

KNOWLEDGE AND PRACTICES ON MENSTRUAL HYGIENE MANAGEMENT AMONG ADOLESCENTS IN LUBAGA GIRLS' SECONDARY SCHOOL, LUBAGA DIVISION KAMPALA. ACROSS-SECTIONAL STUDY.

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Abstract.

Background.

Menstrual hygiene management continues to be a serious challenge among adolescent girls in Uganda. The purpose of this study was to assess knowledge and practices on menstrual hygiene management among adolescents in Lubaga Girls' Secondary School.

Methods:

A cross-sectional descriptive study was used involving 96 adolescents. A purposive sampling procedure was used to select the respondents and the researcher administered a questionnaire for collecting data which was sorted, coded, and exported to SPSS for analysis. Analyzed data was presented in figures and tables reflecting frequencies and percentages.

Results:

62(64%) of the respondents were aged (17-19) years 66(69%) of the respondents were in between S.5 and S.6 classes, 40(41%) of the respondents knew about menstrual hygiene management (MHM) as practical strategies for coping with monthly periods, 50(52%) described MHM as use of clean materials to absorb or collect menstrual blood. On practices, 66(69%) knew that a menstruating girl should take a bath 2 times a day while 66(69%) knew that changing used materials should be done 2 times a day, and 51(53%) knew that used materials are disposed of anywhere outside the compound, 52(54%) used old pieces of clothes.

Conclusion:

Adolescent girls had inadequate knowledge regarding MHM and poor MHM practices.

Recommendations:

The government through the Ministry of Education and Sports should incorporate Menstrual Hygiene Management in the school curriculum and this would improve the Menstrual Hygiene Management of adolescent girls

Keywords: Adolescents, Menstrual hygiene management, Lubaga girl's secondary school.

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Background

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). Globally across many 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, and these strategies vary greatly between regions, countries, and even within communities (MacRae et al. 2019).

Given the complexity of these variables' adolescent girls in resource-limited contexts often 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,

United States of America (USA) and some countries in the 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). 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). Given little awareness of menstruation among adolescent girls and women, knowledge regarding the physiological process of menstruation was measured during the formative stages of UNICEF's Menstrual Management Framework (UNICEF, 2015). Results showed that 89% of adolescent

girls in Uttar Pradesh, 76% in Jharkhand, and 72% in Bihar did not know menstrual blood came from the shedding of the endometrium, and up to 86% of girls felt completely unprepared for menarche and its hygiene management process.

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).

In 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 this study was conducted to assess knowledge and practices on menstrual hygiene management among adolescents in Lubaga Girls’ Secondary School, Kampala Capital City Authority.

Methodology

Study Design and rationale

This study deployed a descriptive cross-sectional study design employing the quantitative method of 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 via 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 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, especially the 13 to 15-year-old girls to discuss more freely among 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.

The dependent variable: was Menstrual Hygiene Management.

Independent variables: were the adolescent girls’ knowledge and practices of the adolescents on MHM.

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.

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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 was presented to the head teacher of Lubaga Girls' Secondary School seeking permission n 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.

Demographic Characteristics

Table 1 shows that 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. 65(68%) of the respondents were Catholic believers followed by 21(22%) who were Protestants, 6(6%) were Muslims while the minority 4(4%) were Pentecostal believers.

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

Figure 1: Shows the respondents' class of attendance.

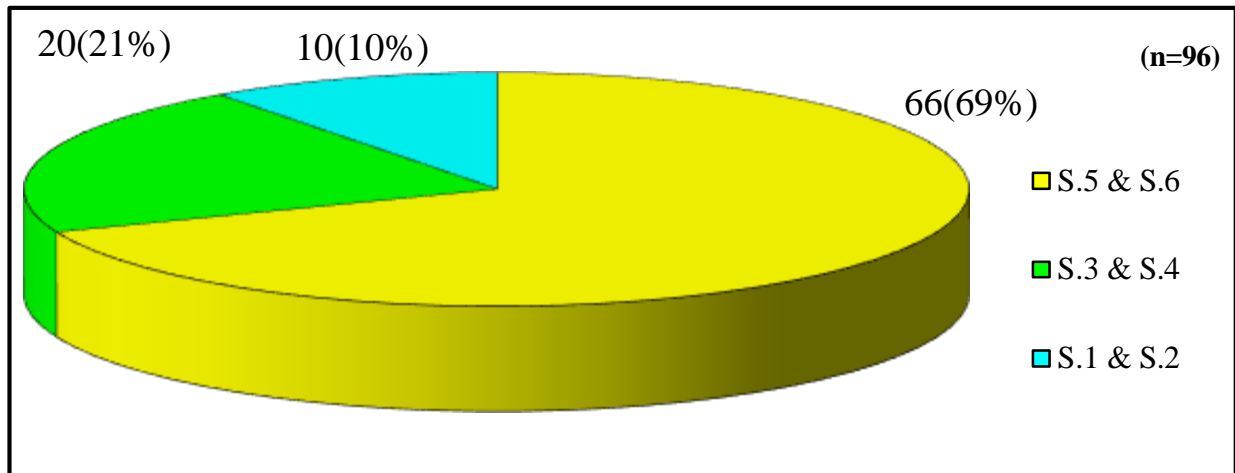


Table 2: Shows knowledge of adolescent girls towards menstrual hygiene management.

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=96)		
Normal physiological process	27	30
Body development or change process	26	29
Curse from God	3	3
Don't know	5	5
Process when the ready eggs fail to get fertilized	36	33
Total	96	100
Knowledge on the cause of menstruation (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 (n=96)		
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	96	100
Responses (n=96)		
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 off used materials in a latrine	6	6
All the above	3	3
Don't know	5	5

Figure 1 shows that 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.

Knowledge of adolescent girls towards menstrual hygiene management

Table 2: shows that 91(95%) of the respondents had ever heard of menstruation and menstrual hygiene while only

5(5%) had not. Among the 91 who said yes when asked how they understood menstruation, 30(33%) said they understood menstruation as the when the ready eggs fail to get fertilized followed by 27(30%) who understood it as normal physiological process and 5(5%) didn't know.

Furthermore, 47(49%) mentioned that natural body psychological changes followed by 32(33%) who raised that failed fertilization of an egg and the least 5(5%) didn't know the cause of menstruation.

More information shows 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.

In the same table ,information shows that more than half 50(52%) and 49(51%) of the respondents described menstrual hygiene management as the use clean materials to absorb or collect menstrual blood and taking 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 off used materials in a latrine while 5(5%) didn't know how to describe menstrual hygiene management practices.

Figure 2 shows 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.

Figure 3 shows 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 shows whether they knew where to dispose off-used menstrual materials, majority 51(53%) knew that used menstrual materials were disposed off 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.

Figure 5 shows 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.

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

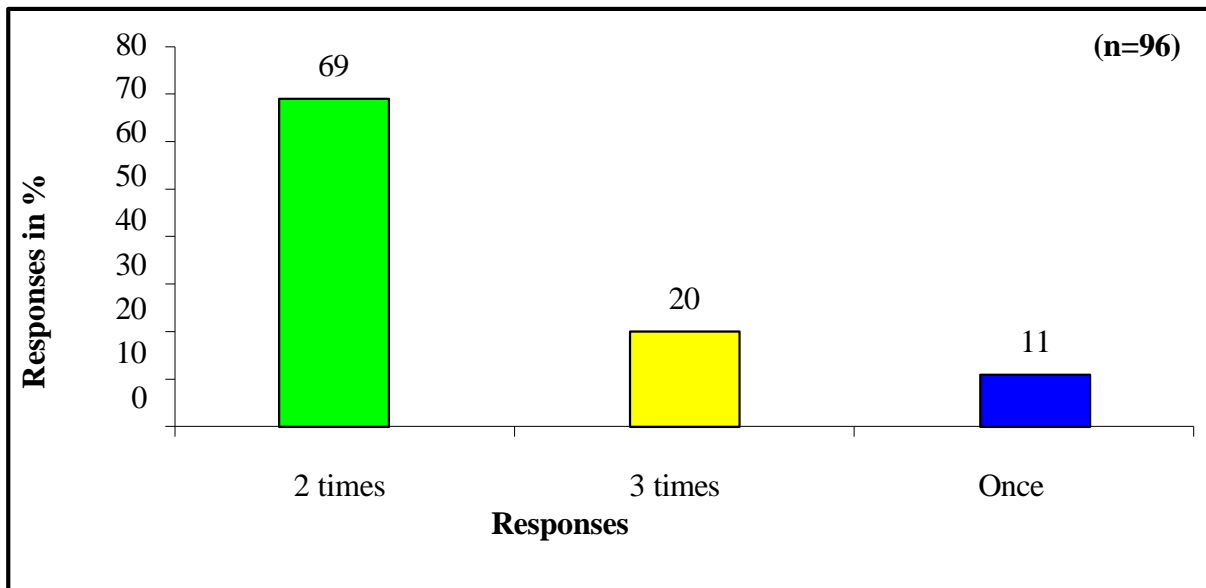
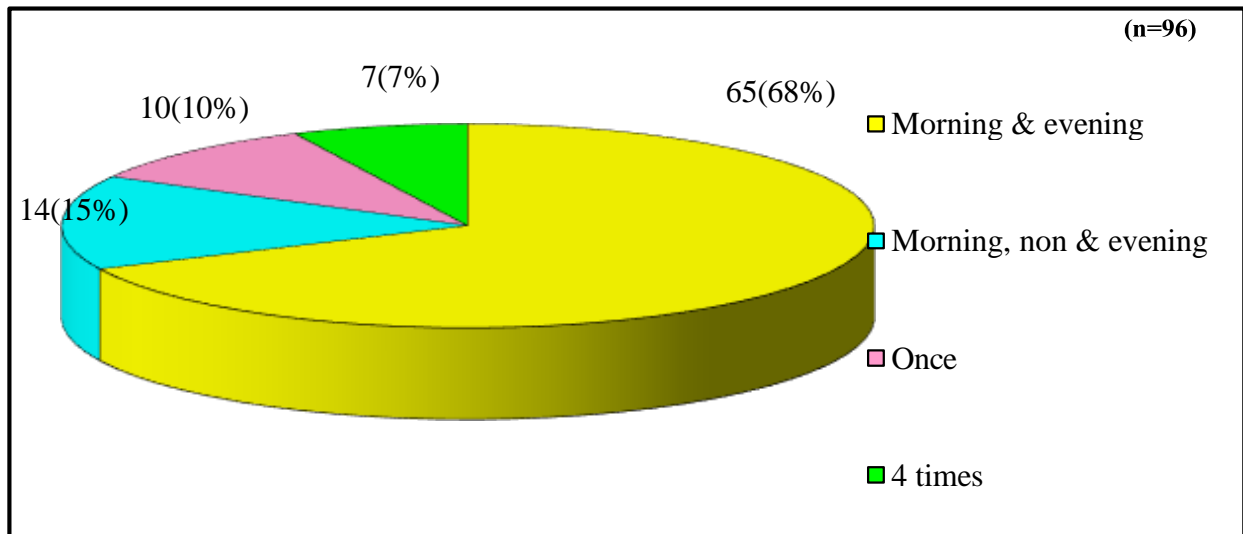


Figure 3: Knowledge on number of times a menstruating girl changes used materials



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

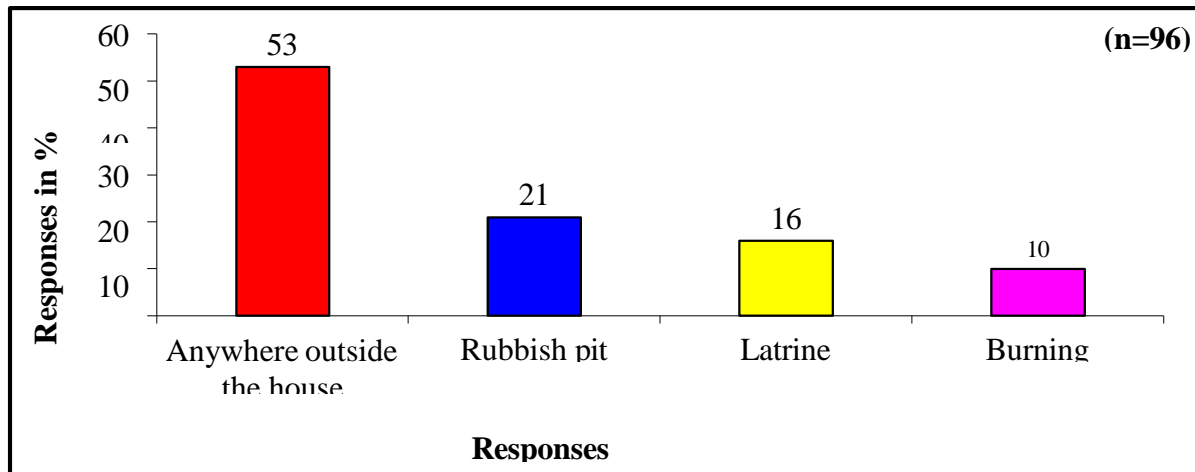


Figure 5: Respondents' sources of information about menstrual hygiene management

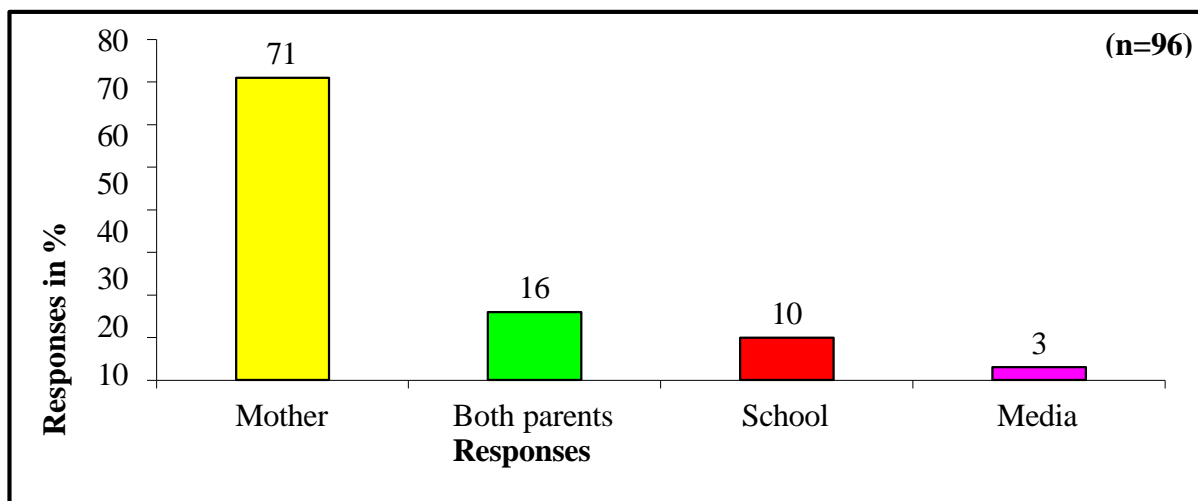


Table 3: Shows menstrual hygiene management practices of the adolescent girls

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 at 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
Pinions 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 thee drive.	49	51

Menstrual hygiene management practices among the adolescent girls

Table 3 shows 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 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. In addition, whether they washed hands after changing used materials, majority 59(61%) said no while 37(39%) said yes.

The table shows that among the 59 respondents who didn't wash their hands after changing the used menstrual materials, majority 36(61%) cited no water and soap at home and at school while 13(22%) cited that they had no time. Table 3 furthermore showed that among the 35 respondents as noted in table 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. The table also shows whether they always cleaned their genitalia during the last menstrual period, 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 papers.

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 with health workers. It was also noted that the total number of respondents went beyond 96 because the respondents gave more than one answers 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 shows how many times, they took bath during the previous menstrual period, majority 60(63%) took bath 2 times (morning and evening) followed by 15(16%) who took bath once a day, 10(10%) took bath for 4 times a day and 11(11%) took bath 3 times a day. Figure 7 shows that 68(71%) of the respondents always used water for bathing during the previous menstrual period, while 28(29%) said they took bath using water and soap.

Figure 8 shows where they disposed-off menstrual used materials, majority 65(68%) disposed-off used menstrual materials in the open field, 21(22%) disposed in the latrine and the minority 10(10%) burnt used menstrual materials. 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 piece of clothes were available at home while 6(12%) mentioned that sanitary pads were expensive to afford.

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

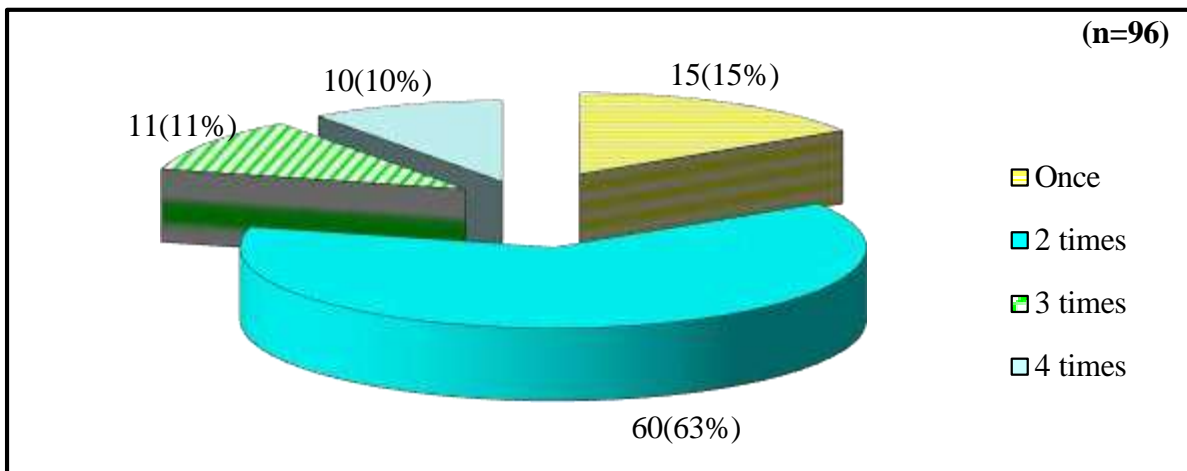


Figure 7: What was always used for bathing during the previous menstruation.

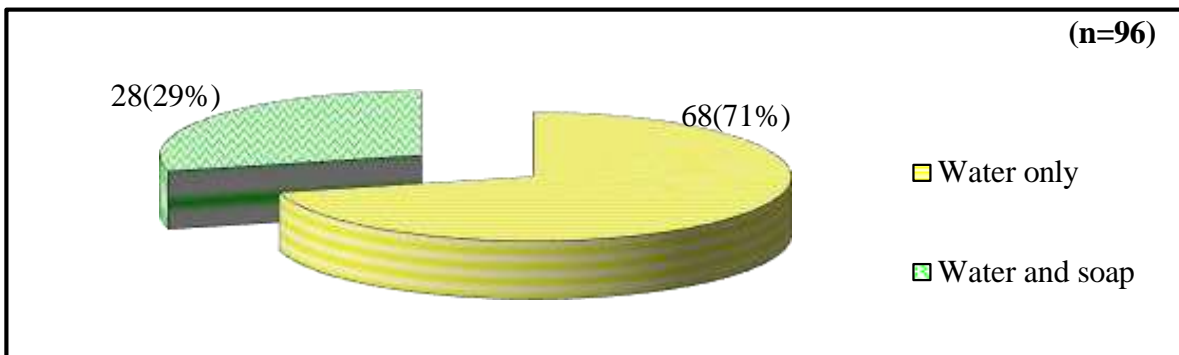


Figure 8: Responses on where used menstrual materials were disposed.

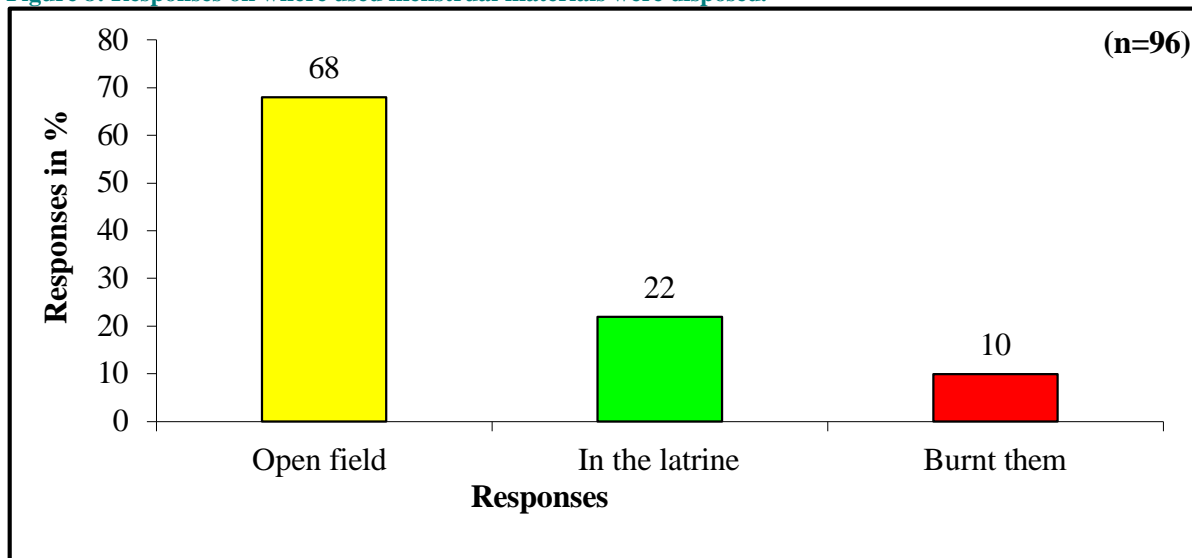


Figure 9: Responses on what motivated the use of old pieces of clothes previously.

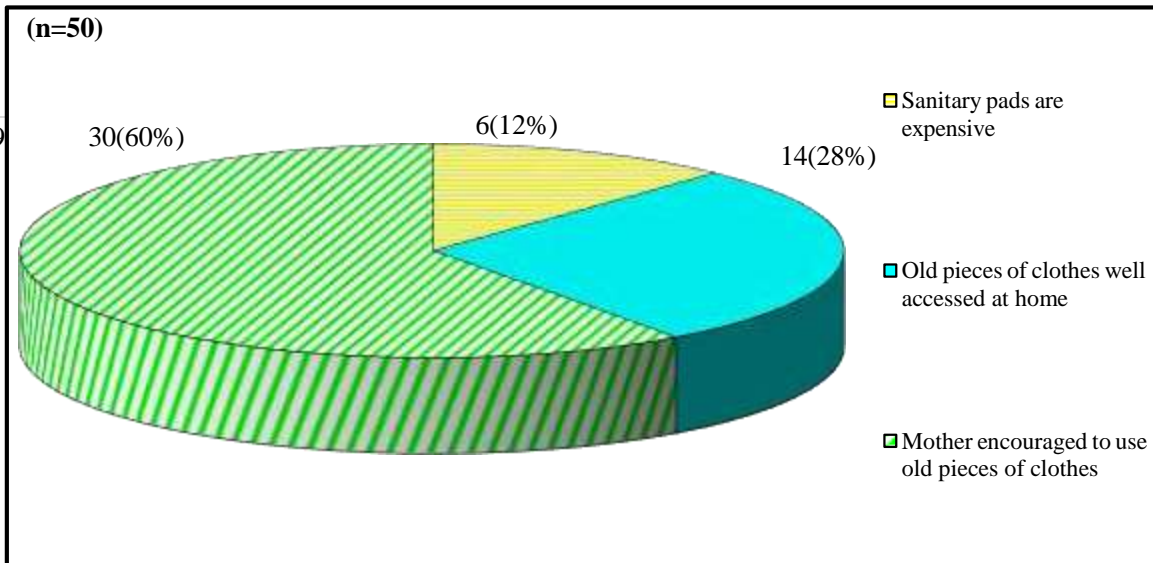


Figure 10: Responses on what motivated the use of reusable pads previously

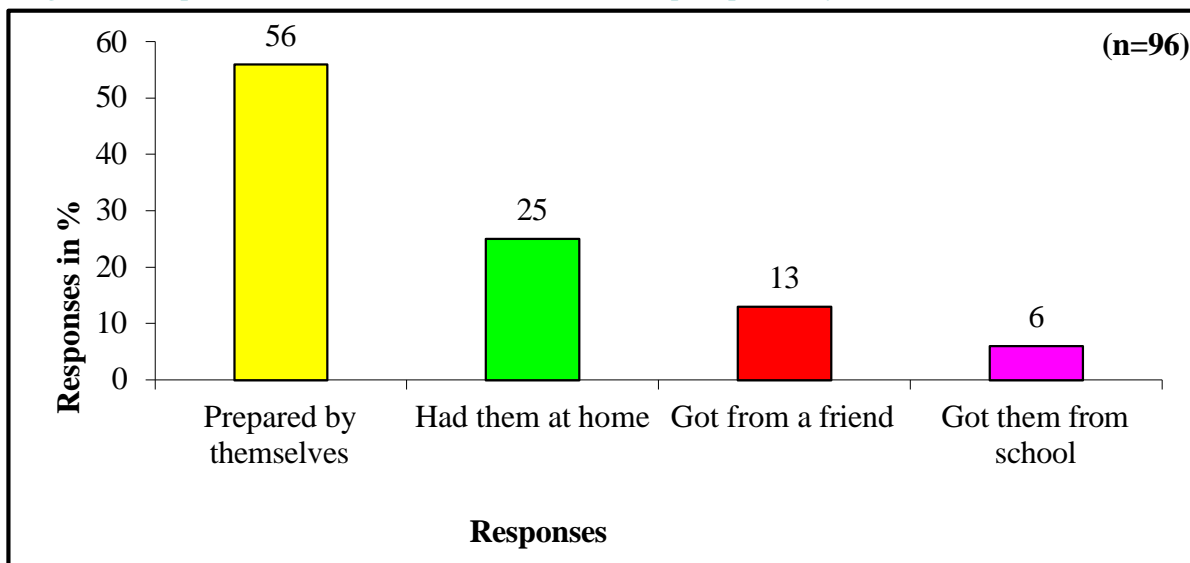


Figure 10 shows that among the 16 respondents who used reusable pads during their previous menstruation, 9(56%) were motivated because they prepared the reusable pads themselves, 4(25%) cited that they had reusable pads at home, 12(13%) said they got from friends. In contrast, 1(6%) was given at school.

Discussion of results

Knowledge of adolescent girls towards menstrual hygiene management

The study showed that 91(95%) respondents had ever heard of menstruation and menstrual hygiene management, 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 and 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. Regarding the respondents’ knowledge of the cause of menstruation, findings 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.

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 mothers among others. 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 this could be attributed to inadequate or lack of sensitization towards menstruation.

According to the study 66(69%) of the participants mentioned that they bathed 2 times, 19(20%) mentioned 3 times, and 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. It was discovered that on 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. Findings showed that 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 infection.

Menstrual hygiene management practices of the adolescent girls

The findings presented in Table 3 showed that study showed that of 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. pads and inadequate knowledge of 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 study showed that 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. 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 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 on whether participants washed their hands after changing used materials, showed that 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. the study showed that when participants 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. Regarding 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 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. 67.3 % of respondents were taking baths daily with soap during menstruation. The majority 65(68%) of the respondents mentioned that they 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.

The study also showed that among the 10 participants who used disposable sanitary pads, 6(60%) cited 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 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 mothers' knowledge regarding menstruation determined menstrual hygiene management despite most of them having inaccurate knowledge concerning menstruation.

According to the findings of the study, 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.

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.

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.

Recommendations

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 for 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

Limitations of the Study

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

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List of abbreviations

KCCA:	Kampala Capital City Authority
LMIC:	Low- and Middle-Income Countries
MHM:	Menstrual Hygiene Management
RTI:	Reproductive Tract Infections
SDG:	Sustainable Development Goals
SPSS:	Statistical Package for Social Sciences
SSA:	Sub-Saharan Africa
UNICEF:	United Nations Children's Emergency Fund
WASH:	Water, Hygiene and Sanitation
WHO:	World Health Organization

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Conflict of interest

The author declares no competing interest.

Authors biography

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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. 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.
4. 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.
5. Nwimo, I. O., Elom, N. A., Ilo, C. I., Ezugwu, U. A., Ezugwu, L. E., Nkwoka, I. J., . . . Okeworo, C. G. (2022). Menstrual hygiene management practices and menstrual distress among adolescent secondary school girls: a questionnaire-based study in Nigeria. *African Health Sciences*, 22(2), 397-409.
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. (1),
8. Salve, S., Dase, R., Mahajan, S., & Adchitre, S. (2021). Assessment of knowledge and practices about menstrual hygiene amongst rural and urban adolescent girls—A comparative study. *Int J Recent Trends Sci Technol*, 3(3), 1-3.
9. 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.
10. 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.
11. Sommer, M., Caruso, B. A., Sahin, M., Calderon, T., Cavill, S., Mahon, T., & Phillips-Howard, P. A. (2016). A time for global action: addressing girls' menstrual hygiene management needs in schools. *PLoS medicine*, 13(2), e1001962.
12. 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.
13. 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.
14. 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).

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