Towards a sustainable solution for school menstrual hygiene management: cases of Ethiopia, Uganda, South-Sudan, Tanzania, and Zimbabwe

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African schoolgirls face considerable challenges as a result of menstruation and its management. Menstruation is seen as secret and regarded as taboo. As a result girls are not receiving adequate support from home, schools, or the community. They are left to address the challenge on their own, which consequently affects their school performance. Development interventions that deal only with the supply of materials cannot resolve the problem in a sustainable manner. We need to have a comprehensive approach that can improve: knowledge, attitude, and practice of girls, parents, and the community; sanitary materials supply; the policy environment; and the physical infrastructure. The issue of menstrual hygiene management is gaining recognition as part of the development agenda for improving girls' school participation. But there is little research and few practical case studies have been conducted to inform policy and practice. SNV Netherlands Development Organization is addressing menstrual hygiene under its WASH in School programme in Asia, Africa, and Latin America. This article highlights baseline survey findings of the current menstrual hygiene management practices in the project areas of Ethiopia, South Sudan, Uganda, Tanzania, and Zimbabwe and recommends the approach piloted.

Keywords: menstrual hygiene management, WASH in School, Africa, SNV, girls' school attendance

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http://dx.doi.org/10.3362/1756-3488.2015.009, ISSN: 0262-8104 (print) 1756-3488 (online)

Menstruation is a normal biological phenomenon that women experience every month on average between the ages of 12 to 50 (USA Department of Health and Human Services, 2009). Owing to traditional and cultural beliefs and practices in Africa, it is one of the subjects that cannot be discussed publically and as a result, support for girls and women both at home and outside is not sufficient to effectively manage menstruation (UNESCO, 2014). African schoolgirls are the most challenged by this biological fact of life. As the baseline survey in five African countries of revealed, on average, 50 per cent of girls are not attending school during menstruation.

The issue of menstrual hygiene is not comprehensively incorporated in school curricula and WASH programmes and, as such, participation of girls in schools is affected. In many curricula, there is emphasis on the reproductive process but not on the practical issues girls need to learn to manage menstruation. Development partners working on WASH in School (WiS) programmes and emergencies have recognized the problem and are addressing the challenge. The approach followed by the different partners varies and it is not at scale. Intervention in menstrual hygiene management (MHM) should look into sanitary material supply, access to information, policy support, and infrastructure facilities. Collaboration and coordination between government, NGOs, donors, the private sector, and communities is also crucial in addressing the issue. This article will focus on baseline findings from an MHM project being implemented by SNV-Netherlands development organization in schools in five African countries (Ethiopia, South Sudan, Tanzania, Uganda, and Zimbabwe). In this article the existing MHM practice will be described and recommendations to improve the MHM situation will be highlighted.

Description of multi-country MHM project

WiS (WASH in School) is one of the main WASH programmes SNV is implementing in Africa, Asia, and Latin America and MHM is a product under the WiS programme. Based on previous experiences in school WASH, SNV developed a joint project on MHM called 'Girls in Control' implemented in Ethiopia, South Sudan, Uganda, Tanzania, and Zimbabwe. This multi-country project is a pilot project aimed at developing and testing a more comprehensive and sustainable approach which addresses policy, awareness, sanitary supply, and access to girl-friendly facilities in schools. Implementation of the project started in January 2014 and it will be concluded by the end of 2015. The project budget is €3 m.

Twenty-five districts in the five countries, a total of 491 schools and 141,000 adolescent girls will be directly benefiting from the project. The project also aimed to reach 8 million people though awareness raising campaigns, dialogues, and advocacy events.

Overview of baseline survey

General

The baseline survey was conducted in the months of January to June 2014 in four countries (Ethiopia, South Sudan, Tanzania, and Zimbabwe). The study conducted by SNV and IRC in 2012 is used for the case of Uganda.

The objectives of the survey were to assess the existing MHM status of the target districts in each country, set benchmarks for monitoring progress, and align the intervention to address the identified MHM issues. Moreover the evidence from the baseline will be used to advocate for policy change.

Education offices were involved in identifying representative primary and secondary schools from rural and urban settings in the target district except for Zimbabwe. In Zimbabwe all schools in the district were targeted for the survey.

Sample populations of schoolgirls above 11 years old, boys, teachers (male and female), school heads, parent–teacher associations, school development committees, and community leaders/village chiefs were targeted for the study. In each country the study team worked closely with the schools in identifying girls and boys who were willing to participate in the study.

Methodology

Questionnaires and checklists were developed prior to the survey and enumerators from each country were trained. In all five countries the enumerators were local people who understand the context and language of the community. Observation using a checklist, structured interview (SI), semi-structured interview (SSI), in-depth interview (IDI), key informant interview (KII), and focus group discussions (FGD) were the methodologies used to collect primary data.

The data collected from the interview questionnaires were analysed using SPSS software and data from FGD were analysed manually based on recurrent themes and patterns.

Ethical considerations

Rights, anonymity, and confidentiality of the respondents were respected in all phases of the study. Informed verbal consent with the respective head of school and the respondents was obtained before data collection. Photos were made with due verbal permission from the respondents. To preserve anonymity, all findings are presented without ascribing names or identifiable personal description.

Limitations

Twelfth and eighth grade students from Ethiopia were not included in the survey because they had already taken exams and left school in June when the survey was conducted.

Key findings

Local naming. In Ethiopia menstruation is called *Yewer Abeba*, meaning monthly flower officially and *Idif*, meaning dirt, and *Gadawo*, meaning disease of the abdomen by different tribes. In the Central Region of Uganda it is referred to as *ensonga* or the 'issue'; in Tanzania, it is called *Hedhi* meaning the blood flow. The South Sudanese call it *Ada shaharia* in Arabic, meaning the usual monthly. From the local naming in Uganda and South Sudan we can see its secrecy. The naming implies how menstruation is perceived and handled by different communities.

Cultural belief and tradition regarding menstruation. Menstruation is a secret subject and a taboo. In all five countries women are considered unclean or dirty during menstruation. They are not allowed to participate in public gatherings, especially in churches, mosques, and religious prayers and ritual activities. In some countries they have to separate themselves for an average of seven days in a separate house until they are called 'clean'. Interviews with men, women, and girls in three districts of Tanzania (Sengerema, Mufindi, and Chato) and Masvingo district in Zimbabwe indicate that menstruating girls cannot be allowed to touch water sources and animals, cook, wash dishes, touch plants, or pass through the planted farms during menstruation because it is believed that they will pollute them. In South Sudan menstruating girls are not allowed to use the latrine and they are not allowed to bathe till the blood flow ends.

Menstruation problems are highly reinforced by cultural and religious traditions and local customs. According to information from the baseline survey in Tanzania some of the children were taught not to use disposable sanitary pads as they cause cancers and not to dispose of the used materials in open spaces as, if seen, they might be used in witchcraft resulting in death or infertility. It is also perceived that if fathers talk with their children about MHM issues, they will die. In all the five countries it is believed that having sex will end the pain associated with menstruation.

As indicated by the data from the baseline, when girls reach adolescence the tendency from the parents' side is to let them get married. In all five countries surveyed girls are considered as an asset for their family as they bring fortune. The data from Tanzania and South Sudan indicates that early marriage and pregnancy are the main causes of girls' school dropout.

On the other hand, the FGDs with teachers and parents, specifically female teachers and mothers confirmed that it was shameful and forbidden to discuss menstrual issues with their husbands and rarely with their daughters. During their menstruation, they had been sleeping separately until the end of their period.

Knowledge on MHM issues. The survey indicated that more than 80 per cent of the girls have knowledge about puberty in general; they know the stages of body change but have limited know-how on handling the changes including menstruation. It indicates that on average 66 per cent of the girls had not known about menstruation before it started. During focus group discussions schoolgirls shared that they were not told anything specific about menstruation, especially the physiological basis – where the menstrual flow comes from and how to manage it until their first personal

experience of it. Respondents reported the onset of menarche as a shocking or fearful event. Numerous studies conducted, particularly from low-income countries, also confirm that a very high number of girls start menstruating without having any idea what is happening to them or why (Jothy and Kalaiselvl, 2012; McMahon et al., 2011; Neginhal, 2010).

In all five countries, more than 80 per cent of the girls interviewed agreed that mothers are their source of information, followed by school and media, respectively. The survey result indicates that schools do not provide specific and sufficient lessons on menstruation and menstrual hygiene. According to the survey result 67 per cent of respondents from Ethiopia, and 52 per cent from Zimbabwe agree that there is no MHM-related education given in the schools and the remaining respondents from both countries claim that some kind of awareness on MHM is given.

In schools knowledge of teachers and counsellors on MHM is not sufficient as they are not engaged in MHM-related training nor have tailored MHM guidelines to support them. Unlike in the other countries, in Zimbabwe Masvingo district 84 per cent of the schools provide guidance and counselling services for girls on MHM. The concern, however, is that 50 (25 per cent) of those schools have male counsellors in charge of MHM which made the effort less effective. Male teachers are dominant especially in South Sudan schools targeted in this study. On average a school has 13 male and 2 female teachers. Some schools do not have a female teacher. Both the male and female teachers are untrained on the issue of MHM and hence cannot support the girls.

It is evident from the results of this assessment that girls are less informed about menstruation before and after seeing it. Ignorance of pubescent girls about their bodies and sexual and reproductive health and rights affects their sense of empowerment to manage monthly menses and to make informed decisions about sex after menarche. Without guidance on these topics, adolescent girls run an increased risk of becoming pregnant or acquiring HIV (or other sexually transmitted infections) from unsafe sexual relations, linked to their vulnerabilities because of uneven gender power in intimate relationships (Sommer et al., 2012; UNESCO, 2014).

Sanitary materials for managing menstruation. The materials used during menstruation range from nothing to disposable pads, cloths/rags, commercial sanitary pads (disposable and re-usable), toilet paper, magazines, cotton, pieces of mattress, natural materials (leaves, tree bark), digging a hole, goat skin, cow dung, ash, and sand are the main materials used in managing menstruation in the five countries.

The data from South Sudan shows that only 16.7 per cent of the girls use commercial disposable sanitary pads, the remaining proportion uses different materials such as pieces of old cloths, goat skin, holes, or nothing. In one of the counties surveyed (Ikwoto county), 43 per cent of the girls use nothing for protection. A considerable proportion of the girls (17 per cent) manage their menstruation by digging holes (use the small holes to menstruate and then cover it with soil) as illustrated in Figure 1. In Ethiopia, 24 per cent use disposable pads, 22 per cent use re-usable pads, and the remaining proportion use rags and toilet paper. In the case of Zimbabwe, 55 per cent use pieces of cloth, 13 per cent use disposable sanitary pads, and the remainder

Figure 1 An adolescent girl demonstrating how a hole is used during menstruation

use a combination of pads, pieces of cloth, tissue or newspaper, and cotton wool. In Tanzania, it was reported that 84 per cent of the respondents use re-usable pads (pieces of cloths, cotton, or sponge), 2 per cent use a combination of re-usable and disposable pads, and 15 per cent use disposable pads. The word re-usable here implies properly sewed commercial, homemade washable pads, and pieces of cloth or sponge. It is unclear whether or not the re-usable pads girls were using met safety standards.

Sanitary material supply sources. Schools are not the targets of commercial pad producers or distributers. The supply of pads is mainly in the urban areas and in rural areas the supply is limited and in most cases it does not exist. As the survey clearly showed there are few commercial sanitary pads available in the target area. In Ethiopia three sanitary pad brands, Eve, Flexi, and Comfort, and in South Sudan Always and Feather, are mainly known by the rural and semi-urban girls. In the case of Uganda Afripads produce re-usable commercial sanitary pads and Makapads produce disposable pads.

The study has clearly demonstrated that the majority of the girls are interested in using commercial disposable pads if the price can be reduced by 50 per cent (the average current price for a pack of disposable sanitary pads ranges from US$1 to 2), if their preference is considered (style, length, thickness, etc.), if they are promoted by the media, and if they are assured that there is no health risk. Water shortage is claimed to be a challenging factor for girls to use the re-usable pads, as most of the schools visited do not have water in the school and at home. Moreover the commercial re-usable pads are not well known by the girls.

Different international NGOs such as SNV, Plan International, and WaterAid, and local NGOs and community- or faith-based organizations are supporting the production of re-usable sanitary pads by training women groups in the community

and schools in Africa. However, the study revealed that the production and distribution is limited to the project areas and it is not well known by the girls interviewed.

Access to physical infrastructure. Access to toilet and water supply facilities in the schools in the study area is limited. The latrines that exist do not provide adequate privacy (no locks and sometimes no doors), they are dirty, and have no ventilation. In Tanzania only 2 per cent of the visited schools have improved latrines and 99 per cent of the schools do not have appropriate MHM facilities (rooms for changing or washing, sanitary disposal, etc.). The same is true in Ethiopia; none of the schools visited had any facility for MHM (changing rooms for girls, sanitary materials for emergency, water basins or buckets, wash rooms, and soap). Figures 2 and 3 demonstrate common latrines in rural schools in Ethiopia. In South Sudan 81 per cent of the schools do not have MHM facilities; in boarding schools girls use their dormitory and shower unit to change their sanitary pads and wash.

When asked how those students who attend schools during menstruation cope with this situation, they respond that they use the nearby forest or the existing latrine to dispose of the used pads; 47 per cent of the girls threw used pads in the dry pit latrine, 16 per cent flush them down the toilets, and the remaining 37 per cent threw them into the forest.

Of the schools visited in South Sudan and Ethiopia, 45 per cent and 16 per cent, respectively, have functional water systems within the school compound. The remaining percentage use water from community water sources near the school. The main source of the water is a borehole fitted with a hand pump and roof water harvesting system. In 12 per cent of the boarding schools in South Sudan the latrines have basins and water is available in buckets and 4 per cent of the schools' washrooms exist near the girls' dormitory. No data is reported from the other countries.

Figure 2 Toilet facilities for girls at Enseno Secondary School, Meskan district, Ethiopia (exterior)

Figure 3 Toilet facilities for girls at Enseno Secondary School, Meskan district, Ethiopia (interior)

Policy environment. The major policy areas where the issue of MHM is expected to gain recognition are education, health, and gender. The baseline survey indicates that MHM is not covered in school, health, or gender policies. According to baseline data from Zimbabwe, 53.3 per cent of the people interviewed say there is no policy around the subject of MHM and it is not covered in the Health Act, while 36.7 per cent did not know whether there were policies or not, and 6.7 per cent were not sure at all. The survey team could not find any relevant policy document, plan, or strategy where the issue of MHM is addressed. The same is true in the other countries. Integration of MHM issues in school-level development plans is also non-existent.

Managing menstruation in schools. All the girls that participated in the study revealed that they have challenges in managing their menstruation; 84.5 per cent of respondents started menstruation at the average age of 11 to 15 years. The challenges are related to lack of appropriate materials and facilities to manage menstruation and associated pain. In Tanzania more than 50 per cent of the girls said that they always fail to manage their blood flow well and cannot afford menstrual pads while 40 per cent experience pains such as stomach ache, headache, and backache making them uncomfortable to stay in class. The study in South Sudan revealed that girls stay home for a minimum of 4 days and a maximum of 8 days during menstruation. This is attributed to the following factors: lack of sanitary pads (73.7 per cent), severe pain (72.5 per cent), lack of a private changing room in school (56.6 per cent), afraid of being made fun of (43.8 per cent), feeling dirty (43.6 per cent), discomfort (43.6 per cent), and not allowed by parents (21.1 per cent).

As the study indicates the majority of the girls are not comfortable to attend class during menstruation. Apart from the associated pain and stomach ache girls experience shame, low self-esteem, and lack of confidence for fear of mismanagement of the menstruation. Girls interviewed responded that the fear of soiling their clothes and of a bad smell associated with not washing properly prevents them from concentrating on their education. As a result most of them (52 per cent: ET 52 per cent, Ug 57 per cent, TZ 48 per cent) prefer to stay home to avoid such instances.

In Tanzania, Uganda, and South Sudan the baseline survey has revealed that schoolgirls are involved in sexual activities with males during school sessions to generate income for meeting their basic needs, including sanitary items, because the support from families is limited; 26 per cent of girls indicated that boys approach them for love and sex after they know that they have started menstruation. This exposes the girls to unwanted early pregnancy and school dropout.

The baseline surveys have indicated how MHM is affecting schoolgirls' enrolment. In Uganda 24 per cent of senior women teachers interviewed agree that menstrual hygiene is the main issue for girls' school dropout. But according to the study from South Sudan only 3.5 per cent of the respondents agree that menstruation is a contributing factor for girls' dropout. They argue that forced marriage (52.9 per cent) followed by early unwanted pregnancy (22.4 per cent) and lack of parental care (16.5 per cent) are the main causes of school dropout.

Discussion and recommendations

Cultural and traditional beliefs

Studies in the five countries have demonstrated that existing cultural and traditional beliefs and practices are negative towards menstruation. Traditional beliefs restrict the free movement of women in the household and in the community. During menstruation girls are considered dirty which dis-empowers them and lowers their confidence in the community and at school. If a girl is to be treated like this every month for an average of 4 days, how can she meet her full potential in school and also in productive work in the community?

Knowledge on MHM

The baseline survey has indicated that mothers are the main (80 per cent) source of information for girls. The knowledge mothers have about menstruation is highly influenced by the cultural or religious belief system and practice and it is not enriched by science as most mothers are illiterate. So the traditional beliefs about menstruation and its management will roll from generation to generation if girls are not empowered with the right knowledge.

The baseline survey has also indicated that teachers do not have sufficient knowledge on MHM. The capacity development support for both male and female teachers does not exist, except for a few examples in Mashvingo district in Zimbabwe.

Interventions on MHM should focus on integrating the issue in the existing school curricula and on promotion using appropriate communication media for the school community and the wider public. The national, local, and school level media such as televisions and radios have great potential to break the silence and create public awareness. Capacity building training for teachers is also essential. The Girls in Control project in the five countries addresses the issue of public awareness and capacity building for teachers and the achievements are promising.

Sanitary materials for managing menstruation

The survey indicated that 13–17 per cent of girls use disposable sanitary pads. The remaining 83 per cent of the population are using re-usable pads, which in most cases are pieces of old cloth, sponges, or cotton. A significant proportion of girls in South Sudan are managing their menstruation by digging holes (17 per cent) or using nothing (43 per cent in the county of Ikwotos), while cases of using ash, sand, and cow dung are reported in Zimbabwe, South Sudan, and Tanzania. This data clearly indicates that 83 per cent of adolescent girls are at high risk.

More than 70 per cent of the girls have mentioned lack of finance as the main reason for not using commercial sanitary pads. Some respondents in the rural areas did not know what commercial sanitary pads were; they have never seen or touched them.

The study also noted that re-usable pads that meet the sanitary standard are not easily available. The production of the re-usable pads is mainly by households and a few producers.

Sanitary pad producer companies and entrepreneurs should come up with an innovative product which is affordable by most girls and meets safety standards.

Access to physical infrastructure

Professionals and development partners suggest that school sanitation facility designs should take into consideration the special needs and interests of girls during menstruation. The MHM toolkit written by Sarah House et al. (2012) suggests that a girl-friendly latrine design should consider the following elements:

- segregated by gender;
- accessible to girls and women with disabilities;
- in schools – different facilities for schoolgirls and teachers;
- private and safe for girls and women, ideally with a screen or wall in front of the doors;
- locks on the inside of the doors;
- water available inside the latrine cubicles and shower units;
- facilities incorporated within each unit for the discreet disposal of sanitary materials;
- easy to keep clean and hygienic at all times;
- shower units have good drainage where the waste water does not flow into the open.

The baseline survey results clearly show that the school WASH status of all the countries is poor; both the facilities and the hygiene practices are inadequate. None of the school latrines fulfils the above standards set for girl-friendly toilets. There is a need to improve both the school WASH situation and access for MHM. It is evident that such intervention in schools will require considerable financial investment and therefore both the national governments and donors should allocate finances.

Policy environment

There are encouraging initiatives by development partners and professionals. Evidence gathered clearly shows that MHM is a critical problem for girls in school. Lack of appropriate policy and strategy by respective local governments has limited the upscaling of good practices and sustainability of initiatives. The ministry of education is an appropriate institutional structure to take the lead in developing appropriate policy and programmes and including MHM in school curricula and teacher training guides in the colleges. Ministries of health, the WASH sector, and ministries of gender and youth, donors, NGOs, and the private sector can be taken as the main collaborators.

MHM should not be a stand-alone programme. It has to be integrated with the existing programmes of WiS, school health and nutrition programmes (SHNP), puberty education programmes, and emergencies.

Managing menstruation in schools

The myths and taboos around menstruation lead to negative attitudes towards this biological phenomenon. When girls begin menstruating they are ashamed and when they have pains related to menstruation, access to medicine in the school is poor. On average 49 per cent of the girls interviewed miss 4 school days every month due to menstruation. In Tanzania, 92 per cent of girls interviewed have reported that they lose concentration in classes during menstruation.

Lack of family support and teasing from male counterparts in schools and communities are forcing girls to look for support on their own and to engage in sexual activities with males. Lack of adequate knowledge, materials, and facilities to manage menstruation has disempowered girls and prevented them from meeting their full potential in school when they reach puberty. There is a need for strong support for girls from family, community, and schools.

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