



Menstrual Hygiene Management Practices for Adolescent Girls among Public Secondary Schools in Kibondo District, Tanzania

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Abstract: *The study aimed at examining menstrual hygiene management practices among adolescent girls in public secondary schools in Kibondo District. The study used the mixed research approach with the convergent parallel design. The study was comprised of the sample size of 99 respondents from four out of 17 schools, including ten parents, 12 female teachers, 68 students, 4 matrons, 4 Heads of schools and 1 District Education Officer. Data collection was done through semi-structured interview, focus group discussion and questionnaire. Qualitative data analysis was done through content analysis while quantitative data were analyzed descriptively with the help of the Statistical Package for Social Science (SPSS) version 20 and presented in tables through percentages, and frequencies. The study discovered that there are problems in MHM practices among public secondary schools under investigation. There were shortages of menstrual hygiene management practice facilities such as toilets and private areas to change absorbent pads, disposable mechanisms and water. The study recommended that adolescent girls should be provided with sanitary pads and education. There is need to improve MHM facilities such as water, disposable mechanisms and private rooms for changing absorbent materials for effective management of menstrual periods. Menstrual hygiene management topics should be integrated into the syllabi in order to increase awareness on MHM to adolescent girls. Teachers and health workers should closely provide guidance and health talks to adolescent girls, advising them on how to manage their menstrual-related illness effectively for their good performance in school.*

Keywords: Menstrual Hygiene Management, Menstrual hygiene management practices, absorbent pads

Introduction

Adolescence in girls is a special period which signifies the transition from girlhood to womanhood. This period is marked by menstruation. According to Jones, Griffith, Noriss, Pettifor and Cameron (2013), menstruation is a natural process which begins to occur for girls between the age of 9 and 16 years with a mean of 13 years. The menstruation period usually lasts for about five days, but it varies from three to seven days. Water Aid (2011) argued that the duration of menstruation period marks the need of the girl to manage menstruation where girls need to use clean menstrual materials to absorb the blood that should be changed in privacy for the whole period of menstruation. Therefore, access to soap, water for washing the body and safe facilities to dispose used materials to manage menstruation are essential requirements. Attention towards addressing

Menstrual Hygiene Management (MHM) is essential so that women and adolescent girls can be aware of managing their menstrual periods properly (Tamiru, Mamo and Mush, 2015).

MHM is practiced differently following the cultural, social and economic status of the community. According to Shanbhag, Shipa, Josephine, Singh and Goud (2012), young girls in developing countries often receive minimal instruction and information about menstrual hygiene management. This is because menstruation is seen as taboo by many communities which make it difficult for adolescent girls to acquire full information about it. For example, in Nigeria, there is a culture of silence and shame regarding the issue of menstruation and sexuality which are attributed to culture restriction and therefore cannot be discussed publically (Aniebu, 2016).

A study undertaken in an urban secondary school in Malawi revealed that girls experienced difficulties in dealing with menstruation while at schools because of poor toilet conditions (Pillitteri, 2012). Similar findings reported from Ethiopia by UNESCO (2014) revealed that many adolescent girls stay at home due to menstrual problems, deficient menstrual hygiene materials, lack of water and sanitation facilities in schools, unsupportive environments and fear of the menstrual accident. In Sri Lanka, a baseline survey was carried out to find out issues and availability of menstrual facilities and the study revealed that most of the schools were faced with difficulties in menstrual hygiene management such as non-availability of sanitary napkins within school environment, absence of water supply to latrines and lack of facilities for changing and safe disposal of used sanitary napkins (Patabendi 2014). UNESCO (2014) in Indonesia reported that poor menstrual hygiene management in schools and limited knowledge on menstrual hygiene has made menstruating school girls miss classes. Facilities related to MHM like clean water, sanitation and hygiene are considered to be insufficient, thus making adolescent girls have a challenge in their personal hygiene.

In Nigeria, Sommer and Sahin (2013) reported that there is global evidence of lack of adequate facilities for girls to manage their menstruation in schools. Facilities like toilets, adequate clean water for washing hands, facilities for drying clothes and the absence of sanitary menstruation hygiene materials prevent girls from safe hygienic management of their menstruation. Sommer and Sahin (2013) adds that lack of facilities in managing menstruation to girls while at school results in absenteeism, reduces concentration in class and causes dropout as some girls skip 4-5 days of school for every 28 days.

TAWASANET (2015) in Tanzania found out that adolescent girls still need more information on MHM which should be provided in schools. Additionally, shortages of soap and hand washing facilities, privacy in the toilet and free pads to attend emergency needs are the main challenges in schools. Guya, Mayo and Kimwaga (2014) suggest that a supportive environment for MHM at schools has to be provided and that there is an urgent need for girls' user friendly toilet designs and appropriate final disposal facilities for menstrual products.

Baseline Survey Report (2014) from eight rural districts of Tanzania namely Sengerema, Chato, Magu, Siha, Babati, Karatu, Njombe and Mufindi

revealed that during menstruation, adolescent girls usually feel like they smell bad like rotten eggs due to the absence of appropriate facilities at schools, hence feeling ashamed, embarrassed and restricted. They hence decide to isolate themselves from others by staying at home throughout the menstrual periods without attending school. Girls revealed that using disposable sanitary pads relieve them of stigmas, hence improving MHM practices (SNV, 2015). However, MHM facilities at schools such as WASH, waste management hygienic disposal of used rags and sanitary pads were insufficient. Hence making many girls not attend schools while in their period.

Similarly, SNV/Water Aid/UNICEF (2009) as cited by Taylor (2009) provide more details on the condition of water, sanitation and hygiene practices in Tanzanian schools whereby only 11% of schools surveyed met the national minimum standard of 20 girls and 25 boys per latrine. Two out of three of all schools in these districts had more than 50 students per latrine and only 6 percent of the latrines were suitable for girls while 94 percent were unsuitable. Available doors to latrines were 54% while 46% of toilets did not have doors which made toilets to lack privacy. Furthermore, over 80% of the latrines were found to be either smelling or soiled besides or lacking water for washing hands. Facilities such as soaps were available by 2% while 98% were not available. The results of the absence of these components led to ineffective participation in class, schooldays lost each month, or even dropping out of school altogether.

In Kigoma, Turangaza (2018) reported in The Citizen Newspaper on Tuesday, 23rd January that some girls, especially in poor families, cannot afford sanitary pads and lack decent changing washrooms at school which contributes to their poor class attendance during their monthly periods as it becomes difficult to handle the situation. The report further shows that there were shortages of user friendly toilet facilities at school to support adolescent girls.

A study in the Kibondo District particularly in Nduta and Mtendeli camps by Sanduvac, Panga, Charles and Banekwa (2017) found out that adolescent girls in refugee camps are facing several challenges in accessing education. Among the challenges identified was menstrual hygiene management practices due to inadequate WASH facilities during their cycles. The authors add that there was

inadequate space in which girls could change or wash their clothes and also there was inadequate support from parents, teachers and the community during the menstruation period. Many adolescent girls could not go to school when they were in their monthly period. Therefore, there is a need for parents, teachers and community members to support MHM to promote better attendance of adolescent girls.

Moreover, the government of Tanzania, institutions and NGOs have realized that without addressing the problems associated with menstruation, the achievements of three Sustainable Development Goals (SDG) will be hampered. Stakeholders have to collaborate taking measures to ensure health lives, inclusive and equitable quality education and promote lifelong learning opportunities (UNICEF 2010).

This study sought to investigate on menstrual hygiene management by the adolescent girls among Kibondo District Public secondary schools.

Review of Related Literature

This part presents several study findings that have been done by different scholars relating to MHM among adolescent girls in secondary schools.

Menstrual Hygiene Management Practices

Globally, about 52% of the female population is of reproductive age, meaning menstruation is part of their life and menstrual hygiene management practices are therefore essential part of their basic hygienic practice (House, Mahon, and Cavil 2012). The majority of them have no access to clean and safe sanitary products or to clean and private space in which they can change menstrual pads and wash.

The preference of absorbed materials to be used depends on personal choices and cultural acceptability, economic status and availability of the materials in the market (Kur and kur 2018). The choice of absorbents varies among rural and urban areas. In rural areas, the most preferable absorbents by girls are re-usable clothes pads while in urban areas, girls prefer to use commercial sanitary pads. The study carried out in Nigeria discovered that 31% to 56% of the schoolgirls in urban areas used toilet tissue or cloths to absorb their menstrual blood as opposed to menstrual pads, while, the use of disposable sanitary pads was 37.6% and 62% were using rags and pieces of clothes (Fehintola, Fehintola, Aremu, Idowu, Olumuyiwa and Paulina, 2017).

Miuro, Tindole, Nakuya and Namakula (2018) in a feasibility study on menstrual health and school absenteeism among adolescent girls in Uganda found that 70% of girls reported of using disposable manufactured sanitary pads, but 12% among them used local manufactured sanitary pads while 20% used both. Baseline Survey Report (2014) in Tanzania revealed that more than 70% of the girls would prefer to use disposable sanitary pads when they are at school because pads keep them feel comfortable and can sustain a heavy flow of blood. While 22% wanted to use pads but they were worried about the quality, 8% were not ready to use pads even if distributed for free, thinking that they were unsafe to use. Local materials like rags and cotton were used instead because they believed that such materials were safer, cheaper and easier to access.

Disposal of Used Sanitary Materials

Appropriate disposal of used menstrual materials is still a problem in many public schools. Due to this, Pillitteri (2012) in Malawi revealed that appropriate disposal of used menstrual materials is still a problem in many public schools. Due to this, most of the girls in schools disposed of their sanitary pads or other menstrual materials into solid wastes or garbage bins or sometimes throw them in the forest near their school compounds. A study by Kur and Kur (2018) in Indonesia reported that toilet facilities lack bins to dispose of used sanitary pads besides hand washing facilities for menstruating girls to handle their menstrual hygiene. They echo that in urban areas, there are modern disposal of menstrual materials such as burying, burning and throwing in pit latrines while in rural areas most girls used re-usable and noncommercial sanitary materials. Lawan, Nafisa and Aisha (2010) in a study carried out among adolescent girls in Kano, Nigeria revealed that girls never wrapped up the absorbed materials or disposed in toilets due to lack of disposal of materials, which resulted into smelling and breeding of insects that were dangerous to their hygiene.

Frequency of Changing Sanitary Materials

Frequency of changing menstrual materials depends on the access of absorbing materials. Many adolescent girls seem not to change menstrual pads because of a lack of disposal materials or lack of access to sanitary pads while at school. A study done by Crafts and Fisher (2012) in Uganda revealed that sanitary materials were usually changed at least once a day in school due to poor hygiene

conditions and lack of privacy and area to dispose off the used materials. Mashala (2018) noted that 52% of students changed their absorbed materials in 8-10 hours, while 37% of girls changed sanitary pads in 6-8 hours. The students stayed with absorbing materials for a very long time as they had to change their pads when they go back home due to the absence of disposable materials at school.

Changing Sanitary Materials in Private Rooms

To practice well MHM, it is important to have changing rooms that separate girls' toilets from boys' with adequate spaces to change menstrual materials used during the menstrual period. House et al. (2012) asserted that all schools must have adequate sanitary materials for washing, changing and disposal of menstrual waste. A baseline study conducted by Netherlands Development Organization, SNV (2014) in four districts in Southern Ethiopia revealed that the school environment is not conducive for menstrual hygiene management because 90% of the schools lacked private spaces to change menstrual pads. Chinyama, Jenala and Anjali (2019) add that in Malawi, girls find it difficult to maintain menstrual hygiene at school because the toilets offered no privacy. Uganda Red Cross Society (2015) in a menstrual hygiene survey project that was carried out in Arua and Adjumani Districts reported that 39 percent of adolescent girls in schools have difficulties in finding private places to change disposable pads. Therefore, girls would not change sanitary materials until they got home to change used materials comfortably, hence school attendance was threatened. The study of Mashala (2018) among three secondary schools in Dodoma, Tanzania revealed that though students were using toilets for changing their absorbent during menstruation, infrastructures of the toilets were very poor.

According to Sommer (2010), the best way to make an impact on improving the lives of girls and women is provision of water and sanitation. Water sanitation and hygiene with a supportive environment for washing teach girls how to be hygienic. The author adds that WASH projects should be maintained in schools because they are important as they ensure proper use, maintenance and sustainability of MHM facilities. Tamiru, Mamo and Mushi (2015) assert that over 50% of schools in Ethiopia lack quality water supply facilities, which are not only inadequate but also are poorly managed. Baseline study Report (2014) in Tanzania asserts that lack of water in most rural schools and

washing of re-usable pads pose a serious challenge as this causes girls to opt to stay at home and not to attend school for 3-4 days of their menses hence affecting their performance.

Research Methodology

The study employed a *mixed research approach with* convergent parallel design in which Quantitative and qualitative approaches were applied. The research was carried in Kibondo District which is among six Districts of Kigoma Region. The study involved four out of 17 public secondary schools in the Kibondo District. The target population of this study was 7570 subjects, including 59 female teachers, 17 heads of schools, 3830 adolescent girls, as well as 17 matrons and 3647 mothers of adolescent girls, and the District Educational Officer (DEO). Both probability and non-probability (simple random, stratified, purposive and snowball) sampling were employed in the study to come up with a sample size of 99 respondents. The study employed Interviews, Questionnaires, Focus Group Discussion and Observation as a method of collecting data from different respondents. Quantitative data from survey was analyzed using the SPSS version 20 software. Analysis was done with descriptive statistics which computed frequencies while qualitative analysis was done through the content analysis approach.

Results and Discussion

This section presents the research findings on the menstrual hygiene management practices among adolescent girls in public secondary schools in Kibondo District.

Menstrual Hygiene Management Practices

The researcher aimed at identifying different MHM practices used by adolescent girls to manage their menstrual periods. The study enrolled 68 adolescent girls, who fulfilled the eligibility criteria across 4 study schools to provide the information regarding menstrual hygiene management practices. The researchers tested the indication of the participants on the MHM practices they used to manage their menstrual period while at school and the presence of facilities in schools. The quantitative results are presented in table 1 and 2 and are supported with qualitative data from open ended content, Focus Group Discussion and observation.

Students Feedback

Table 1 highlights on the menstrual hygiene management practices during the menstrual period

among adolescent girls. The majority (70.6 percent) agreed that they use disposable sanitary pads to manage their menstruation especially when girls are at school. The reasons for using disposable materials was because disposable sanitary pads do not need to be changed frequently; it reduces the concern of leaking and no need to wash and dry. This finding is comparable with study findings in Dare-es-salaam by Guya et al. (2014) who reported that majority of girls in primary schools used disposable sanitary

pads. The reasons for using disposable materials included the fact that their families were able to afford the disposable sanitary pads. Therefore, this made them able to use disposable sanitary pads while at school. While 29.4 percent disagreed with the statement regarding the use of disposable sanitary materials, they probably used re-usable sanitary materials to manage their menstruation because their families were not able to afford disposal sanitary pads.

Table 1: Students Response on Menstrual Hygiene Management Practices (n=68)

Statements in the Questionnaire	Strongly Disagree		Disagree		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%
	I Use disposal sanitary material during the menstrual period	3	4.4	17	25.0	34	50.0	14
There is Disposal of used sanitary material at school	13	19.1	26	10.3	22	38.2	7	32.4
I Frequently change sanitary materials while at school	41	60.3	19	27.9	3	4.2	5	7.6
There are Private areas for changing sanitary materials	27	39.7	14	20.6	20	29.4	7	10.3
Water, Sanitation and hygiene facilities are available	26	38.2	24	35.3	12	17.6	6	8.8

In the view of disposal of used absorbent materials, the majority of the girls 70.6 percent agreed that schools had areas to dispose off used absorbent pads. The available disposal used pads found in the school were toilets or pit latrines. The findings concur with those of Oduor, Alexande, Oruko and Nyothach (2015) in West Kenyathat disposing of used sanitary pads in toilets or latrine is because of the absence of proper disposal areas to dispose of used sanitary. They added that disposing of used sanitary pads in the latrine in secondary school increases to 90% of all adolescent girls due to improper disposal areas. While 29.4 percent disagreed with the statement, this was probably due to the fact that those disposable mechanisms available were poor and also due to the absence of proper disposal mechanisms like incinerators.

With respect to regularly changing absorbent materials (sanitary pads), it was found that the majority (88.2 percent) of the girls disagreed that they frequently change absorbed pads. The probable reasons for not changing sanitary pads regularly was due to ignorance, lack of extra sanitary pads and privacy, the absence of disposing areas and absence of water. This finding is similar to those of Sudeshna and Aparajita (2013) in India that the different aspects of personal hygiene were generally found to be poor such as not changing pads regularly with lack of privacy being a hindrance.

Regarding availability of private spaces for changing pads, 60.3 percent of adolescent girls disagreed that there were private spaces or rooms to change sanitary pads. This was probably because in schools there are no special rooms for changing pad and therefore girls changed in toilets with no doors, no locks and with limited spaces. However, 39.7 percent of the respondents agreed that there were private rooms for changing sanitary pads in their schools. They probably agreed with the statement because toilets were used as areas to change pads. Moreover, while 73.5 percent disagreed that water, sanitation and hygiene facilities were available in their schools, 26.4 percent agreed with the statement.

Table 2 (p. 112) confirms that majority of female teachers (75 percent) agreed with adolescents girls regarding the use of disposal sanitary pads as absorbent materials. This agrees with a similar study by Amaede and Gart (2016) that about 20 percent of adolescent girls used other sanitary pads to absorb menstrual blood rather than disposable sanitary pads due to the economic status of their respective families, the belief of using water and shortage of water in school.

The study established from open-ended responses by female teachers that the common place for disposal of used absorbent materials were pit latrines. This was because of shortage of adequate disposal mechanisms in schools; this is supported by House, Mahon and Caville, (2012) that when there is absence of a convenient established methods for

disposal of sanitary pad products, girls and women often dispose off their pads in the latrine. A proper disposal of used absorbent materials was found in only one school where an incinerator was used. Some girls in the FGD session reported that they disposed off their used pads in the pit latrines found in schools. One of the adolescents, for instance,

made it clear that “we throw used pads in a latrine”. Another girl added that “the most common practices of disposing off absorbent material in the school are toilets.” Others said they disposed them off at home because toilets at school were very dirty, lacked privacy and there was no water to wash their genitalia.

Table 2: Female Teachers’ Response on Menstrual Hygiene Management Practices (n=12)

Statements in the Questionnaire	Strongly Disagree		Disagree		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%
I use disposal sanitary material during the menstrual period	1	8.3	2	16.7	5	41.7	4	33.3
There is Disposal of used sanitary material while at school	2	16.7	1	8.3	5	41.7	4	25.0
Frequently changing sanitary material while at school	4	33.3	3	25.0	2	16.7	1	8.3
There is Private areas for changing sanitary materials	5	41.7	3	25.0	2	16.7	1	8.3
Water, Sanitation and hygiene facilities are available	3	25.0	2	16.7	4	33.3	3	25.0

During the observation, the researchers confirmed that disposal facilities available were pit latrine. However, those toilets were in poor condition with inadequate water, full of feces, doors were not locked and no water or soap for hand washing. Furthermore, toilets did not offer any privacy for changing sanitary pads, which led girls not to use these toilets. The girls had to stay at home, as a result, due to poor disposal areas, or sometimes when they attended schools, they carried used materials home. One Adolescent girls in the FGD stated that the toilets used to dispose off pads are in poor condition, lacked maintenance, smelt, were dirty and there was no soap or water to wash their private parts. Therefore, they did not like to use school toilets to dispose off their used pads.

Respondents further explained that schools did not offer adequate private rooms to change used menstrual materials as often as they wanted. Many girls mentioned that latrines being dirty caused them to prefer to go home without changing their menstrual items. One adolescent girl reported, "I don't change pads at school but I just go back home since school latrines are dirty. These findings concur with those from a study conducted by Upashe, Tekelab and Mekonnen (2015) in Western Ethiopia which revealed that 25% of the school girls typically isolated themselves during menstruation, resulting in a fundamental infringement of the human rights. The author adds that although toilets did not offer adequate privacy, they were still a better alternative for changing sanitary pads especially for those who had extra pads. However, they could not wash their private parts after changing sanitary pads because of the absence of water and soap in the

toilets. For this reason, some of the adolescent girls could not change their used sanitary pads while at school. This was confirmed during the site visit, whereby school toilets had no doors or doors had no locks. This shows that girls were not changing absorbed pads regularly because they had to stay with absorbent materials for a long period due to lack of private area for changing used pads, poor disposable spaces and lack of water.

Girls found it difficult to manage their menstrual period while at school because of absence of changing rooms. In all schools visited, girls used toilets as area of changing their absorbent materials but the problem was that the toilets offered no privacy and were small with limited spaces. Some girls mentioned that the latrine being dirty, they would prefer to go home without changing their menstrual items. One adolescent girl reported, "I don't change pads but I just go back home since latrines are dirty." Another adolescent also said:

I don't feel like going to school during my menstrual period because of various reasons, such as hygiene and unavailability of private rooms for changing pads. If we had girls' user-friendly toilets in our school, my friend and I would be really happy and would have attended school during our menstrual periods (August 2020).

This was also confirmed by the observation visit which revealed that no school had a private changing room. The observation showed that toilets were the main areas where girls used to change sanitary pads. Girls did not feel safe because they kept on prying eyes when using these toilets while

changing sanitary pads because doors could not be closed properly due to poor maintenance, hence lack of privacy. This is supported by SNV (2015) that lack of privacy affects girls' ability to wash and change menstrual hygiene products.

Experience from the open-ended respondents shows that girls demand body sanitary service especially water especially when they are in their menstrual period. However, inadequate water supply was a common concern raised by adolescent girls and was identified as a serious challenge facing menstruating girls at school. It was therefore important in this study to observe the availability of water services in schools whereby all respondents indicated that water service was not available at all. Some schools had no pumping water and therefore girls had to fetch water from the wells which were found in the village. Through Focus Group Discussion, adolescent girls complained:

Sometimes, the water is not available in school when the pumping system has broken; we have to go to fetch water at the nearest river and sometimes women villagers refuse to allow us from fetching water. Also, the distance from school to where water is available is about an hour walking from school to the river source. So you can't concentrate in the class (August 2020).

When the headmasters were interviewed on the provision of water services at school, they maintained similar response to that of girls in the FGD that water is provided but not stably and girls faced difficulties in maintaining a proper standard of hygiene during the menstrual periods. One of the headmasters commented that there is a relationship between the provision of water services at school and girls performance because lack of water in school stresses girls as they have to walk long distance looking for water. He explained:

Sometimes they spend more than one hour to bring water to school when they have followed water from the river source. This is a serious problem which discourages adolescent girls especially during their periods; as a result, some girls do not attend school when they are in their period (August 2020).

In the same vein, parents interviewed maintained that their daughters are at risk of falling victim to the hygienic problems. The parents revealed their

awareness on the existence of water problem in public schools, as it is for the general community. The findings showed that public schools are built in places whereby there are no water sources and even those pumping sources of water available at schools are not well maintained. This has discouraged adolescent girls from attending schools during their menstrual periods. The study by Miiro et al., (2018) has it that if girls attend schools which lack water supplies to wash themselves in privacy, they may be unable to remain comfortable in class during their menstrual period.

Conclusions and Recommendations

This section presents the conclusions of the study and then comes up with the recommendations of the study.

Conclusions

The study concludes that there are problems in MHM practices among public secondary schools under investigation whereby adolescent girls faced a number of challenges that affected their school attendance and consequently their achievement. The *shortages of menstrual hygiene management practice included such facilities as toilets and private areas to change absorbent pads, disposable mechanisms and water.*

Recommendations

Based on the conclusions, the study recommends that school authorities and other development agencies should make sure that adolescent girls receive knowledge on MHM through health clubs and seminars. However, the education sector should make sure that menstrual hygiene management topics are integrated into the syllabus in order to increase awareness on MHM among adolescent girls. School leaders should strive to ensure availability of facilities to support the hygiene of girls during their periods. These include construction of girls' user-friendly latrines with doors and locks for privacy besides provision of water.

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