

Is Sanitary Pad Provision in School Enough to Manage Menstrual Health and Hygiene of Adolescent Girls in Nepal?

Introduction

From the beginning to the end of a woman's menstrual cycle, maintaining her health and hygiene is an essential part of her life. Different women health research have found that menstrual health is connected with their physiological, pathological and psychological wellbeing (1). Women's and girls' empowerment and well-being depend on menstrual health and hygiene (MHH) which has been identified as global population health to attain SDG and concerning gender equality and human rights (2). The WHO has been working on menstrual health issues for adolescent girls including education related to menstruation, creating healthy and positive norms about menstruation, access to facilities like sanitary products, water, toilets, privacy, care and support families of girls, and access to health care facilities (3). To effectively manage their menstruation, UNICEF have recommended interventions based on socio-ecological framework consisting of 4 pillars including use of appropriate and affordable menstrual material, gender responsive facilities and services, knowledge and skill related to menstrual management, and social support to end menstrual stigma and discrimination (4). But globally still 500 million people lack access to products and facilities related to menstrual hygiene management (MHM) mainly in public places (5). Adolescent girls are uninformed and unprepared for menstruation, due to which they feeling of exclusion and shame (6). Poor menstrual hygiene is exacerbated by social and economic disparities for generations of girls and women, affecting their education, health, safety, and human development (7).

Menstruation contributes to the gender gap; girls struggle to fully participate in school due to restrictions on menstrual management in school settings. One promising way to achieve this goal is to promote menstrual health and hygiene in school (8). Half of the school in low income counties lack satisfactory water, sanitation, and hygiene facilities and services to oversee menstruation (7). So, to face these challenges of menstruating girls, who lack a basic lack of supplies or infrastructure, MHM issues has been incorporated in education sector forums for WASH and health with menstrual health and hygiene intervention (9). But it Nepal, lack of awareness or proper facilities for menstruation in schools, and culturally restrictive practices make menstruation are still challenges for girls (10). To minimize student absenteeism and create a favorable learning environment for girls, the Nepalese government launched its National Sanitary Pad (Distribution and Management) Procedure at the beginning of 2020 (11). In cooperation with UNICEF, the government has ensured the provision of “hardware” components, including separate toilets for girls with privacy and security and adequate water supplies and facilities for sanitary napkins disposal (12). National report shows that, half (51.2%) girls mentioned that they used disposable sanitary pad, and 46.6% of them have access to toilet for cleaning purpose, and 93.7% of them have access to soap for washing during menstruation (13).

Menstrual-related challenges have gained awareness over the past decade, but more multi-sectoral investment is needed to address all women's needs (14). In addition to lack of supplies and infrastructure, menstruating girls and women face other challenges. The intersecting issues of

inadequate sanitary facilities, lack of information and knowledge, lack of access to affordable and quality menstrual hygiene products, and the stigma and social norms associated with menstruation. These all issues cannot be tackled only by WASH professionals alone (7). So, the study aims to highlight the experience of mensural health and hygiene problems among adolescent girls that can expose the needs required for adolescent girls in schools just then the hygiene facilities in rural areas of Nepal.

Methods

The study was a cross-sectional study conducted among adolescent girls from schools in Bolde, Hindi, Godamchaur, Manekharka, Baluwa, Dapcha, Solambu, Bahunepati, Dhungkharka, Kirnetar and Dhulikhel. All adolescent girls attending educational sessions in schools were included in the study. For data collection, a consent form was distributed to all the eligible adolescent girls present in school a day before data collection to get parental consent. They were asked to return if they did not want to be involved in the study. Total 381 girls were included in the study.

Questionnaires were prepared with rigorous literature review and discussed among the group consisting of sociodemographic characteristics, and information related to menstruation. The questionnaire was translated in Nepali language which was pretested before collecting real data. During the day of data collection in each study site, the trained nurses distributed questionnaires to each of them. Questions were explained to them and if any of them were not clear about the questions, they were allowed to ask questions. The completeness of the questionnaires was checked and gathered on the same day. At the end of the interview, the girls were educated about the facts of menstruation and explained about cleanliness during menses. In addition, all their queries were answered satisfactorily. Data was entered into EpiData version 3.1 which was later extracted to SPSS (version 18). Descriptive statistics were summarized into frequency and percentage for categorical variables and the mean and standard deviation for continuous variables.

Approval was obtained from each school to collect data, and ethical approval was obtained from KUSMS IRC (Approval No.: 79/2019). Nepali version written consent was taken from each participant. Voluntary participants, confidentiality and right to decline from the study was explained to each participant before collecting data.

Result

Table 1: Socio-demographic characteristics of Adolescent girls

| Characteristics | Frequency | Percentage |
|-----------------|---------------------------------------|------------|
| Age (Years) | 14.4±1.3 (Mean±SD) 12-17 (Min-Max) | |
| Caste | | |
| Brahamin | 80 | 21 |
| Chettri | 80 | 21 |
| Newar | 38 | 10 |
| Tamang/Gurung | 119 | 31.2 |
| Dalit | 64 | 16.8 |
| Religion | | |

| Characteristics | Frequency | Percentage |
|------------------------|------------------|-------------------|
| Hindu | 245 | 64.3 |
| Buddhist | 118 | 31.0 |
| Christians | 18 | 4.7 |
| Types of family | | |
| Nuclear | 156 | 40.9 |
| Joint | 225 | 59.1 |

Table 1 reveals the sociographic characteristics of adolescent girls. The mean age of the participants in the study is 14.4 years. Majority them were Tamang/ Gurung (31.2%) by ethnicity and Hindu (64.3%) by religion. Regarding the types of family, 59.1% of are living in joint family.

Table 2 Information related to the Menstruation

| Menstrual Experience for girls | Frequency | Percentage |
|--|------------------|-------------------|
| Heard about menstruation before it started | 227 | 59.6 |
| Know Menstruation as natural process | 295 | 77.4 |
| Source of menstrual blood during menstruation | | |
| Uterus | 72 | 18.9 |
| Vagina | 228 | 59.8 |
| Other | 81 | 21.3 |
| Like to know more about menstruation | 332 | 87.1 |
| Impressions on 1st menstruation | | |
| Fear | 37.7 | 37.7 |
| Shy | 8.7 | 8.7 |
| Felt bad | 53.6 | 53.6 |
| Acceptance after subsequent menstruation | | |
| Accept it | 143 | 44.5 |
| Fear and frustrated and disgust | 121 | 37.7 |
| Did not care much now | 57 | 17.8 |
| Source of information about menstruation | | |
| Mothers | 132 | 34.6 |
| Teachers | 73 | 19.2 |
| Friends | 30 | 7.9 |
| Sister and others family members | 63 | 16.5 |
| Books newspapers and other social media | 83 | 21.8 |
| Experience pain during menstruation | 230 | 60.4 |
| Site of pain | | |
| Abdomen | 197 | 85.7 |
| Back | 33 | 14.3 |
| Ever seek health care for menstruation | 68 | 17.8 |
| Use clothes during menstruation | 225 | 59.1 |
| Mensural facilities in school | | |
| Toilet in school to clean during menstruation | 235 | 61.7 |
| Water in school to clean during menstruation | 236 | 61.9 |

| | | |
|--|-----|------|
| Menstrual Experience at home | | |
| Restriction during menstruation * | | |
| No restriction | 148 | 46.1 |
| Stay in separate room or dark room or shed or others house | 184 | 57.3 |
| Not see sun | 22 | 6.9 |
| Restriction after subsequent menstruation* | | |
| Religious work | 176 | 54.8 |
| Household work | 103 | 32.1 |
| Sleep in separate room or touch family members | 103 | 32.1 |
| Play outside or going to school | 98 | 30.5 |
| Stay in fix room or touch storerooms | 128 | 39.9 |
| Touch family members | 59 | 18.4 |
| Restrictions on eating some foods | 63 | 19.6 |

* Multiple responses

Tabel 2 states information related to menstruation of adolescent girls. Concerning the awareness on menstruation, 59.6% of them had not heard about menstruation before it started. Among them, 77.4% consider that menstruation is a natural process and only 18.9% of them mentioned correctly that uterus is the main source for menstruation. About the impression on the first menstruation, 25.7% of them felt fear and for subsequent menstruation, 44.5% of them accepted it but, others still felt fear, frustrated, or disgust about it. The majority of them (34.6%) had heard about menstruation from their mothers. Participants who had menstruated, 60.4% of them experienced some pain and among them also, 87.5% experienced abdominal pain and 17.8% of them had ever seek health care for menstrual problem. Regarding the type of pad, 59.1% of them used clothes during menstruation.

Regarding the menstrual experience in school, 61.7% mentioned that they had toilet facilities in school and 61.9% of them mentioned that had adequate water required to clean during menstruation. At home, during the first menstruation, 57.3% of them had to separate a room or dark room or shed or other houses. Regarding the subsequent menstruation 54.8% of them had restriction religiously, followed by household work, to play outside and types of food they eat and others.

Discussion

A study was conducted among adolescent girls in rural area to assess of mensural health and hygiene problems among adolescent girls in rural areas of Nepal. Overall, the results suggest that adolescent girls are facing multiple menstrual health issues in Nepal.

The mean age of the participants is 14.4 years. Girls who do not get information about menstruation may lead to discrimination and misconceptions related to it and lack of knowledge about menstruation can lead to harmful beliefs and practices (15). But in the study adolescent girls mentioned that they had not heard about menstruation before it started. Among them 77.4% of them mentioned that it is a natural process. Similarly, during menstruation, the uterine lining sheds,

disintegrating and departing the body as blood. Awareness of menstruation from an early age might improve safe practices and lessen the agony experienced by millions of women (16). But in the study, more than half, 59.8% of them mentioned that vagina is the source of menstruation.

The menstrual cycle is an essential aspect of femininity and womanhood, and every woman should cherish every menstrual cycle. But the stigma associated with menstruation restricts women's behavior and jeopardizes their wellbeing (6). In the study also, adolescent girls mentioned that they felt fear and shy on their first menstruation. Even in their subsequent menstruation 37.7% of them felt fear, frustrate or disgust. The finding is similar as in others studies conducted in Nepal (17).

A review related to menstruation among adolescents have stated that, they face multiple health issues among which pain or discomfort or dysmenorrhea are major problem (18). In the study also among the ones who have experienced menstruation, 60.4% of them had some pain during menstruation. Among the who experience pain, 85.7% of them had abdomen pain followed by back pain. For those who had pain, or discomfort, only 17.8% of them have sought care for it.

UNICEF had defined menstrual hygiene management as “women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials.”(19) But a review on menstrual hygiene management in low resource countries have mentioned that mainly in sub-Saharan Africa and south Asian countries, school girls in rural areas face substantial barriers for menstrual management (20). In the study also, 61.7% of them mentioned that they have toilet facilities and 61.9% of them mentioned about adequate water to clean during menstruation.

Nepal is a Hindu nation. Even though Hindu scriptures do not mention distinctly about menstruation, Hindus consider girls and women are impure during menstruation. The first menstruation is considered as a special event in the culture. Due to these cultural beliefs, women and girls are not allowed to involve in their daily activities during that period (21). Girls in Nepal have report of being not allowed to prayer rooms, temples and kitchens, or touch male family members, sleep on own bed, and going to school (10, 22). In the study also, the majority (57.3%) of them mentioned that they had to stay in a separate room or dark room or shed or others house on their first menstruation. For subsequent menstruations, 54.8% of them experienced restriction in religious work, 32.1% of them experienced restriction on household work and had to sleep in separate room or should not touch family members. Adolescent girls may miss information about menstruation due to stigma, taboos and myths, but still many restrictions persist in Nepal.

Conclusion

As menstruation is a social issue, so menstrual health and hygiene should be an imperative part of social system. Menstrual health and hygiene facilities are available, but still basic sanitation facilities, menstrual materials, information and services are missing among adolescent girls

essential for adolescent girls. To manage current unhealthy practices, interventions are required at family, community, and policy level.

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