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FACTORS INFLUENCING MENSTRUAL HYGIENE MANAGEMENT AMONG ADOLESCENTS IN LUBAGA GIRLS' SECONDARY SCHOOL, LUBAGA DIVISION KAMPALA. A CROSS-SECTIONAL STUDY.

Beatrice Laker*, Teddy Ssemambo Nassanga, JaneFrances Namuddu.
St. Michael Lubaga Hospital Training Schools

Abstract

Background

Menstrual hygiene management (MHM) is the "use of clean menstrual materials to absorb blood and can be changed in privacy as necessary for the duration of the menstruation period. The study aims to identify factors influencing menstrual hygiene management among adolescents in Lubaga Girls' Secondary School, Lubaga Division Kampala.

Methodology

A cross-sectional study design employing both quantitative and qualitative approaches to data collection. The study population for this study was adolescent girls studying at Lubaga Girls' Secondary School. The sampling criteria for this study was purposive sampling.

Results

The majority 62(64%) of the respondents were in the age bracket of 17-19 years and the minority 12(13%) were between the age of 13-14 years. The majority 66(69%) were in between S.5 and S.6 classes while the minority 10(10%) were in S.1 and S.2. 66(69%) mentioned 2 times, 19(20%) mentioned 3 times, and 11(11%) raised once a day when asked the times a menstruating girl should take a bath. The majority 51(53%) knew that used menstrual materials were disposed of outside the house, 20(21%) said in the rubbish pit, 15(16%) in the latrine while 10(10%) knew that used menstrual materials are burnt.

Conclusion

Adolescents in Lubaga Girl's Secondary School had inadequate knowledge of MHM, poor MHM practices, and the availability of menstrual products as a determinant in MHM.

Recommendation

There is a need for the Government of Uganda through the Ministry of Education and Sports together with the Ministry of Health to improve the privacy of girls, access to clean water, and provide sanitary pads in schools to facilitate their menstrual hygiene management.

Keywords: *Menstrual hygiene management, Adolescents, Menstruation.*
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Corresponding author: *Beatrice Laker**
Email: beatricelaker95@gmail.com
St. Michael Lubaga Hospital Training Schools

Background of the study

According to the Public Health Community, menstrual hygiene management (MHM) is the "use of clean menstrual materials to absorb blood and can be changed in privacy 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" (Sommer et al., 2016). However, globally and across cultures, adolescent girls have developed strategies to manage their menstruation given their unique personal, social, and cultural contexts. Depending on the availability of resources, socioeconomic status, education, cultural beliefs, local tradition, and personal preference, these strategies vary greatly between regions, countries, and even within communities (MacRae et al. 2019). And, given the complexity of these variables often adolescent girls in resource-limited contexts do not have access to the hygienic resources required for adequate MHM leaving them vulnerable to disease, gender inequality, and social exclusion compared to adolescent girls from high resource settings such as Europe, the United States of America (USA) and some countries in Asian continent (MacRae et al., 2019; Shah et al., 2019).

Increasing efforts to improve menstrual health are important first steps in advancing global health agendas (Phillips-Howard et al., 2016; Shawki, 2019; Sommer et al., 2017). Addressing menstrual health or menstrual hygiene as an upstream form of primary health prevention tackles not only issues of adolescent girls and their reproductive health, but will also improve water sanitation and hygiene (WASH), gender equality, nutrition, and education outcomes at the community level (Ramaiya & Sood, 2020; Sommer et al., 2017).

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In India, menstruation is traditionally thought of as a polluting factor by many religions, and in many communities in rural India women and adolescent girls are thought to be unclean or untouchable during menstruation (Sivakami et al., 2019). In Hinduism, this misconception stems from a common belief that women are ritually impure and that menstrual blood is expelled from the body as a form of purification. These fallacies have resulted in the stigmatization of the topic and strict socio-cultural restrictions are placed on adolescent girls after attaining menarche, which result in gender inequality and poor menstrual health (Sonowal, Talukdar, & Saikia, 2021).

In Sub-Saharan Africa as seen elsewhere, significant menstrual lore and practices to prevent the menstruating woman from contaminating others have been observed in Ethiopia, Uganda, South Sudan, Tanzania, and Zimbabwe (Anbesu & Asgedom, 2023). Through interviews conducted with men, women, and schoolgirls, it was discovered in the above-mentioned countries that women were required to separate themselves for a week in separate homes until they regained their status as "clean" (Anbesu & Asgedom, 2023).

In Uganda 2014 census showed that the population of women was 22,624.684, (24.5%) of whom were school going, between 10-19 years (13,440,547), at least 84% were rural and assumed unable to access sanitary pads indicating poor menstrual hygiene (Miiro et al., 2018). That is an estimate of 3.75 million girls living without sanitary care. In addition, this is mainly because of limited access to proper menstrual facilities. Many of them rely on crude methods like old clothing, pieces of foam mattresses, toilet paper, leaves, and banana fibers to manage their menstruation, and these result from poverty (Miiro et al., 2018).

The study carried out in the Northern part of Uganda (Bidibidi Refugee Settlement, Yumbe District) showed that there was a lack of knowledge and awareness on the matter related to menstrual hygiene and menstruation management. Most of the school girls did not fully understand what was happening in their bodies during menstruation and neither did they know the physiological process of menstruation (Lenia, 2019).

Another study conducted in the central part of Uganda (Kampala) among secondary school girls revealed variance in menstrual hygiene management practices whereby 41% were observant with recommended practices while 59% were not observant (Kavuma, 2022). However, what was not known for sure was what were the drivers or influencers among those who observed the recommended menstrual hygiene practices among secondary school girls. It was against this background and statement that the researcher was compelled to conduct this study and assess factors influencing menstrual hygiene management among adolescents in Lubaga Girls' Secondary School, Kampala Capital City Authority. The study aims to identify factors influencing menstrual hygiene management among adolescents in Lubaga Girls' Secondary School, Lubaga Division Kampala.

Methodology

Study Design and rationale

This study deployed a descriptive cross-sectional study design employing both quantitative and qualitative approaches to data collection. The main objective of descriptive research was to accurately describe the characteristics of the study population and situations related to menstrual hygiene management practices. It was a cross-sectional study because data was collected at a single point in time.

Study Setting and Rationale

The study was conducted in Lubaga Girls Secondary School in Kampala City Authority found in the southern part of Lubaga Division, approximately 6.9km by the road vie kyadondo road from Kampala City Uganda. It's a catholic school managed by the Bannakikira sisters. The study area was preferred because of its proximity and the prevailing Burden of menstrual hygiene management among adolescent girls in Kampala and other districts. Lubaga Division is in the western part of the City Bordering Wakiso District from West and South. The Eastern Border is Kampala's central division and Kawempe Division lies to the north.

Study Population

The study population for this study was adolescent girls studying at Lubaga Girls' Secondary School. The study population was preferred because they were always the ones affected in terms of missing school and locked themselves inside the dormitory during menstruation. Therefore, the researcher believed that they had the right information needed to answer the researcher's questions at hand.

Sample Size Determination

The sample size of adolescent girls who participated in this study was 96 adolescents and this was preferred because it was among the preferred gazette sample size by the Ugandan Nurses and Midwives Examinations Board Research guideline of 2009. This sample size represented the entire population of adolescent girls in Lubaga Girls' Secondary School.

Sampling Procedure

The sampling criteria for this study was purposeful sampling, meaning it was not about numbers, but about informants who consented and could provide in-depth and rich information about experiences and meanings of the phenomenon of menstrual hygiene management and factors determining its practice. Furthermore, a maximum variation sampling strategy was adopted (Rice & Ezzy, 1999; Liamputtong & Ezzy, 2005), meaning the adolescent girls were divided into two groups: one group comprised of 13 to 15 years old girls (without much experience), and the other group comprised of adolescent girls aged 16 to 20 years (with more experience). The separation into age groups was meant to help them,

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especially the 13 to 15-year-old girls to discuss more freely amongst themselves with the researcher than it would have been when immersed with the older girls, who might have dominated or even intimidated them.

Inclusion Criteria

The researcher included only adolescent girls studying at Lubaga Girls' Secondary School, those who menstruate and willingly consented to participate in the study on the day of data collection.

Exclusion Criteria

The researcher excluded adolescent girls who were not willing to take part or sign the consent form, visitors at the school, and those who were not present at the school premises during data collection.

Definition of Variables

The study examined the relationship between two variables; dependent and independent variables. The dependent variable was Menstrual Hygiene Management Practices while the independent variables were the adolescent girl's knowledge and determinants of menstrual hygiene management practices.

Research Instruments

The study used a Self-Administered Questionnaire to collect data from the adolescent girls during data collection, it was composed of both closed and open-ended questions, and the purpose of the study was explained within the questionnaire.

Data Collection Procedure

After the approval of a research proposal and clearance by the supervisor, the researcher got a letter of introduction from the Principal of St. Michael Lubaga Hospital Training Schools and was presented to Lubaga Girls' Secondary School introducing her to the school authorities.

The school granted permission after explaining to them the purpose of the study. The researcher sought acceptance from the respondents during sampling and distributed the questionnaires to each one. sampled after obtaining her consent to participate in the study by signing the consent form.

Data Management

The filled questionnaires were collected back, counted, checked for completeness/accuracy, and edited after every data collection day to ensure that they were all returned, coded, and kept in a safe place as a backup. A flash disk was also used to store data. Filled questionnaires were then cleaned as they waited for data analysis.

Data Analysis

Collected data was sorted, coded, entered into Epidata then exported to Statistical Package for Social Scientists for analysis. Data from open-ended questions were also sorted, and arranged, and similar responses were grouped and analyzed using SPSS version 17.

Data Presentation

Analyzed data was presented in tables, graphs, and pie charts reflecting the frequencies and percentages.

Ethical Consideration

The researcher got an introduction letter from the Principal Tutor St. Michael Lubaga Hospital Training Schools that was presented to the head teacher of Lubaga Girls' Secondary School seeking permission to carry out the study among adolescent girls. The researcher also secured both verbal and written consent and permission from the respondents before the data collection exercise.

Results

Table 1: Shows the Demographic Characteristics of the respondents

Age brackets in years	**Frequency (n=96)**	**Percentage (%)**
13-14 years	12	13
15-16 years	22	23
17-19 years	62	64
Total	**96**	**100**
Religion	**Frequency (n=96)**	**Percentage (%)**
Catholics	65	68
Protestants	21	22
Muslims	6	6
Pentecostals	4	4
Total	**96**	**100**

Table 1 shows that the majority 62(64%) of the respondents were in the age bracket of 17-19 years, 22(23%) were in between 15-16 years, and, the minority 12(13%) of them were in between the age bracket of 13-14 years. Majority 65(68%) of the respondents were Catholic believers followed by 21(22%) who were

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Protestants, 6(6%) were Muslims while the minority 4(4%) were Pentecostal believers.

Figure 1: Shows the respondents' class of attendance

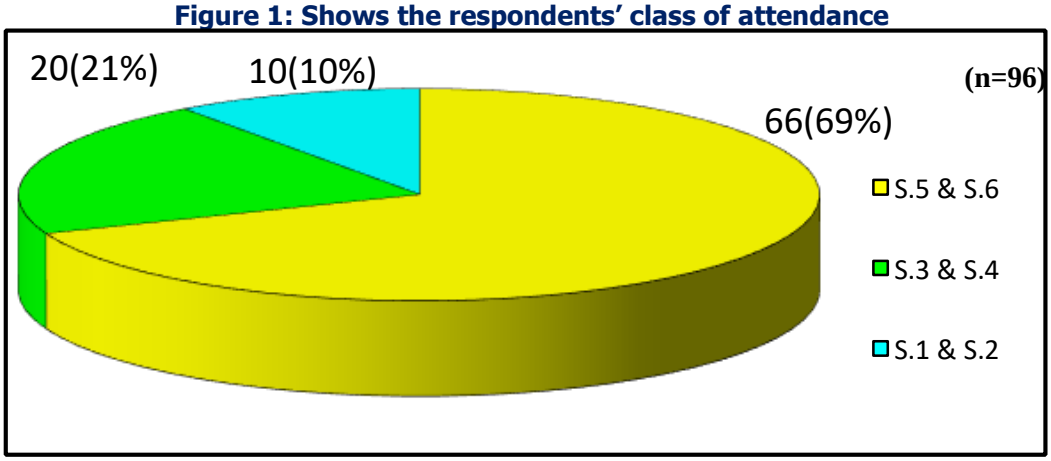

Figure 1 shows that the majority 66(69%) of the respondents were in between S.5 and S.6 classes followed by 20(21%) who were in S.3 and S.4 while the minority 10(10%) of the adolescents were in S.1 and S.2.

Table 2: Shows knowledge of adolescent girls towards menstrual hygiene management.

Ever heard of menstruation and MHM	**Frequency (n=96)**	**Percentage (%)**
Yes	91	95
No	5	5
Total	**96**	**100**
If yes, how they understood menstruation	**(n=91)**	
Normal physiological process	27	30
Body development or change process	26	29
Curse from god	3	3
Don't know	5	5
The process when the ready eggs fail to get fertilized	30	33
Total	**91**	**100**
Knowledge of the cause of menstruation	**Frequency (n=96)**	
Natural physiological body changes	47	49
Diseases	12	13
Don't know	5	5
Failed fertilization of an egg	32	33
Total	**96**	**100**
How menstrual hygiene management was defined	**Frequency (n=91)**	**Percentage (%)**
Practical strategies for coping with monthly periods	40	44
Ways women keep clean/healthy during menstruation	26	29
How women menstruating manage themselves and dispose of used materials	15	16
All the above	6	7
B and C only	4	4
Total	**91**	**100**

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Responses	Frequency (n=96)	Percentage (%)
Use of clean materials to absorb or collect menstrual blood	50	52
Changing used materials 3 times a day	10	10
Wash reusable materials with water and soap	13	14
Taking bath 3 times a day	49	51
Disposing of used materials in a latrine	6	6
All the above	3	3
Don't know	5	5

Table 2, shows that when the respondents were asked whether they had ever heard of menstruation and menstrual hygiene, the majority 91(95%) said yes while only 5(5%) said no. Among the 91 who said yes when asked how they understood menstruation, 30(33%) said they understood menstruation as when the ready eggs fail to get fertilized followed by 27(30%) who understood it as a normal physiological process and 5(5%) didn't know. 47(49%) mentioned that natural body psychological changes were the cause of menstruation followed by 32(33%) who raised that failed fertilization of an egg and the least 5(5%) didn't know the cause of menstruation.40(44%) defined menstrual hygiene management as practical strategies for coping with monthly periods while 4(4%) defined it as ways women keep clean/healthy during menstruation and how women menstruating manage themselves and dispose of used materials. 50(52%) and 49(51%) of the respondents described menstrual hygiene management as the use of clean materials to absorb or collect menstrual blood and taking a bath 3 times a day respectively, 13(14%) mentioned washing reusable materials with waste and soap, 10(10%) described menstrual hygiene management as changing used materials 3 times a day, 6(6%) described it as disposing of off used materials in a latrine while 5(5%) didn't know how to describe menstrual hygiene management practices.

Figure 2: Responses on how many times a menstruating girl takes a bath in a day

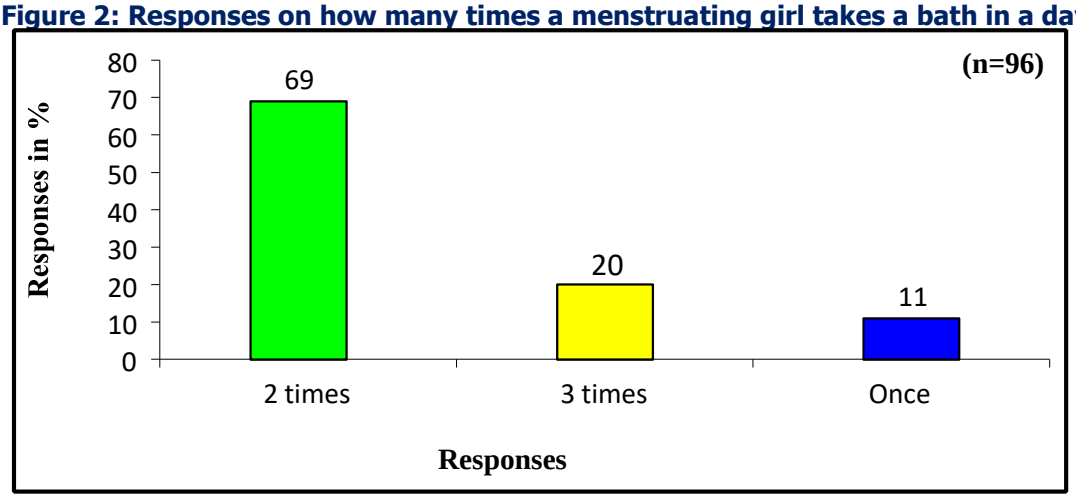

Figure 2 shows how many times a menstruating girl was supposed to take her bath, 66(69%) mentioned 2 times, 19(20%) mentioned 3 times, and 11(11%) raised once a day.

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Figure 3: Knowledge of the number of times a menstruating girl changes used materials

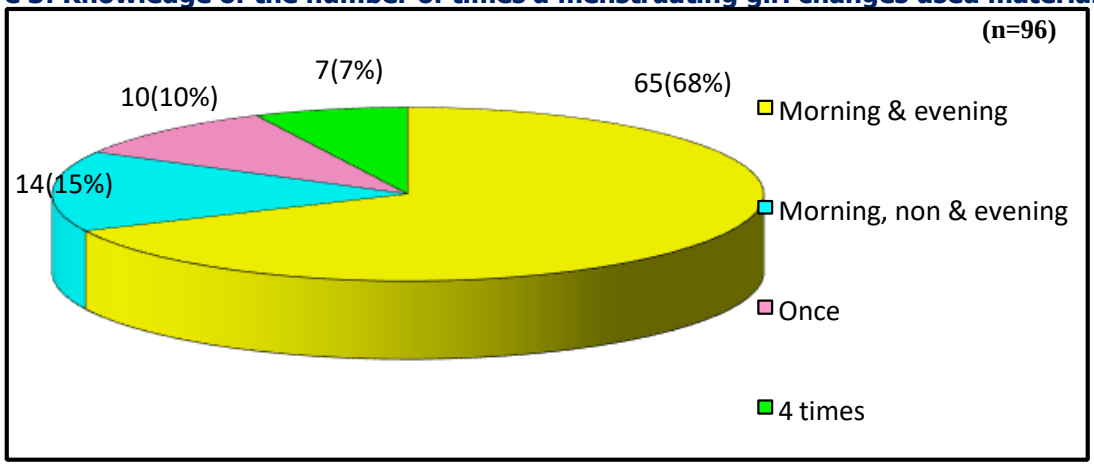

Figure 3 shows that when the respondents were asked the number of times a menstruating girl should change used materials, 65(68%) said morning and evening, 14(15%) knew 3 times (morning, noon, and evening), 10(10%) knew once a day while 7(7%) said 4 times a day.

Figure 4: Respondents' knowledge of the disposal of used menstrual materials

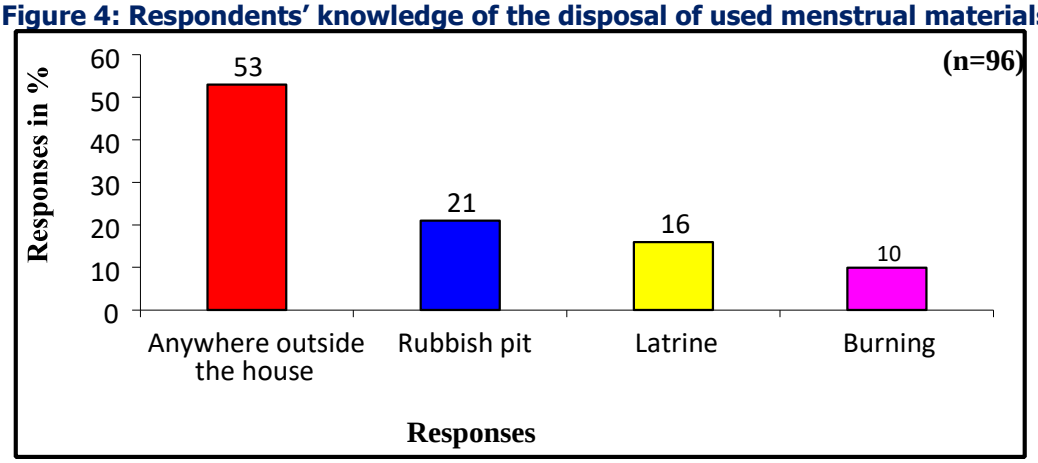

Figure 4 shows when the respondents were asked whether they knew where to dispose of off-used menstrual materials, the majority 51(53%) knew that used menstrual materials were disposed of outside the house followed by 20(21%) who knew in the rubbish pit, 15(16%) knew that in the latrine while 10(10%) knew that used menstrual materials are burnt.

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Figure 5: Respondents' sources of information about menstrual hygiene management

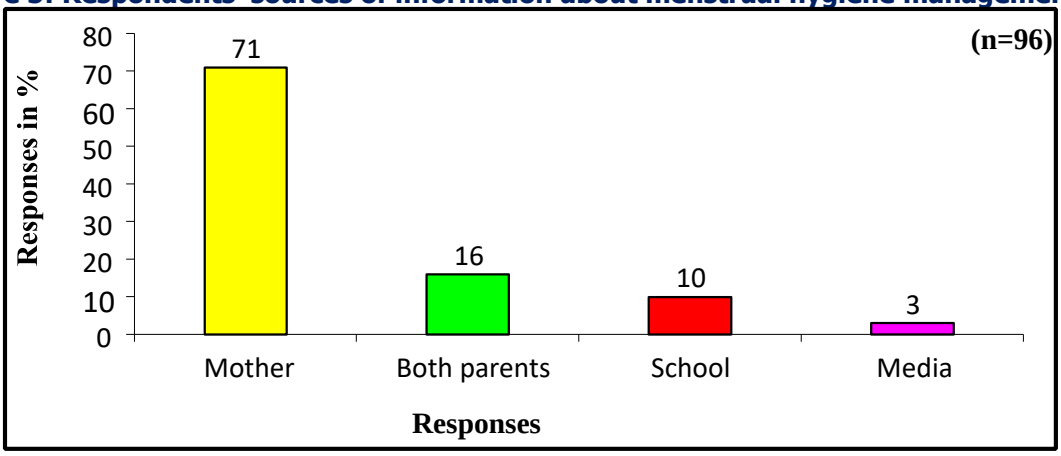

Figure 5 shows that when the respondents were asked about their sources of information about menstruation and menstrual hygiene management, 68(71%) said mothers,15(16%) said both parents,10(10%) said they were given from school while 3(3%) mentioned the media.

Table 3: Shows menstrual hygiene management practices of adolescent girls

Responses for what was used	**Frequency (n=96)**	**Percentage (%)**
Disposable sanitary pads	10	10
New pieces of clothes	20	21
Old pieces of clothes	50	52
Reusable pads	16	17
Total	**96**	**100**
How often used materials were changed	**Frequency (n=96)**	**Percentage (%)**
Once a day	25	26
Twice a day	56	58
Thrice a day	15	16
Total	**96**	**100**
Whether hands were washed after changing	**Frequency (n=96)**	**Percentage (%)**
Yes	37	39
No	59	61
Total	**96**	**100**
Why hands were not washed	**Frequency (n=59)**	**Percentage (%)**
No water at school	10	17
No water and soap at home and school	36	61
Had no time	13	22
Total	**59**	**100**
What was used for washing hands	**Frequency (n=35)**	**Percentage (%)**
Water only	20	57
Water and soap	15	43
Total	35	100
Opinions to improve MHM practices of adolescents	**Frequency (n=96)**	**Percentage (%)**
Training adolescents on how to make reusable pads	80	83
Distribute free sanitary pads not in schools alone even communities.	55	54
Make the sanitary pads prices reasonable	52	54
Promote health talks about menstrual hygiene management	70	73
Involve religious and cultural leaders in the drive.	49	51

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Table 3 shows that when the respondents were asked about the materials that were used during the last period for absorbing blood, more than half 50(52%) said that they used old pieces of clothes, 20(21%) used new pieces of clothes, 16(17%) used reusable pads while 10(10%) used disposable sanitary pads. More information shows that when the respondents were asked how often used menstrual materials were changed, more than half 56(58%) changed used materials 2 times a day followed by 25(26%) who changed once a day, and the minority 15(16%) changed three times a day. In addition, when the respondents were asked whether they washed their hands after changing used materials, the majority 59(61%) said no while 37(39%) said yes. From 59 respondents who didn't wash their hands after changing the used menstrual materials, the majority 36(61%) cited no water and soap at home and school while 13(22%) cited that they had no time. 7 who washed hands after changing the used materials, 20(57%) washed their hand with water only while 15(43%) washed with water and soap.

More so shows that when the respondents were asked whether they always cleaned their genitalia during the last menstrual period, the majority 58(60%) said no while 38(40%) said yes. Among the 38 who said yes, 19(50%) washed their genitalia with water only while 6(16%) wiped their genitalia with plain paper. Almost all 90(94%) said yes while only 6(6%) said no. Among the 90 who said yes, 56(62%) discussed MHM with their mothers while the minority 6(7%) discussed it with health workers. It was also noted that the total number of respondents went beyond 96 because the respondents gave more than one answer that is to say majority of the respondents gave multiple responses on what should be done to improve menstrual hygiene management practices whereby, 80(83%) raised training adolescents on how to make reusable pads; 70(73%) mentioned to promote health talks about menstrual hygiene management; 55(57%) reported that distributing free sanitary pads not in schools alone even in communities; 52(54%) raised making the sanitary pads prices reasonable while 49(51%) said involve religious and cultural leaders in the drive of promoting menstrual hygiene management practices.

Figure 6: Responses on the number of times menstruating girls previously took a bath

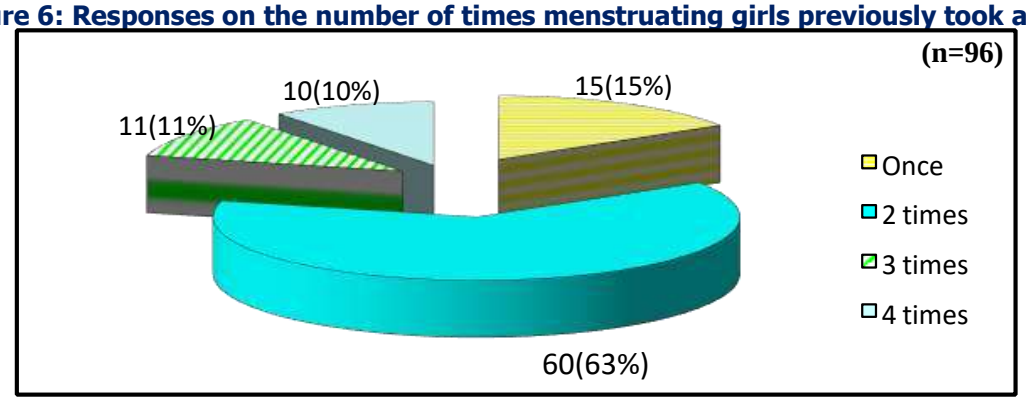

Figure 6 shows that when the respondents were asked how many times they took a bath during the previous menstrual period, the majority 60(63%) took a bath 2 times (morning and evening) followed by 15(16%) who took a bath once a day,10(10%) took bath for 4 times a day and 11(11%) took bath 3 times a day.

Figure 7: What was always used for bathing during the previous menstruation

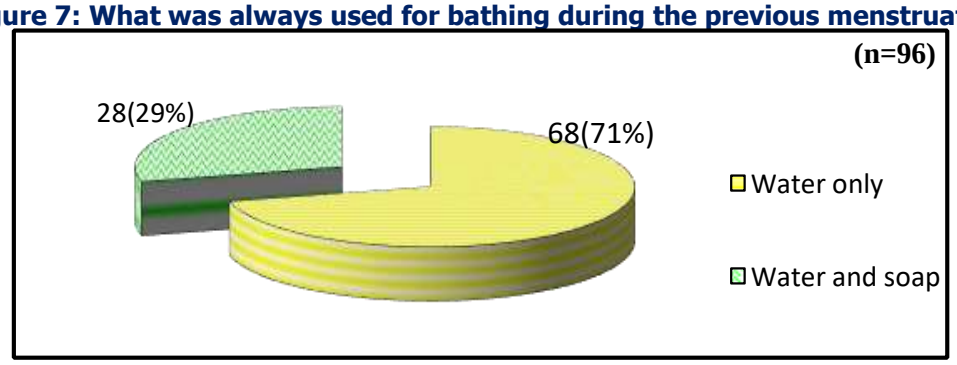

Figure 7 shows that when the respondents were asked what they always used for bathing during the previous menstrual period, 68(71%) said they used water only while 28(29%) said they took baths using water and soap.

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Figure 8: Responses on where used menstrual materials were disposed

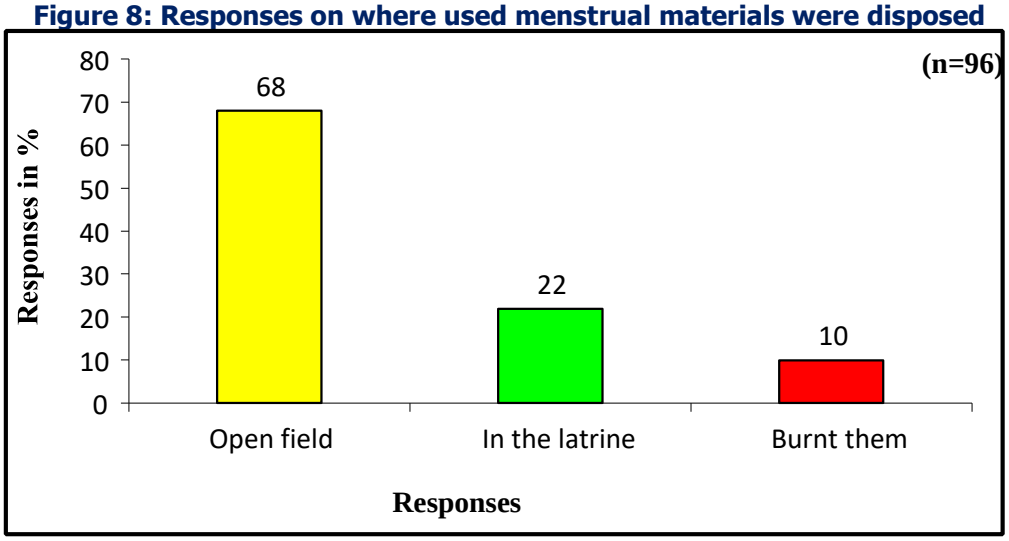

Figure 8 shows that when the respondents were asked where they disposed of menstrual materials, the majority 65(68%) disposed of used menstrual materials in the open field, 21(22%) disposed of them in the latrine and the minority 10(10%) burnt used menstrual materials.

Figure 9: Responses on what motivated the use of old pieces of clothes previously

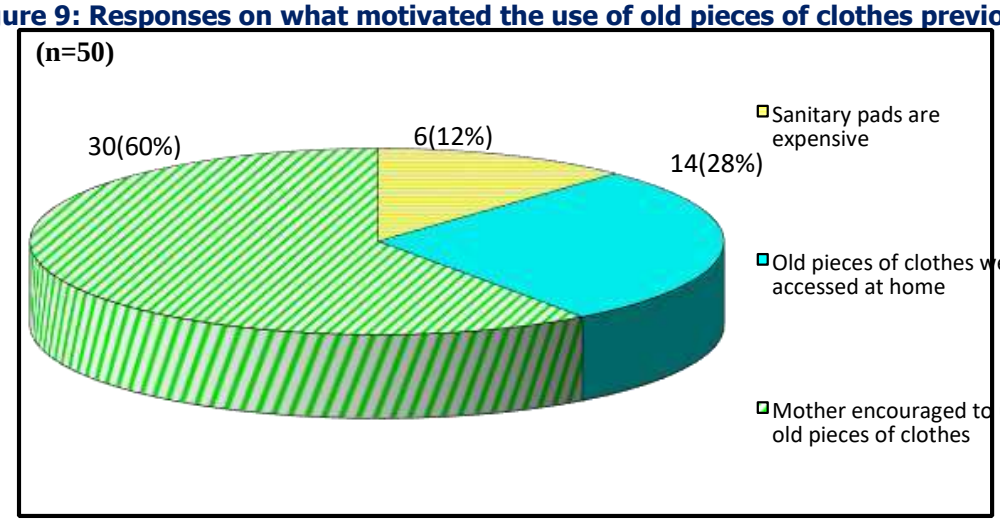

Figure 9 shows that among the 50 respondents, who used old pieces of clothes during their previous menstruation period 30(60%) cited that their mothers encouraged them to use old pieces of clothes, 14(28%) cited that old pieces of clothes were available at home while 6(12%) mentioned that sanitary pads were expensive to afford.

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Figure 10: Responses on what motivated the use of reusable pads previously

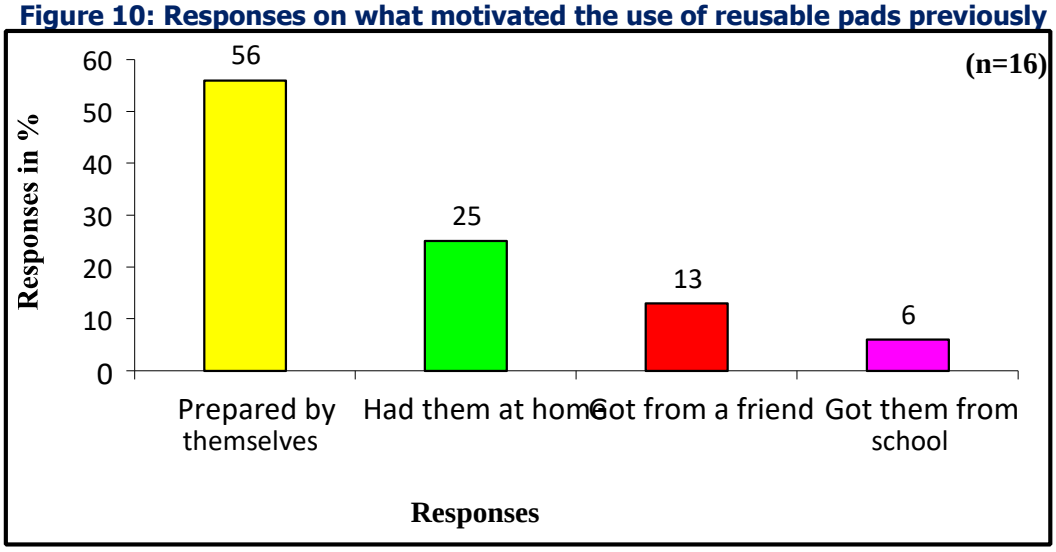

Figure 10 shows that among the 16 respondents who used reusable pads during their previous menstruation, 9(56%) were motivated because they prepared the reusable pads themselves, 4(25%) cited that they had reusable pads at home,12(13%) said they got from friends while 1(6%) were given at school.

Discussion

Demographic characteristics

According to the findings of the study presented in Table 1, the majority 62(64%) of the respondents were in the age group of 17-19 years, 22(23%) were between 15-16 years while 12(13%) of them were in between the age bracket of 13-14 years. This implies that most of the adolescent girls in Lubaga Girls' Secondary School were between 17-19 years and could have been well-versed in menstrual hygiene management. The study findings presented in Figure 1 showed that 66(69%) of the respondents were in senior five (S.5) and Senior six (S.6) while 10(10%) were in senior one (S.1) and senior two (S.2). and 20(21%) were in senior 3(three) and 4 (four). This implies that the majority of the respondents were in higher advanced-level classes. In addition, the majority 68% of the respondents were Catholic believers and dominated the study compared to their counterparts and this was attributed to the fact that Lubaga Girl's Secondary School is a Catholic-founded school.

Knowledge of adolescent girls towards menstrual hygiene management

The findings presented in Table 2 showed that when the respondents were asked whether they had ever heard of menstruation and menstrual hygiene management, the majority 91(95%) said yes while only 5(5%) said no. This implies that the majority of the respondents had heard of menstruation and menstrual hygiene management and this could be attributed to their common sources of information such as mothers among others. These findings are in line with (Adinma & Adinma, 2018) whose study showed that 79% of the respondents had heard of menstruation and menstrual hygiene practices. The study further revealed that 30(33%) of the respondents understood menstruation as when the ready eggs fail to get fertilized while 27(30%) understood it as a normal physiological process. This implies that although almost all 91(95%) of the respondents had heard of menstrual hygiene management, adolescents had low levels of knowledge about menstrual hygiene management because less than half of them knew or could define menstrual hygiene management. Similarly, a study conducted by (Dixit et al., 2016) in Central India showed that 34% of the respondents knew menstruation was a normal physiological process.

Regarding the respondents' knowledge of the cause of menstruation, findings presented in Table 2 showed that 47(49%) knew menstruation was caused by natural body physiological changes while 32(33%) knew was caused by failed fertilization of an egg. This implies that the respondents had low levels of knowledge regarding the cause of menstruation and this could be attributed to their inaccurate sources of information concerning menstruation which was the mothers in the case of this study. These findings agree with (WHO, 2016) whose findings indicated different ways through which respondents understood the cause of menstruation such as caused by failure of the egg to be fertilized and natural body changes among others.

The findings showed that among the 91 respondents who had ever heard of menstruation and menstrual hygiene management, 40(44%) defined menstrual hygiene management as practical strategies for coping with monthly periods while 4(4%) defined it as ways women keep clean/healthy during menstruation and how women menstruating manage themselves and dispose of used materials. This implies that the respondents had low levels of knowledge regarding the definition of menstrual hygiene management and this could be attributed to inaccurate sources of information which was mostly the

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mothers among others. Similarly, a study conducted by (Marvan & Molina-Abolnik, 2015) showed that only 58% knew that menstruation hygiene management (MHM) focuses on practical strategies for coping with monthly periods.

According to the findings presented, more than half 50(52%) and 49(51%) of the respondents described menstrual hygiene management as the use of clean materials to absorb or collect menstrual blood and taking a bath 3 times a day respectively, while 5(5%) didn't know how to describe menstrual hygiene management practices. This implies that, although more than half of the respondents gave correct descriptions, there were low levels of knowledge regarding what was involved in the menstrual hygiene management practices and this could be attributed to inadequate or lack of sensitization towards menstruation.

According to the findings presented in Figure 2, when the respondents were asked whether they knew how many times a menstruating girl was supposed to take her bath, 66(69%) mentioned 2 times, 19(20%) mentioned 3 times while 11(11%) raised once a day. This implies that respondents had a low level of knowledge regarding the number of times a menstruating girl should take her bath in a day. This was contrary to what was reported (WHO, 2015) that menstruating girls should take their baths 3 times a day.

From the findings presented in Figure 3, it was discovered that when the respondents were asked the number of times a menstruating girl should change used materials, 65(68%) knew morning and evening while 14(15%) knew 3 times (morning, noon, and evening). This implies that the respondents had a low level of knowledge concerning the number of times a menstruating girl should change her used menstrual materials and this could be attributed to inadequate menstrual materials and a lack of changing rooms among others. However, a study conducted by (Boosey et al., 2014) showed that 84% of the respondents knew that menstrual hygiene management involved regular changing of used menstrual materials such as pads, sanitary pads, cotton wool, new pieces of clothes, and washing the washable pads.

According to the findings of the study presented in Figure 4, it was observed that when the respondents were asked whether they knew where to dispose of off-used menstrual materials, the majority 51(53%) knew that used menstrual materials were disposed of outside the house while 10(10%) knew that used menstrual materials should be burnt. This indicated that the respondents had a low level of knowledge regarding the disposal of used menstrual materials and this could be attributed to their inadequate sources of information concerning menstrual hygiene management practices. Similarly, a study conducted by (WHO, 2015) showed that 65% of the respondents possessed poor knowledge regarding the disposal of used menstrual materials because they knew that used materials were disposed of in the open environment which is not proper and could cause infections.

Menstrual hygiene management practices of adolescent girls

The findings presented in Table 3 showed that when the respondents were asked about the materials that were used during the last period for absorbing blood, more than half 50(52%) said that they used old pieces of clothes, 20(21%) used new pieces of clothes, 16(17%) used reusable pads while 10(10%) used disposable sanitary pads. This implies that most of the respondents had poor practices of menstrual hygiene management and this could be attributed to inadequate resources among others. Similarly, a study conducted by (Dhingra et al., 2019) showed that the use of old clothes during the management of menstruation was found to be common among 67% of adolescent girls and this was attributed to poverty or inability to afford sanitary pads and inadequate knowledge on the importance and effectiveness of sanitary pads in the management of menstrual hygiene.

According to the findings of the study presented it was revealed that when the respondents were asked how often used menstrual materials were changed, more than half 56(58%) changed used materials 2 times in a day followed by 25(26%) who changed once a day and the minority 15(16%) changed three times a day. This implies that the majority of the respondents had poor menstrual hygiene management practices and this could all be because of inadequate knowledge concerning the number of times menstrual materials should be changed in a day. Similarly, a study conducted by (Shanbhag et al., 2017) in four selected High Schools in rural areas in three districts of Bangalore Urban, Bangalore Rural, and Kolar around Bangalore City showed that 39.8% of the respondents changed sanitary pads or cloth twice a day, 29.5% three times a day and 21.7% once a day

In addition, the findings presented furthermore showed that when the respondents were asked whether they washed their hands after changing used materials, the majority 59(61%) said no while 37(39%) said yes. These findings imply that the respondents had poor menstrual hygiene management practices regarding hand washing and this could be because there was no water at home and school among others.

According to the findings of the study presented, when the respondents were asked whether they always cleaned their genitalia during the last menstrual period, the majority 58(60%) said no while 38(40%) said yes. This implies that there were poor menstrual hygiene management practices among the respondents because they were not cleaning their genitalia during menstrual periods and this could be because of inadequate knowledge concerning cleaning of genitalia. This was contrary to the study conducted by (Shanbhag et al., 2017) which revealed that a large proportion of 56.8% of the study population used soap and water to clean their private parts while the rest used only water.

The findings presented also showed that, when the respondents were asked how many times they took a bath during the previous menstrual period, the majority 60(63%) took a bath 2 times

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(morning and evening) followed by 15(16%) who took bath once a day and 10(10%) took bath 4 times a day. This implies that there were poor practices among the respondents regarding the number of times a menstruating girl should take her bath and this could be related to some factors such as lack of water and soap both in schools and at home among others. Similarly, a study conducted by (Upashe et al., 2015) revealed that 67.3 % of respondents were taking baths daily with soap during menstruation.

The findings presented in Figure 8 furthermore showed that when the respondents were asked where they disposed of menstrual used materials, the majority 65(68%) disposed of used menstrual materials in the open field while 21(22%) disposed of them in the latrine. This implies that there were poor menstrual hygiene disposal practices and this could be related to inadequate knowledge concerning the proper disposal of used menstrual materials among others. These findings are contrary to a study that showed that 77% of the respondents disposed of absorbents in a latrine while 33% in an open field (Tegegne & Sisay, 2014).

According to the findings of the study presented in Table 4, when the respondents were asked what motivated them to use sanitary pads, among the 10 who used disposable sanitary pads, 6(60%) cited that their parents for them. This implies that parental involvement in supporting menstruating adolescent girls was one of the factors that motivated the use of disposable sanitary pads.

From the findings presented in Table 3, among the 20 respondents who used new pieces of clothes during menstruation, when asked what motivated them, the majority 12(60%) said their mothers advised them to use new pieces of clothes. This then implies that the mother's advice on the use of new pieces of clothes was one of the factors that determined the use of new pieces of clothes during menstruation. Similarly, a study conducted in Nigeria showed that 59% of the respondents reported that mother's knowledge regarding menstruation determined menstrual hygiene management despite most of them having inaccurate knowledge concerning menstruation (Umeora & Egwuatu, 2018).

According to the findings of the study presented in Figure 9, it was discovered that among the 50 respondents who used old pieces of clothes during their previous menstruation period 30(60%) cited that their mothers encouraged them to use old pieces of clothes while 14(28%) cited that old pieces of clothes were available at home. This implies that mothers' encouragement was one of the factors that determined the use of old pieces of clothes during menstrual periods and this could be all because of inadequate resources to afford for disposal sanitary pads. Similarly, a study conducted in Nigeria showed that 59% of the respondents reported that mother's knowledge regarding menstruation determined menstrual hygiene management despite most of them having inaccurate knowledge concerning menstruation (Umeora & Egwuatu, 2018).

It was furthermore discovered that among the 16 respondents who used reusable pads during their previous menstruation, 9(56%) were motivated because they prepared the reusable pads themselves while 4(25%) cited that they had reusable pads at home. This implies that adequate knowledge of how to prepare reusable pads was one of the determinants of using reusable pads among adolescent girls and this was because girls were able to use reusable pads since they were able to make them.

The study furthermore showed that although almost all 90(94%) of the respondents had discussed MHM practices, 56(62%) had a discussion on MHM practices with their mothers rather than health workers. This implies that mothers were more trusted with menstrual issues than health workers who could give accurate information concerning menstrual hygiene management practices. This could be related to the way menstrual issues were still being treated as secretes among others.

Limitations of the Study

The researcher encountered the following limitations that were solved:

Accessing new material on the Internet was not easy since some files required one to subscribe and accept cookies to access them and at times not easy to understand.

Conclusion

Adolescents in Lubaga Girl's Secondary School had inadequate knowledge of MHM, poor MHM practices, and the availability of menstrual products as a determinant in MHM.

Recommendation

There is a need for the Government of Uganda through the Ministry of Education and Sports together with the Ministry of Health to improve the privacy of girls, access to clean water, and provide sanitary pads in schools to facilitate their menstrual hygiene management.

There is also a need to incorporate menstrual hygiene management into the school curriculum and encourage teachers to do more sensitization on menstrual hygiene management by introducing it in the health and hygiene clubs in schools.

There is also a need for health workers in KCCA to create storytelling, theatre, psychological information, and personal anecdotes that would reach students learning about menstruation rather than teaching about physiology only.

There is a need for the different stakeholders such as Headteachers, Teachers, and Parents at large to provide good access to clean water, menstrual products, and pain relief tablets, providing for these needs should be to both secondary schools and primary schools.

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List of Abbreviations

KCCA: Kampala Capital City Authority
MHM: Menstrual Hygiene Management
SPSS: Statistical Package for Social Sciences
SSA: Sub-Saharan Africa
UNICEF: United Nations Children's Emergency Fund
WASH: Water, Hygiene and Sanitation

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The author did not declare any conflict of interest

Author Biography

Beatrice Laker is a student finalist undertaking a diploma in midwifery at St. Michael Lubaga Hospital Training School.
Teddy Ssemambo Nassanga, a tutor at St. Michael Lubaga Hospital Training School.
JaneFrances Namuddu is a principal tutor at St. Michael Lubaga Hospital Training School.

References

1. Anbesu, E. W., & Asgedom, D. K. (2023). Menstrual hygiene practice and associated factors among adolescent girls in sub-Saharan Africa: a systematic review and meta-analysis. *BMC Public Health*, *23*(1), 1-14.
2. Kavuma, F. (2022). *Factors associated with menstrual hygiene management among school-going adolescents in Kampala Capital City Authority Secondary Schools, Central Uganda.*, Makerere University.
3. Lenia, E. (2019). *Assessment of knowledge, perceptions, and practices of menstrual hygiene management among females aged (15-49 years) in Bidibidi Refugee Settlement, Yumbe District, Uganda.* Makerere University.
4. MacRae, E. R., Clasen, T., Dasmohapatra, M., & Caruso, B. A. (2019). 'It's like a burden on the head': Redefining adequate menstrual hygiene management throughout women's varied life stages in Odisha, India. *PLoS One*, *14*(8), e0220114.
5. Miiro, G., Rutakumwa, R., Nakiyingi-Miiro, J., Nakuya, K., Musoke, S., Namakula, J., . . . Ross, D. A. (2018). Menstrual health and school absenteeism among adolescent girls in Uganda (MENISCUS): a feasibility study. *BMC women's health*, *18*, 1-13.
6. Phillips-Howard, P. A., Caruso, B., Torondel, B., Zulaika, G., Sahin, M., & Sommer, M. (2016). Menstrual hygiene management among adolescent schoolgirls in low-and middle-income countries: research priorities. *Global health action*, *9*(1), 33032.
7. Ramaiya, A., & Sood, S. (2020). What are the psychometric properties of a menstrual hygiene management scale: a community-based cross-sectional study. *BMC Public Health*, *20*(1), 1-11.
8. Shah, V., Nabwera, H. M., Sosseh, F., Jallow, Y., Comma, E., Keita, O., & Torondel, B. (2019). A rite of passage: a mixed methodology study about knowledge, perceptions, and practices of menstrual hygiene management in rural Gambia. *BMC Public Health*, *19*(1), 1-15.
9. Shawki, N. (2019). The Global Adolescent Girl Agenda: An Analysis of the Emergence and the Political Outcomes of Two Global Health Networks. *Journal of Social and Development Sciences*, *10*(1 (S)), 35-50.
10. Sivakami, M., van Eijk, A. M., Thakur, H., Kakade, N., Patil, C., Shinde, S., . . . Kabir, Y. (2019). Effect of menstruation on girls and their schooling, and facilitators of menstrual hygiene management in schools: surveys in government schools in three states in India, 2015. *Journal of Global Health*, *9*(1).
11. Sommer, M., Caruso, B. A., Sahin, M., Calderon, T., Cavill, S., Mahon, T., & Phillips-Howard,
12. P. A. (2016). A time for global action: addressing girls' menstrual hygiene management needs in schools. *PLoS medicine*, *13*(2), e1001962.
13. Sommer, M., Phillips-Howard, P. A., Mahon, T., Zients, S., Jones, M., & Caruso, B. A. (2017). Beyond menstrual hygiene: addressing vaginal bleeding throughout the life course in low and middle-income countries. *BMJ global health*, *2*(2), e000405.
14. Sonowal, P., Talukdar, K., & Saikia, H. (2021). Sociodemographic factors and their association with menstrual hygiene practices among adolescent girls in Urban slums of Dibrugarh town, Assam. *Journal of Family Medicine and Primary Care*, *10*(12), 4446.

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