

Menstrual Hygiene Management Among Girl's in Rural Schools of Rukum Nepal

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Abstract

This paper explores Menstruation Hygiene Management (MHM) among rural schoolgirls aged 13 - 19 years who had begun menstruating. The study is based on qualitative exploratory design in eight rural secondary schools of Eastern Rukum district of Nepal. The data were collected through purposive sampling method where Key In-depth Interview (KII), In-Depth Interview (IDI) and Focus Group discussion (FGD)'s were administrated with teachers, female guardians and students respectively. The study found low level of knowledge on menstrual hygiene, inadequate Water Sanitation and Hygiene (WASH) facilities and menstruation materials in school. As a result, schoolgirls would rather stay at home than feeling uncomfortable and embarrassed due to inadequate Menstruation Hygiene Management (MHM) facilities at school. Differently, school attendance was not compromised due to socio-cultural influence. A friendly and supportive MHM environment that provides education, absorbent sanitary materials and adequate WASH facilities is essential.

Keywords: Menstrual Hygiene Management; Rural Schools; Adolescent Girls; Attendance

Introduction

Most schools in developing countries, especially in rural areas, do not have minimum level of WASH facilities. schools equipped with mentioned materials are very difficult to find in rural areas. As a result, girl's participation and psychological well-being is influenced because they fear staining their clothes, subsequently being teased and humiliated by their classmates [1]. Menstruation is a biological process that occurs in females, for a significant period of their lifetime. Generally, MHM in schools requires access and availability of clean and absorbent menstrual materials, soap and water for washing, privacy to change absorbent, and disposal facilities for used menstrual materials in schools as per required [2]. The inadequate menstrual materials and guidance, poor quality and insufficient supply of safe drinking water; lack of disposal and private changing facilities in many schools compel girls to leave schools at their menarche [3]. Further, lack of adequate sanitary hygiene products forces some girls to use unhygienic materials which has high potential to increase urogenital infections [4]. In different options, for safe and proper personal hygiene, adolescent girls engage in selling sex in order to manage menstrual product [5].

Almost half school of Nepal (47%) have basic water services, no basic sanitation and hygiene services [2]. Altogether 33,160 basic and secondary schools lacked adequate facilities for water supply, sanitation, and waste disposal. Department of Education [6] highlighted

only about four-fifths (79%) schools are found with toilet where only less than two in five (36%) are equipped with separate toilets for girls. Amid them almost all toilets did not meet the national students to toilet standard set [7]. While, Sanitation and Hygiene Master Plan (SHMP) (2011) [8] and Child Friendly School Framework (CFSF) emphasized separate toilets for girls and boys and highlighted 50:1 student's toilet ratio as a minimum standard. If toilets are operated in place, are not functional and are not built for single sex are considered to failing to offer a basic standard. Rural school's toilet blocks are often not adequately operated and maintained for user friendliness, especially for girls because schools lack the skills and budget for operation and maintenance of their facilities.

Undeniably, most schools, especially of rural areas have scarce of safe drinking water supply, sanitation facilities, and hygiene behavior with MHM materials. Girls still are being more likely to drop schools earlier than boys. Of total enrollment more than two thirds (69.7%) 69.7 (%) in secondary level complete their academic cycle [9]. An inadequate social support, ongoing gender inequality, and social and hygiene taboos around menstruation make girls more vulnerable [10]. Moreover, without sound school environment girls cannot expose their academic performance psychologically as a result it limits their long-term economic potential, and significantly affects their Sexual and Reproductive Health (SRH) outcomes [11]. Despite, having girls school attendance and accomplish their education cycle is crucial to a country's development; lack of appropriate facilities with respect to WASH hinders girls from attending school and accomplishing their education cycle.

Literatures indicates that knowledge of MHM is poor. The ratio between number of girls and toilet is not as standard set. These facts indicate that MHM is an issue in educational setting. It hinders girl's regular attendance and academic performance. As per our best knowledge no significant study was found with regards in rural school. So, this study aims to explore MHM among rural schoolgirls in Rukum of Nepal.

Methodology

As study followed qualitative exploratory design, the epistemological stance of this study is subjective. Meanwhile, this study follows relative ontology that is constructed within individual experience, such that no one true reality exists. As a constructionist researcher, we value of context generating reality and understanding of MHM. This study confined eight secondary schools of Eastern Rukum district located in Province five of Nepal with an estimated population of 53,018. There is a total of 24 secondary schools (DEO report). The eight schools located in the rural areas were purposively selected with the close consultation of District Education Office (DEO) Eastern Rukum. School girls aged 13 - 19 who had already experienced menarche, their health education teacher and their female guardians were study population for the study. In this study, there were altogether 24 schoolgirls for FGDs where three girls from each school were selected. Concurrently, eight health teachers for KIIs were selected. Finally, 16 female guardians for IDIs, two represented from each school were purposively selected as respondents.

Data were collected in February and March 2018 using IDIs, KIIs and FGDs guideline. Participants completed questionnaire in their classrooms at their schools where FGDs were performed on the yard of schools. Preceding the data collection, local teachers assisted to make questionnaire clear on their local language in some units. Meetings were conducted among the school staffs, Parents Teacher Association (PTA) and School Management Committee (SMCs) in selected school to introduce the study objectives. Thereafter, female teachers assisted to identify eligible female people who had begun menstrual cycle aged between 13 - 19 years. Then after, health teachers, female guardians of the selected girls were identified to participate in KIIs. Guardians' individual consent and adolescents' individual consent were collected in confidential settings. The KIIs and IDIs were administrated face to face with selected participants. Doing so, their responses were recorded through the mobile set assuming it ensures internal reliability. The two FGDs were separately performed in the U-shaped setting of respondents.

Here, researcher rolled as a moderator of appropriate environment for discussion and encouraged participants to share their experiences, feelings and understanding among their peers. As a moderator, researcher did not interrupt the discussion that took place

among the participants. Prior to precede the KIIs, IDIs and FGDs, researcher took permission for recoding information from the concerned person. The information was recorded in mobile set in order to remain internal reliability of the information. As Vaismoradi and others [12] stated the data obtained from all qualitative tools applied in this study were analyzed thematically using content analysis. Prior to do this, obtained raw data in the form of text, written words, verbalism and symbols representing people and events regarding MHM were conceptualized. Then after, organized information was categorized in three major themes emerged as knowledge on menstruation, menstrual hygiene facilities, and discomfort in school during the period. Different previous research findings are also put together to make research findings stronger.

Results

The paper presents the results from the qualitative study using three main themes including knowledge on menstruation, menstrual hygiene facilities, and discomfort in the school during the period along with verbatim presented by the respondents during research.

Poor knowledge of menstruation

Reproductive health education started before three decades in Nepal from secondary to higher level in its different form as; family life education, sex education, adolescence sex and reproductive health education aiming to make students familiar on sexual and reproductive health education as well as its different perspectives. While the school curriculum covers menstruation as part of health subjects, the majority of girls did not know its biological basis. Both the girls and teachers reported lack of structured teaching on menstruation and MHM in the schools. Teacher emphasized that open discussion cannot commence due to hesitation. One of the KII respondents stated that "Students, especially girls do not raise their head because of shame during classes where male students laugh loudly, and they tease girls in their mother language" (KII, teacher).

Teacher added that this type of class environment hinders teaching learning activities in formal way. As a result, they suggested self-reading for those topics which make shame. Instead, fewer students come to learn individually where they felt confused. So, students have varied knowledge and differed understanding level with respect to menstruation and its management.

Concurrently, the girls revealed that despite having curiosity, they were not formally taught because of cultural taboo 'named shame full subject'. Additionally, they explained that they know about menstruation either own menarche or elder sisters' period rather than formal way. For that reason, most girls were unfamiliar why it happened and its biological basis. For instance, one of FGD respondent responded that "Menstruation is a flow of impure blood (aangko maila) from female sex organs which occurs once a month in girls. I only know about it during my sisters' menarche at schools, at that time the blood was running out and had stain in her clothes" (FGD, Girl).

This understanding of the girls denotes that they have very poor level of understanding with respect to menstruation. Further, they were unaware how to properly manage it. Meanwhile, the another FGD respondents revealed that "I only knew about menstruation on my own menarche and at that time blood was running out from my 'Katu' (vagina) and my grandmother told me that I reached age for a marriage (la yesko pani aba biha garne umar bho) (FGD, Girl).

At that time, she knows that having menarche is a sign of get ready for the marriage. Additionally, they know that they would be pregnant if they got marriage after period. However, saying badly most of them were unanswered on why menstruation occurs in girls.

With respect to knowledge on menstruation and its management, female guardians urge that appropriate time for providing it is only when they experienced the menarche. This is the proper time that they can learn and understand what is taught to them. Moreover, girls know different way of handling menstruation from their seniors as; elder sisters, aunties and female teachers. In addition, how to behave and take care themselves during menses. They instruct girls what they have acknowledged, perceived and strictly followed in their own life that revealed the local understanding of menstruation. This has the long history before many decades and closely associated to human

civilization and customs too. The customs are deeply rooted in society. For instance, menstruation is considered as the period of dirt and impurity and females are kept in complete isolation.

This study also found the understanding of female guardians of the schoolgirls. Differently, female guardians of the study area have given emphasis not to isolate in daily activities like; attending schools, be in homes, kitchen and worship room, touching other people (especially male members of the family or neighbors), cattle and from growing fruit and vegetables during their period except big ritual as; 'kul-puja' worshipping of ancestor. Concerning to the menstruation understanding, the responses were similar as girl's students. One of IDI respondents stated that "We understood menarche as the perfect age for marriage and girls can give healthy baby. The significant thing is that girls can properly handle her husband in life" (IDI, Female guardian). From the assessing of all mentioned verbalism, we came to understand that knowledge regarding to menstruation was very poor in the study area. Having some notable issues like not prohibition in going to schools during their messes, remaining others as; menstruation understanding, knowledge providing time and means were irrelevant. In order to make get rid of from this stereotype understanding it requires more efforts from the Government and Non-government sectors in schools as well as communities.

Inadequate menstrual hygiene facilities in school

Principally, school WASH facility denotes a combination of technical and human made environment that are essential to produce a healthy school environment and to develop appropriate health and hygiene behaviors. School WASH has some key concerns as; functional and reliable source of drinking water, gender segregated toilets, functional and strategically located hand-washing stations, inclusion of the hygiene education in the curriculum. As per the observation of the school, all schools had tap in school, however piped or stored water was not available in toilets. Some of the taps were nonfunctional; so that office helper has brought water on pot '(gagri)' far from the schools from public tap. In schools, there were no taps and containers for storing the water in the toilets. Toilets were not operation with appropriate space where soaps for washing were also not available. However, a small empty bucket (Baltin) for more than two toilets was found in most of schools. In this scenario, one of FGD respondent responded that "I never use the school's toilet during menses (kyau-tau) because there are certainly drops of blood while urinating or defecation in the toilet. The dropped blood remains over the floor and pan because our toilets have scarce of water and no soaps for cleaning" (FGD, Girl).

Almost all girls reported that toilets were not equipped with water and soap for cleaning. They emphasized that water should be available at least to wash hands. Due to these insufficiencies, most girls avoided to use toilets, with limited options as; wait until the end of the school day to go to the toilet at home. They stressed that rather than that it would be better not to come at school during the period.

Considering to privacy and cleanliness, girls were found with difficulties to maintain hygiene during their period at school due to the toilets offered no privacy. Toilets were operated small with limited spaces. The purpose for designing and constructing toilets ensures privacy; however, girls did not feel so as it to feel. The reason was toilets were not constructed for MHM purposes, space was limited, no running or stored water and soaps with bad stink. In this context, teachers accounted that most girls remained at home during period so they do not face any discomfort while managing menstruation. Alternatively, girls attended school during period requests teachers' toilet which remains clean and private rather than students. However, they were not also as clean as it would be. Regarding this, one of FGD respondents stated that "The latrines at school have cracked doors; somebody easily can see when someone is using toilet. Friend requires informing as someone is inside". (FGD, Girls). "The toilets at school are very limited with bad odor. Having more users (one toilet for grade 1 to 10 students), urine and faecal can be seen all over the floor and the toilets are equipped with a bad odor and stink as well" (FGD, Girls).

As per these verbalisms of the respondents' we came to understand that girls did not use the toilets during their period. In analogous words, toilets were not usable during messes in the study area because they had no water, soap, privacy and cleanliness as well. Moreover, toilets were filled up by urine and faecal throughout the floor and walls that produced bad stink. Almost all toilets did not meet the

national students to toilet standard set. Toilet blocks were not adequately maintained or user-friendly, especially for girls. This is mostly because schools lack the skills and budget for operation and maintenance of their facilities. Undeniably, most schools have scare of safe drinking water, sanitation facilities, and hygiene behavior with MHM.

The access of menstrual materials depends on personal choice, cultural acceptability, economic status, and availability in local markets. The choice of varies among rural and urban girls. In rural areas, the most preferred absorbents are reusable cloth pads and in urban areas girls prefer to use commercial sanitary pads. Most girls revealed not having access to absorbent menstrual materials in the area which was a huge challenge to manage their periods. Being rural, girls commonly used old piece of clothes where few used sanitary pads available in far market. Referring this situation, one of FGD respondent responded that "We have no options to remain in schools rather than going to back home, if we menstruate up at school. The major challenge we experience is what to use after menses" (FGD, Girls).

As per girls, they must leave school if they had messes during school time or they have stored materials in her school bag. Those girls who used old piece of clothes, reported that it filled up too quickly and did not stay in place by sticking to underwear. Furthermore, girls reported that when cloth absorbed blood, the materials starts to smell. So that someone, who passes by messes girls can easily notice that she was menstruating. At the same time, some girls reported that they experienced more difficult to manage this period while they had loose underwear or had not wear underwear. Though they have heard about readymade sanitary pads and its convenience to use, some girls have never seen.

In the different way, few girls reported that they have used it which lasts up to 6 hours and experienced more comfortable than homemade materials. We brought it from the far market and stored, however it is not possible forever because it is costly. Although having more comfortable, parents recommends using the pieces of clothes because sanitary pads cost high.

Concerning to the availability of menstrual materials, all schools were found with no menstrual materials. As per teacher this is because schools do not have enough funds for school WASH as well as menstrual materials. We are highly aware from the negative consequences of not having adequate MHM materials in the schools. Despite, we accept the better truth that we have lack proper budget for constructing and managing other MHM requirements, one teacher responded. As similar as teacher one KII said that "Girls as well as female staffs must own-self manage menstrual materials, if they have interest to attain at schools at their menstruation periods". (KII, health teacher) This verbalism indicates that girls have to develop their own personal strategies in order to handle this period. These strategies may vary due to the personal preferences, availability of resources, economic status, and cultural traditions and beliefs, education status, and knowledge about menstruation. Regarding this issue's one FGD (G6) reported that "We just have to carry material from home either homemade materials or readymade sanitary pads to use on messes, instead stay at home throughout the period" (FGD, Girl).

From the reviewing of these responses, we came to understand that there is scarce of MHM materials in all schools. For this reason, girls and female staff must prepare and develop MHM materials on the basis of their available resources, economic status and prior experiences. The worth noting thing is that all girls were unaware to the use of unhygienic materials and behavior has high potential to increase urogenital infections. The basis of urogenital infections embedded on unavailability of appropriate menstrual materials and unhygienic health behavior during the menstruation period.

Discomfort in school during the period

Menstrual hygiene practices were affected directly and indirectly by cultural norms, parental influence, personal perceptions, economic status and socio-economic pressures. Menstrual beliefs refer to misconceptions and embedded attitudes towards menstruation within given culture or religion and are interrelated to the MHM. These norms are the barriers as well as supporters in the path of good menstrual hygiene practices. Furthermore, they are also the dominant causes to school attendance and absenteeism too.

Female guardians reported that they were aware of the challenge's girls faced during menstruation as; absence of privacy room for MHM, water and soap. Almost all guardians responded that they have encouraged own girls to attend school and taught them how to take care of themselves and maintain personal hygiene to avoid smell and stains. Additionally, they did not urge to attend school if she feels discomfort while on menses. They suggested own girl if the teasing by their male counterparts, making a complaint with female teacher or principal or beat ('kuta') them. In these regards, one IDI stated that "Seniors, especially elder sisters instruct girls how to properly practice MHM while on schools and home during their period. We never recommend not attaining school during this period except girls feeling discomfort" (KII, female guardian).

Girls experience no restrictions on attending school during this period, this happened due to the overall perception of the people regarding menstruation. They consider it is a common phenomenon occurring in female and values the educational aspects. But all girls reported that they feel discomfort in school in term of reading, playing and other activities. Due to not having adequate MHM materials in the schools they experienced more difficult to manage the period in school time. Similarly, some girls reported that they also feel physical discomfort like abdomen pain, Nausea, weakness feeling, excessive bleeding during the period in school. And some girls stated that they felt discomfort to stay in the class. It means due to not availability of menstrual materials, rural schoolgirls have felt discomfort in term of physical, mental and social aspect.

Discussion

This qualitative study concluded that management of menstruation among girls in rural schools is challenging for both menarche and experienced girls with psychologically and physically. Here, researcher brought literatures, reflection over the responses of informants and personal understanding as per theme.

First finding of the study tells that knowledge on menstruation and its management practice in schools is very poor in the study area. They did not know anything about menstruation before menarche and instruct them only in informal way through their seniors as; elder sisters, elder female colleague, aunties and mothers as well. The core basis for not educating formally is misconception towards menstruation such as; it is substitute of pornography, health teachers are vulgar, heterogeneous teacher requires for teaching menstruation and this discipline is not openly taught [13]. The qualitative data clearly showed that girls could not properly maintain menstrual hygiene in school due to the lack of structured education with respect to menstruation. In the same line, Kaur and others [14] explained that due to cultural expectations and restrictions many girls were not adequately informed about the realities of menstruation. If so, as Deo and Ghattargi [15] poised girls feel subnormal, diseased, frightened, confused, and feel embarrassed by menarche likely to develop negative attitudes towards menstruation. Qualitative findings from western Kenya reported that inadequate MHM knowledge affects girl's confidence, psychological wellbeing and ability to perform physical activities [16]. Reflecting upon the findings, relating them with the literatures and adding to my own experience, researcher came to know that menstruation and its subsidiary topics should be formally taught in order to clearly understand to MHM by girls.

Uniformly, the second finding of the study informs that school WASH facilities in rural areas were inadequate. The similar levels school WASH facilities were found in Zambia and Nicaragua [1]. Toilet blocks are not adequately maintained or user friendly equipped with no soap. This is mostly because schools lack the budget and skills for operation and maintenance of their facilities. As reported by Montgomery, Ryus, Dolan, Dopson, and Scott [17] from Kenya, poor WASH facilities deter girls from using the facilities at school, with most girls not using them at all and opting to stay home until they finish menstruating. Research conducted in Uganda [18] also found inadequate School WASH facilities in secondary schools influenced MHM practices that lead to school absenteeism in period. As per researcher knowledge is concerned, the scare of school WASH facilities directly and indirectly hinders girls learning environment in the schools.

Third finding of the study notifies that there were no privacy and cleanliness in the toilets. Additionally, girl students do not use school toilets because of bad odor of urine and fecal over the floor while on period. A qualitative research in Uganda concluded that menstruation

kept girls away from school included pain, lack of access to protection methods and lack of privacy for MHM at school [19]. Lack of adequate toilet facilities, privacy and cleanliness emerges as one of the major reasons for girl's absenteeism. While, National Sanitation and Hygiene Master Plan of Nepal (NSHMPP) (2011) of and Child Friendly School Framework (CFSF) emphasized separate toilets for girls and boys and highlighted 50:1 student's toilet ratio as a minimum standard. As found in India, inappropriate toilets for girls, even when toilets were present, the functionality could be doubted when girls responded the toilets were unusable, so they preferred either to request teachers toilet or stay home on menstruation period [20]. From the assessing mentioned literatures and information, girls experienced more discomfort to use toilet even urinate and offered no privacy.

Fourth finding of the study clearly showed that there was no access and availability of absorbent menstrual materials in schools. Almost all girls used homemade pads (made from the old clothes) where few used sanitary pads. It is found similar to Northeast Ethiopia where girls used pieces of cloth and rags [21]. Some countries such as; rural Malawi and Western Kenya was identified costly commercial pads as one of the major barriers to school attendance [22]. Differently, a research conducted in Tamil Nadu, India found that simply providing sanitary pads would clearly not resolve girls menstrual issues; however comparison of regular against 'model' schools highlighted that additional activities improved their knowledge, and ability to cope with menstruation in school [20]. This study showed that comfort during period is essential. In order to get comfort feelings on menstruation period they should well instruct how to manage it.

Fifth finding of this study enlighten that girl's education is not undermined on menstruation period. Cultural norms, parental and personal perception does not negatively influence for attending and acquiring knowledge from school at this period. Except girls physical unwell-being, there had not restriction from the socio-cultural norms. As Morrison and others (2018) [23] found in Acham district that it was not good to miss school and that girls should attend even when they were menstruating. Furthermore, study emphasized that in the past girls did not attain school when they were menstruating, but nowadays they attain. From the assessing of qualitative data concurred that girls pain and discomfort sometimes prevented them from attending school. They cannot concentrate on class because of menstrual cramps if they were very bad then is no need to go school. Many girls experience restriction on cooking, working, bathing, worshipping, and having certain food like milk and milk product of cow even going to school [24]. Girls isolation during their period by their family rely on overall perception of the people regarding menstruation as they consider it dirty and polluting the isolation [25].

Finally, this study has several limitations that should be noted. Research findings are limited to rural secondary schools in Eastern Rukum of Nepal on MHM issues, may be different to other areas however equally important to understand the extent of MHM challenges faced by schoolgirls. Research includes eight secondary schools amid 24, 16 IDIs and two FGDs with 24 female students who had already messes. Simultaneously, eight KIIs with health teacher, 16 IDIs with female guardians were administrated assuming it yields rich information. The information obtained from varies sources were triangulated in order to make findings more reliable. In addition, research findings were compared and contrasted to thematic literatures for making strengthen of the research findings [26].

Conclusion

Girls understanding on menstruation and practices to MHM has close relationship to school attendance and academic performance as well. Poor menstrual knowledge on girl students often forced to skip school in rural secondary schools. The inadequate school WASH facilities with menstrual materials decreases their attendance and hinders their full performance. The absences of menstrual materials in school make more inconvenience, embarrass and compel them to use unhygienic things as a material. School attendance is not comprised on the basis of socio-cultural influences on menstruation, instead girl student's physical discomfort, un-appropriate WASH infrastructure with privacy and MHM materials.

At the final point, the study noted three major improvements in the study area. Firstly, need to operate and maintain of school WASH facilities to make them MHM and user friendly, including provision of adequate soap, MHM materials, and disposal systems and

appropriate changing spaces within toilets. Second, need to reeducate and train teachers, so that they can work towards creating a supportive environment for girls. Third, need to encourage girls to practice safe and hygienic behaviors wherever, schools or home. The basis of overall problems is illiteracy. In order to overcome from mentioned problems, girl's education is a must.

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