FACTORS INFLUENCING MENSTRUAL HYGIENE MANAGEMENT AMONG ADOLESCENT STUDENTS AT SOROTI SECONDARY SCHOOL IN SOROTI DISTRICT, A CROSS-SECTIONAL STUDY.

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ABSTRACT Background

At Soroti Secondary School, about 11% of the girls in 2022 were affected by poor menstrual hygiene as they reported to Eastern Division Health Center III with urinary tract infections. Their number increased to 13.5% in 2023. This study aimed to assess the factors influencing Menstrual Hygiene Management among adolescent students at Soroti Secondary School in Soroti City.

Methodology

A descriptive cross-sectional study was used, adopting the quantitative approach to data collection and analysis. A sample size of 30 adolescent girls was determined using a simple random sampling method, Data was collected using a semi-structured questionnaire, prepared by Microsoft Excel, and presented in the form of tables and figures.

Results

Findings showed that more than half, 63.33%, were aged 16-19 years, 63.33% came from urban settings, 70% had selfemployed parents, 63.33% always received menstrual upkeep from their parents, and 73.33% first learned about menstruation from their mothers. The majority, 90% preferred using disposable sanitary pads, 86.67% had a menstrual flow length of 3-4 days, and 93.33% said that the school provided water and soap for MHM. Half (50% of the respondents accessed menstrual care products from the school administration, and 83.33% received menstrual hygiene lessons. However, all said that the school had no toilet and bathroom mirrors, and 63.33% rated the privacy towards MHM as minimal, which probably negatively affected MHM among the students.

Conclusion

Age above 16 years, availability of support from parents and the school administration, positively influenced menstrual hygiene among the participants. However, a shortage of proper facilities and lack of privacy, as well as criticisms from fallacies about menstruation, negatively affected MHM.

Recommendation

Promotion of continuous counseling and guidance by teachers and collaboration with health workers to conduct health talk shows on reproductive health.

Keywords: Menstrual Hygiene, Adolescent, Soroti Secondary School, Soroti District. Submitted: 2025-02-10 Accepted: 2025-03-28 Published: 2025-04-15 Corresponding Author: Shamim Shukran Namulondo Email: namulondoshamim25@gmail.com Soroti School of Comprehensive Nursing, Soroti-Uganda

BACKGROUND OF THE STUDY

Menstruation is a natural physiological and psychological event in the reproductive well-being of women (Bulto, 2021), and adolescence is a phase of physiological, psychological, and social transformation between childhood and adulthood (Dar et al., 2023). The reproductive system of female adolescents exhibits regular cyclic changes that may purposively be considered as the pregnancy and fertilization preparation period, and the remarkable feature of this cycle is the periodic bleeding from the vagina with shedding of uterine mucosa, which is termed menstruation (Thiyagarajan et al., 2022). Menstrual hygiene is the promotion of hygienic activities during the menstruation period aimed at the prevention of UTIs in women (Balqis et al., 2016). According to WHO and UNICEF, MHM is where women and girls use clean MHM materials to imbibe blood, which can be changed in privacy as and when necessary for the duration of the menstrual period, using soap and water for washing the body as required and having access to facilities to dispose of used menstrual management materials (Sinha & Paul, 2018).

Menstruation is still considered unclean in some societies. The isolation and restrictions imposed on menstruating females in the family not to engage in a variety of activities have augmented a negative attitude towards this period, and despite the challenges related to MHM, professionals in the education sector have abandoned menstrual hygiene (Ahmed Shallo et al., 2020).

Globally, millions around the world are unprepared for

Page | 2 menstruation before having their first period, and only 39% of schools provide health education on menstruation. This escalates to 84% in secondary schools in Southern and Central Asia, for example, providing menstrual education. Less than 31% of schools have bins for menstrual waste in girls' toilets as the majority of adolescent students do not have access to clean toilets or private spaces to change menstrual products, and girls in urban areas, private schools, and girls-only schools are more likely to have access to a private place with water and soap (UNICEF & WHO, 2024).

> Nearly half (49.3%) of young women aged 15 to 24, including school-going adolescents in India, practice hygienic methods to manage menstrual bloodstains, with significant regional and socio-economic disparities (Roy et al., 2021). According to the National Family Health Survey (NFHS-4) conducted in 2015–2016, around 58 % of urban adolescent girls reported using MHM during menstruation, which includes sanitary pads, tampons, and menstrual cups (Mahajan, 2019).

> In Africa, studies showed that 50%-70% of girls missed on average 1.6-2.1 days from school every month due to menstrual-related problems such as shame, pain, and discomfort, among others. According to UNICEF, about 10% of school-age girls did not go to school during menstruation or dropped out at puberty due to a lack of cleanliness and privacy as separate toilet facilities for female students at schools (Method et al., 2024).

> A study conducted in Nigeria revealed that only 37% of females with age 15-49 had whatever they needed for proper MHM such as clean materials and places to dispose of used products of menstruation and rural females were less likely to access safe, clean and private MHM facilities as compared to their counterparts (Nnennava et al., 2021).

> The prevalence of unmet needs for menstrual hygiene management was 53.5% in Kenya (Akoth et al., 2024). In a study conducted from a pastoralist community, findings revealed that the factors that contributed to poor menstrual hygiene management among students were religion, age, lack of sanitary pads, lack of privacy, lack of water, and teasing by the boys (Korir et al., 2018).

> In Uganda, it was estimated that 35% of females aged 15-49 had the necessary needs to manage their menstruation (Borg et al., 2023). A study carried out in the Bukedea district showed that the adequacy of MHM among adolescent secondary school girls was 12.5%, and it was higher among those who had menstruation before the age of 11 years (Bagenda et al., 2023). Thus, this study seeks to assess the factors influencing MHM among adolescent students at Soroti Secondary School in Soroti City.

METHODOLOGY Study design and rationale

In this study, a cross-sectional descriptive research design was used, adopting a quantitative approach to data collection. The study was done in the shortest period of time, which did not allow following up with respondents, and it was less costly and allowed the researcher to meet the objectives by answering the research questions. Descriptive studies enabled a vast quantity of information to be collected from the respondents, as they were able to describe the variables from their point of view.

Quantitative methods were involved as the study involved the application of mathematical and statistical methods to numerical data to understand the meaning and patterns of the data.

Study setting and rationale

The study was conducted at Soroti Secondary School in Soroti City. Soroti City is approximately 123km (53 miles) by road north of Mbale, the largest city in the eastern region. Soroti city is approximately 302km (210 miles), by road, northeast of Kampala, the capital city of Uganda. It is within the Soroti district, and the major languages spoken are Ateso, Kumam, and Kiswahili.

Soroti Secondary School is located in the Eastern division, Soroti municipality, Soroti District, Eastern Uganda. It is a mixed public school with both ordinary and advanced levels.

The study setting was selected because;

It was easily accessible by the researcher, had a wider catchment area, and no similar current study had been carried out in the area.

This study setting was purposely chosen because of the increased number of adolescent girls in the school.

Study Population

The study population was all the adolescent girls at Soroti Secondary School, Soroti City.

Sample size determination

According to Kish and Leslie 1965, a sample size of 30-200 suffices if 20-80% of the attributes are present. Based on this statement, a sample of 30 respondents was used because it was within the range. This sample size was adequate to collect the required data for the study.

Sampling procedure

The Simple Random Sampling (SRS) method was used to select the required respondents. First, the researcher identified the participants, who were adolescent girls at Soroti Secondary School. The researcher then cut 10 equalsized pieces of paper of the same appearance and then purposely labeled 6 of them "YES" and 4 "NO. The pieces of paper were folded uniformly, put in a container, and mixed thoroughly. Then, the researcher invited the participants one by one to pick a paper. Those who picked

"YES" were congratulated and qualified for the study. However, those who picked "NO" were thanked for showing interest and released. This process was repeated for the consecutive 4 days until a sample size of 30 respondents was achieved.

Page | 3 Inclusion criteria

The study included only students who were willing to participate voluntarily in the study, who were adolescents by age, had attained menarche, were of sound mind, and consented to the study.

Exclusion criteria

The study excluded adolescent girls of sound mind who were not willing to consent to participate in the study.

Independent variables

These refer to the variables that can be changed or manipulated by any factors, and in this study, they were; Individual factors influencing menstrual hygiene management among adolescent students.

Socioeconomic factors influencing menstrual hygiene management among adolescent students.

School-related factors influencing menstrual hygiene management among adolescent students.

Dependent variable

This is the presumed effect or outcome variable, and in this study, it was menstrual hygiene management.

Research instruments

A semi-structured, self-administered questionnaire was used for data collection, comprising of close-ended questions. It consisted of the following sections: Demographic data of respondents, B- Socioeconomic factors, C- Individual factors, and School-related factors influencing menstrual hygiene management among adolescent students. The questionnaire was pretested with a small sample from Mbale Secondary School on 5 students with similar characteristics, and errors found were corrected with the help of the supervisor. This was done to eliminate vague, ambiguous questions and to check for the validity and reliability of the data collected.

Data Collection Procedures

A research proposal was presented to the Soroti School of Registered Comprehensive Nursing.

A letter of approval was given to the researcher by the research committee, which was presented to the headmaster of Soroti Secondary School for permission to carry out research in their area.

Journal of World Health Research Vol. 2 No. 4 (2025): April 2025 https://doi.org/10.71020/jwhr.v2i4.31 Original Article

The head teacher introduced the researcher to the students and asked them to collaborate with her. The researcher introduced herself and the purpose of the study to the respondents.

Consent was sought from the participants through an explanation of the topic and its relevance.

Data was collected for 5 days, and after filling the questionnaires by the respondents, the researcher picked them up, checked for completeness, and then thanked the respondents for participating in the study.

Data Management

After data collection, the filled questionnaires were kept in an envelope under strict supervision. Data was tallied into frequencies and converted into percentages then it was entered into the computer ready for analysis. The data folder was then given a name, shared on a personal flash, researcher's mobile phone for a backup. The computer password was put in for data protection to avoid alterations.

Data analysis

The data was processed into meaningful information, and the process involved data entry, assembling, editing, and coding after data collection. Data analysis was done with the help of SPSS version 16, and Microsoft Excel was used to generate tables, pie-charts, and graphs and hence was presented.

Ethical Considerations

The following ethical considerations were put into account to prevent as much harm as possible;

The research committee of Soroti School of Comprehensive Nursing approved the research topic and proposal.

A letter of introduction was given by the school to the researcher, who presented it to the study setting authorities. The study setting was authorized in writing, allowing the researcher to conduct a study in their area.

Maximum confidentiality and privacy of respondents were observed by interviewing them one at a time and separately to increase their willingness to take part in the study and to protect the information recorded.

Respondents were allowed to refuse or accept to participate. No legal implications were imposed.

INFORMED CONSENT

There was full disclosure; full comprehension, and respondents voluntarily consented to participate in the study.

RESULTS

Social-demographic characteristics of respondents

Variables	Responses Frequency (F)		Percentage (%)	
Age (vears)	12-15	8	26.67	
	16-19	19	63.33	
	20-23	3	10	
Place of residence	Rural setting	11	36.67	
	Urban setting	19	63.33	
Whom respondents lived	Parents	20	66.67	
with	Guardians	9	30	
	Hostels	1	3.33	
Marital status of	Married	26	86.67	
residents' parents	Divorced	4	13.33	
Family members	1-4	2	6.67	
	5 and above	28	93.33	

Table 1: Respondents' demographic data (n=30)

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Source: Primary data (2024)

Results from Table 1 showed that the majority of the respondents, 19/30 (63.33%), were in the age range of 16-19 years, 8/30 (26.6%) were between 12-15 years, and the minority, 3/30 (10%), were aged between 20-23 years.

Most of the respondents, 19/30 (63.33%), were from an urban setting, and the minority, 11/30 (36.67%), came from rural settings.

A significant number of respondents, 20/30 (66.65%), lived with their parents, 9/30 (30%) lived with their guardians, and 1/30 (3.33%) lived in hostels.

A large proportion of respondents, 16/30 (86.67%) parents who were married, and the minority, 4/30 (13.33%) parents who were divorced.

The majority of the respondents, 28/30 (93.33%), had 5 or above members in their families, while the minority, 2/30 (6.67%), had between 1-4 members.

Socioeconomic factors that influence menstrual hygiene management among adolescent students at Soroti Secondary School.



Figure 1: Respondents' mothers' highest level of education (n=30)

Source: Primary data (2024)

The results in figure 1 showed that a significant number of respondents (43.33%), their mothers attained primary level education while the minority (3.33%) did not go to school.



Figure 2: Showing the employment status of the respondents' parents (n=30)

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Source: Primary Data (2024)

From Figure 2, findings showed that the majority of the respondents (70%) reported that their parents were self-employed, and the minority (13.33%) said that their parents were unemployed.

Figure 3: Family income range of the respondents (n=30)



Source: Primary Data (2024)

The analysis results from Figure 3 showed that the majority of the respondents (73.33%) reported having come from families with a middle-income range while the minority (6.67%) from families with high-income status.

Table 2: Distribution of respondents according to other socioeconomic factors (n=30).

Variables	Response	Frequency (f)	Percentage (%)
Cultural/religious beliefs	Menstruating girls are impure	22	73.33
that discourage			
respondents from talking about menstruation	Have powers for bad	3	10
	luck		
	Have powers for breaking	5	16.67
	curses		
Provision of menstrual	Always	19	63.33
upkeep from	Sometimes	9	30
parents/guardians	Rarely	1	3.33
	Never	1	3.33
Knowledge about	Mother	22	73.33
menstruation	Teacher	4	13.33
	Friends	3	10
	Relative(others)	1	3.33

Source: Primary Data (2024)

Results from table 2 above showed that; majority of the respondents, 22/30 (73.33%), reported that menstruating girls were impure, and the minority, 3/30 (10%), said that menstruating girls had supernatural powers for bad luck. Most of the respondents 19/30, 63.33%) always received their menstrual upkeep money, and the minority 1/30, 3.33%) rarely and never received any upkeep from their parents or guardians.

More than half of the respondents 22/30, 73.33%) learned about menstruation from their mothers, and 1/30 (3.33%) from their relatives (aunt).

Individual-related factors influencing menstrual hygiene management among adolescent students at Soroti Secondary School





Source: Primary Data (2024)

In Figure 4, results showed that an overwhelming number of the respondents (90%) preferred disposable sanitary pads,

while only 10% preferred using locally made cloth pads.





In Figure 5, results showed that the majority of the respondents (86.67%) had a menstrual period length of 3 to 4 days,

while the minority (3.33%) had a menstrual per	riod length of 2 days
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Table 3: Distribution of respondents a	ccording to br	roadcasting m	edia and confid	ence when
managing	menstrual hyg	giene (n=30)		

Response	Frequency (F)	Percentage (%)
Radios	12	40
Televisions	18	60
Very confident	11	36.67
Neutral	3	10
Confident	7	23.33
Not confident	9	30
	Response Radios Televisions Very confident Neutral Confident Not confident	ResponseFrequency (F)Radios12Televisions18Very confident11Neutral3Confident7Not confident9

Source: Primary Data (2024)

The observed results from Table 3 showed that the majority of the respondents, 18/30 (60%), had televisions in their homes while the minority, 12/30 (40%), had radios.

Most of the respondents 11/30 (36.67%) were very confident about managing menstruation in public places while a few 3/30 (10%) reported to be neutral.

School-related factors influencing menstrual hygiene management among adolescent students at Soroti Secondary School

Figure 6: Distribution of respondents according to school provision of water and soap (n=30)

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Results from Figure 6 show that most of the respondents (93.33%) said that the school provided water and soap for menstrual hygiene management, while the minority (6.67%) said that the school did not provide any water and soap.

Variables	Response	Frequency	Percentage (%)
Disposal facilities in the school	Incinerators	7	23.33
-	Disposal bins	17	56.67
	Pit latrines	6	20
Male teachers' practices	Talk about menstrual	8	26.67
towards menstrual hygiene	hygiene		
	Supporting menstrual	20	66.67
	hygiene needs		
	Do nothing	2	6.67
Access to menstrual care	School administration	15	50
products in school	School canteen	2	6.67
	From home	13	43.33
Privacy towards MHM in	Low	7	23.33
school	Minimal	19	63.33
	High	4	13.33
Mirrors in school toilets and	Yes	0	0
bathrooms	No	30	100
Menstrual hygiene lessons	Yes	25	83.33
	No	5	16.67

Table 4: Distribution o	f responses on	various school	l-related fa	actors (n=30
		various scribb		100013 (11-30

Source: Primary Data (2024)

As illustrated in table 4, results showed that more than a half of the respondents, 17/30 (56.67%), reported that their

school had disposal bins for the disposal of used sanitary materials during menstruation, while a few 6/30 (20%) mentioned pit latrines.

Most of the respondents 20, 66.67%) reported that male teachers supported menstrual hygiene needs, while the minority of the respondents 2/30, 6.67%) said that male

9 teachers did nothing towards menstrual hygiene management.

Half of the respondents, 15/30 (50%), reported that they got menstrual care products from the school administration, while the minority, 2/30 (6.67%), bought them from the school canteen.

More than a half of the respondents 19/30 (63.33%) ranked the privacy in school as minimal while the minority 4/30 (13.33%) ranked it as high.

All of the students reported not having mirrors for menstrual hygiene management in their toilets and bathrooms.

A large proportion of the respondents, 25/30 (83.33%), said that they had menstrual hygiene lessons in school, while a few 5/30, 16.67%) reported not having had them.

DISCUSSION

The study results revealed that the majority of the respondents, 19/30 (26.67%), were between the ages of 16-19 years, and this may have made them have better knowledge of menstruation and the use of sanitary pads out of experience. Similarly, the study conducted by Mohammed and Larsen-Reindorf (2020) showed that older girls had better MHM than younger ones as they had better knowledge of menstrual sanitary products, how to use them, and their storage.

The majority of the respondents, 19/30 (63.33%), resided in an urban setting, while the minority, 11/30 (36.67%), resided in a rural setting. This could be because the school is located in the city, a short distance from the homes of those residing in urban areas. This may have provided them with access to information on menstruation and its hygienic practices. This agrees with the study conducted by Ha and Alam (2022), where girls from urban areas had better MHM practices than rural residents.

More than half of the respondents 20/30, 66.67%) lived with their parents, the majority 16/30, 86.67%) of their parents were married, and the minority of parents 4/30, 13.33%) were divorced. This could be because their parents are typically in the appropriate age brackets when marriage rates are higher, and therefore, they may share responsibilities for the support of menstrual hygiene management.

The highest number of the respondents, 28/30(93.33%), lived with 5 or above people in their families. This could be because they came from middle- and low-income families which tend to produce many children and have relatives

within their homes. This is in contrast to the study carried out by Bhusal (2020), who reported that girls who came from small families of 1-4 members had better menstrual hygiene management practices than those who came from big families of 5 and above members.

A significant number of respondents, 13/30 (43.33%), had the highest level of education of their mothers as primary, and this could be due to the financial constraints of their grandparents to push their mothers to higher levels of education. This is similar to the study conducted by Habtegiorgis et al. (2021), which revealed that maternal completion of primary, secondary, or college was associated with good MHM.

Most of the respondents' parents, 21/30 (70%), were selfemployed, which could be because of the available job opportunities for self-employment and flexibility in personal jobs. This may have given rise to the study results of the majority, 22/30(73.33%) of the respondents' family income range being rated as middle status, which may have made access to menstrual care products easier for adolescent girls. In contrast, the study conducted by Hussein et al. (2022) revealed that girls who came from high-indexed families were seven times higher in association to good menstrual hygiene than their counterparts.

More than half of the respondents, 22/30 (73.33%), reported that menstruating girls are impure, which could be due to their religious and cultural beliefs as taught by religious and cultural leaders and limited MHM knowledge and social support due to negative perceptions. This is in line with a study conducted by Kpodo et al. (2022), who reported that myths and misconceptions of societies toward menstruation discouraged adolescent girls from seeking the needs they required for the management of their periods from their relatives.

The study results also found that most of the respondents 19/30, 63.33%) always received menstrual upkeep money for menstrual care products from their parents/guardians. This could be due to the employment status of their parents, which may have made it easier for them to provide some money for their daughters' menstrual care products. This is similar to a study conducted by Mohammed et al. (2020), where they reported that adolescents who received regular allowances from their parents for menstrual care products, such as absorbent materials, had better MHM practices compared to their counterparts.

Most of the respondents 22/30, 73.33%) learned about menstruation from their mothers, and this could be due to the gender similarity as mothers relate to their daughters' experiences, thereby providing necessary knowledge and empathetic guidance to them. This study is similar to the study conducted by Shumie and Mengie (2020), who reported that girls who had prior information on

menstruation before menarche obtained it primarily from their parents rather than their teachers, and they had better menstrual hygiene management than those who did not have any knowledge.

An overwhelming majority of the respondents, 26/30 (90%), preferred using disposable sanitary pads in

10 managing their menstruation, which could be due to the disposable sanitary pads being easy to use, portable, and eliminating laundry concerns. These findings were in line with a study conducted in Uganda by Miiro et al. (2018), who revealed that some adolescents preferred disposable sanitary pads over locally made clothes for menstrual protection.

A large proportion of the respondents, 26/30 (86.67%), spent between 3-4 days in their menstrual periods. This was because most of the females had an average of 3 to 4 days. This reduced the burden of menstrual care among girls and made it possible to maintain MHM. These findings were not in line with the study conducted by Belayneh and Mekuriaw (2019), who reported that school girls with longer days of menstrual periods had poor menstrual hygiene practices compared to those with shorter days.

Most of the respondents, 18/30 (60%), reported that they had televisions in their homes, and the rest, 12/30 (40%), had radios, and these may have provided them with awareness of menstruation and its hygienic management practices and available products and resources. This is in agreement with the findings of the study conducted by Mohammed and Larsen-Reindorf (2020), who reported that adolescent girls who came from homes with televisions and radio sets had better knowledge of menstruation and its hygienic practices compared to those whose homes did not have any.

A significant number of the respondents, 11/30 (36.67%), felt very confident about managing their menstrual hygiene in public places like school and travel, while 9/30 (30%) did not feel any confidence. It may be because of unreliable access to menstrual care supplies and unclean private facilities. These findings are in agreement with the study done by Birhane et al. (2020), where less menstrual hygiene management was among the school adolescents who had unfavorable attitudes toward MHM.

Almost all of the respondents, 28/30 (93.33%), said that their school provided water and soap for MHM, and this may have enabled the menstruating girls to wash their hands, bodies, and blood stains from their clothes for the prevention of infections and shame. In contrast, the study done by Chinyama et al. (2019) reported that MHM of the girls was affected by insufficient WASH facilities in the schools.

More than half of the respondents, 17/30 (56.67%), mentioned disposal bins for the disposal of used sanitary

pads in their school, while the minority, 6/30 (20%), mentioned pit latrines for the same purpose. This is consistent with the study conducted by Sivakami et al. (2019), which revealed that girls who came from schools supported by UNICEF or NGOs had good disposal facilities for used menstrual care products, which facilitated MHM in schools.

Half of the respondents, 15/30 (50%), reported accessing menstrual care products from the school administration, while the minority, 2/30 (6.67%), said that they bought them from the school canteen, and this may have enabled them to stay clean and safe within school in case of menstrual emergencies. These findings are in disagreement with the study conducted by Mohammed et al. (2020), who reported that poor access to menstrual care products by schoolgirls for managing their menstruation led to poor MHM.

More than half of the respondents, 19/30 (63.33%), rated the privacy towards management of their menstruation within school safety as minimal. A few are so high that they may have made them reluctant and less confident to change their pads frequently. This is in line with the study done by Ahmed Shallo et al. (2020), which revealed that schools whose toilets lacked doors for privacy made the girls uncomfortable with managing their menses safely.

All the respondents reported not having mirrors in their toilets and bathrooms, and this could be because of the failure of the school to realize their significance. These findings are in line with the study conducted by Mohammed and Larsen-Reindorf (2020), who reported that toilet facilities without mirrors for the students to check for bloodstains on their uniforms affected their menstrual hygiene management.

The majority of the respondents, 25/30 (83.33%), said that they received menstrual hygiene lessons in school, which may have improved their knowledge of menstruation and hygienic management. This was in agreement with the study conducted in India by Sivakami et al. (2019), who reported that girls who received education about menstrual hygiene and its management in hygiene lessons and girls-only lessons had an improved awareness of MHM.

CONCLUSION

Regarding socio-demographic findings, 63.33% were aged 16-23 years, 63.33% came from urban settings, and 85.67% said their parents were married.

Some respondents 43.33% reported that their mothers attained only primary education, 70% had self-employed parents,73.33% came from middle-income status families,73.33% believed that menstruating girls are impure, 63.33% always received menstrual upkeep money from their parents, and 73.33% first learned about menstruation from their mothers.

The majority (90%) preferred using disposable sanitary pads, 86.67% had a menstrual flow length of 3-4 days, more than half (60%) had televisions in their homes, and 36.67% felt very confident in managing menstrual hygiene in public places.

On school-related findings, 93.33% said that the school Page | 11 provided water and soap for MHM, 56.67% reported having disposal bins for menstrual care products, 50% accessed menstrual care products from the school administration, 63.33% rated the privacy towards MHM as minimal, and 83.33% received menstrual hygiene lessons, which also positively influenced MHM.

Limitations of the study

Limited information from the respondents since the topic was sensitive; this was overcome by reassuring the respondents and properly explaining to them the purpose of the study. Some of the respondents refused to consent to the study, but this was solved by a thorough explanation of the topic.

Unfavorable weather conditions such as hot sunshine. The researcher put on light clothes, a cap, and sunglasses to protect the eyes and had enough water for drinking to avoid dehydration caused by hot weather.

RECOMMENDATION

The Ministry of Education should develop and integrate menstrual hygiene and its management into the curriculum of the schools at all levels to improve and increase the awareness of all adolescents on MHM.

The Ministry of Health should develop and implement policies for menstrual hygiene, such as menstrual hygiene management guidelines for health care providers, schools, and communities. Additionally, allocate budgets for menstrual hygiene management initiatives in order to improve and promote MHM among adolescent students.

The government of Uganda should collaborate with private sectors such as UNICEF, WASH, and DfG to increase the awareness of MHM, funding for menstrual hygiene practices in schools, provision of hygiene facilities like water sources, clean toilets and bathrooms, incinerators, and provision of sanitary products for the management of menstruation.

Individual schools should improve the accessibility of affordable menstrual care products, such as sanitary pads for menstrual emergencies at school, and encourage open communication between adolescent students and teachers to clear some of the individual-related factors, such as negative attitudes and stigma.

Communities and parents should be sensitized more on MHM and encouraged to provide the primary information about menstruation and its hygienic practices to their daughters. Also, provision of monthly menstrual allowances.

ACKNOWLEDGEMENT

I thank almighty Allah for granting me life, wisdom, knowledge, and courage throughout the study period.

My honor goes to the principal of Soroti School of Comprehensive Nursing, Mr. Itomet Francis, and the entire staff who enabled my stay on campus and for the guidance. I heartedly thank my research supervisor, Mr. Opio Charles, who, despite his busy schedule, created time and sat with me to ensure the completion of this wonderful report.

I further extend my sincere gratitude to the headmaster of Soroti Secondary School, who allowed me to conduct this study in his area, and my respondents, whose genuine information brought the success of this study.

Not thank my beloved roommates, Naluvimba Esther Hope, Mutesi Kumeima Nakku Mary, and Mugoloofa Benard, for the words of wisdom, courage, and support that have made me who I am in this field of study. Finally, those to acknowledge are so many, but overall, I say thank you.

LIST OF ABBREVIATIONS

AWDF: African Women Development Fund DfG: Days for Girls MHM: Menstrual hygiene management **MOES:** Ministry of Education and Sports NFHS: National Family Health Survey NGOs: Non-Government Organizations **PMA:** Performance Monitoring for Action **RTI:** Reproductive tract infections **SDGs:** Sustainable Development Goals **SPSS:** Statistical Package for The Social Sciences **UNICEF:** The United Nations Children's Fund UNMEB: Uganda Nurses and Midwives Examination Board **WASH:** Water, sanitation, and hygiene WHO: World Health Organization

SOURCE OF FUNDING

The study was not funded.

CONFLICT OF INTEREST

The author declares no conflict of interest

AUTHOR CONTRIBUTIONS

SSN- Study developer, data collector, and analyzer. **CO-**Research Supervisor

DATA AVAILABILITY

Data is available upon request.

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PUBLISHER DETAILS:

