9 percent and only 4 persons heard menstruation and menstrual hygiene from mass media.

The knowledge of menstrual cycle and flow of menstrual cycle in present study shows that 57 percent adolescent girls had 29-30 days cycle followed by 27-28 days 24 percent. Duration of flow of menstruation was 3 to 5 days in 49 percent girls followed by 6

to 7 days in 33 percent. The similar study from rural Kheda district in India done by Prajapati et al. (2015) reported that 41.5 percent adolescent girls had 28-35 days cycle followed by 25-28 days 34 percent, duration of menstruation was 3 to 5 days in 56 percent girls. In this study, majority of 51 percent had knowledge about the menstruation as a physical process where blood flows from the vagina, which is significantly lower 67.2 percent and 83 percent than the findings done by Sapkota D et al. (2013), Yadav et al. (2017) UNICEF (2018) and Parajuli et al. (2016), respectively.

The menstrual hygiene practice in present study shows that 59.2 percent girls were using commercial sanitary pads during menstruation where the study done by Karki S et al. (2018) found 65.5 percent. Similarly the study conducted in rural Kheda district in India by Prajapati et al. (2015) found only 10.5 percent were using sanitary pad. The similar study in Bhutan done by UNICEF (2018) found that every nine out of ten (91.9 %) school girls used sanitary pad. These variances could be due to differences in geographical, urbanization and socio-economic factors. This study shows that 50 percent of the girls changed absorbent 1 to 2 times a day and 37.2 percent girls reused cloth pieces. A study conducted in rural Kheda district India by Prajapati et al. (2015) reported that changed absorbent 1 to 2 times a day 77 percent and 51.5 percent girls reused cloth pieces. A study done by Karki et al. (2018) reported that changed absorbent 1 to 2 times a day (35.7 percent). There is significant difference noted between Nepalese and Indian context.

Disposal of the used materials during menstruation, present study found that disposed pad thrown in elsewhere 23 percent, disposed in dustbin 16.3 percent. The study done by Karki et al. (2018) reported that 81.1 percent of girls wrapped and disposed of the used materials during menstruation in a closed container, the study done by Sapkota D et al. (2013) reported that 28 percent of girls disposed used materials by throwing elsewhere. The significant difference should be due to place of residence i.e. urban and rural area. The reason of not using sanitary pad in present study was found that 45 percent girls cannot afford sanitary pad (costly) and difficulty in disposal after use (45 percent), piece of clothes available at home (95 %), the study in Bhutan done by UNICEF (2018) found that 7.5 percent girls cannot afford sanitary pad.

The most common menstrual problem was pain in abdomen/dysmenorrhea 68 percent, followed by over bleeding 25 percent and nausea/vomiting 8.2 percent. A study done by Sapkota D et al. (2013) reported most common menstrual problem was dysmenorrhea 78.7 percent. A study conducted in rural Kheda district India (2015), Prajapati, et al. reported the most common menstrual problem was dysmenorrhea 62 percent, followed by backache 26 percent and Headache 18.5 percent.

Conclusion

Lack of scientific information and awareness on menstruation and menstrual hygiene methods, girls push deeper into marginalization and reproductive health morbidity. Knowledge is an awareness or understanding of specific subject matter. It leads to manage menstrual hygiene of girl's reproductive health. This study reveals that more than half of the adolescent girls of rural area of Tanahun district had inadequate knowledge regarding menstruation and menstrual hygiene. Mothers are the major source of knowledge to the daughter. Motivational program should be launched to mothers to the various socio-cultural myths, stigma misconceptions and restrictions regarding menstruation. Introducing education regarding menstrual hygiene in lower secondary school curriculum can automate awareness among girls. The practice of menstrual hygiene seems good for the study subjects where more than half of the adolescent girls had used sanitary pads. Economic conditions, education and other socio-cultural factors are directly or indirectly associated with the hygienic practices of menstruation.

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