

Evaluation of Menstrual Hygiene Management among Girls at Karamurani Catholic Primary School, Mwizi Sub County, Mbarara District

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ABSTRACT

Menstrual Hygiene Management is an issue interested in Gender Equality and Development sector. Globally, particularly in developing countries, girls reach menarche, rules are applied on how they should conduct themselves. Lack of appropriate products and facilities have been previously cited as potentially contributing to school girls' absenteeism. The project was carried out in three upper classes of KCPS among girls aged 10-15 years. A cross-sectional descriptive method with quantitative questionnaire was employed. Quantitative data was analyzed using SPSS version 20 software package. In total 90 respondents participated aged 10-15 years, (60%) were Catholics. Majority 93.3% of girls said that menstruation is a physiological process. However, 3.3% said that menstruation is a pathological process. The highest percentage of girls (70%) reported normally use pieces of cloth during menstruation. Seventy percent (70%) of the girls missed some days of school because of menstruation, (86.6%) of girls missed due to lack of money. Furthermore, this study showed that some girls need knowledge on menstruation as a normal physiological process not a pathological process or curse from God. Schooling should be comfortable and positive experience, in an environment favorable to learning. Such things are made difficult for girls with old cloths, causing discomfort, worry and risks associated with poor hygiene. This affects their attendance, concentration, self-esteem and ability to carry usually. Menstruation is a natural part of a woman's life and girls should not have to suffer in any way because of it.

Keywords: Menstruation, School, Girls, Hygiene, menarche.

INTRODUCTION

Menstrual Hygiene Management (MHM) is the absorption of menstrual blood onto clean material which can be changed in privacy. It also incorporates the availability of soap and clean water, to wash re-usable sanitary materials and the body, as well as a suitable place of disposal for used materials World Health Organization-United Nations International Children's Emergency Fund [1]. Menstruation also known as period is a monthly regular discharge of blood and mucosal tissue from the inner lining of the uterus through the vagina following failure of fertilization to take place [2]. Menarche is an important milestone in a girl's transition to womanhood. However, menstruation can place significant

obstacles in the way of girls' access to health, education and future prospects, if they are not equipped for effective MHM. Good MHM requires access to necessary resources (e.g., menstrual materials to absorb or collect menstrual blood, soap and water), facilities (e.g., private place to wash, change and dry re-usable menstrual materials, in addition to an adequate disposal system for menstrual materials), and education about MHM [1]. Worldwide, School dropout for girls in low-income settings increases when they reach puberty [3]. Previously overlooked menstrual-related concerns are increasingly recognized as factors that contribute to this [4].

In sub-Saharan Africa, menstruation is considered taboo and consequently, is not

discussed often [5]. During the Focus Group Discussion (FGD), which was undertaken in the course of the study, the women were quiet for a while before one of them broke the silence by saying that, "every woman in the village knows that she has to wash her private parts with soap and water daily to avoid bad odor, especially during the time of her flows (menses)" [6]. In general, however women were not very keen to discuss issues such as menstruation and female body organs, which they regarded as social taboos and hence shameful to be mentioned in public [6].

In Uganda, MHM amongst girls in rural primary schools is an under-examined area of research. Girls in this setting are unlikely to have access to what they need to manage their menstrual flow

And are thus more at risk of absenteeism from school [7]. Girls have a human right to education and educating girls is a wise investment for development, producing 'high and long-lasting returns' for families, societies and subsequent generations [8]. In the study area, Karamurani Catholic Primary School highlighted this problem for example as noted by the reports from most primary schools in the study area that, MHM affects school attendance of girl children.

Statement of the problem

Until recently, MHM has been overlooked in Water, sanitation and hygiene (WASH) development programs in East Africa [9] and the effects of MHM on schoolgirls remain a relatively unexamined topic [10]. The reason why MHM has previously been neglected may be due to the culture of silence on the subject [11] where menstruation is seen as a 'secret' [9]. It may also be due to the fact that men are often still the key decision makers in developing countries and due to the lack of knowledge on the issue hence MHM may not be considered in policy making [12]. Researchers recommend that studies are carried out to understand the link between inadequate MHM and absenteeism from school so that policymakers in countries are aware of the barriers schoolgirls face because of menstruation [13]. Research into the

impact of unmet menstrual needs on girls' education remains scarce in the study area. The dearth of studies about MHM and the impact of unmet menstrual needs are particularly striking given the relevance of the topic to numerous fields, such as water, sanitation and hygiene (WASH) humanitarian relief, and human rights. No study had yet examined MHM amongst primary schoolgirls in Karamurani Catholic Primary School where girls are most vulnerable to bad MHM practices hence the need for this study.

Aim of the study

This study aims to assess knowledge, practices and challenges on Menstrual Hygiene Management among girls aged 10-15 years in KCPS, Mwizi Sub County in Mbarara District.

Specific objectives

- i. To determine knowledge on menstruation among girls aged 10-15 years in KCPS, Mwizi sub county in Mbarara district.
- ii. To identify the practices on menstrual hygiene management among girls aged 10-15 years in KCPS, Mwizi sub county in Mbarara district.
- iii. To find out challenges faced by girls during menstrual hygiene management among girls aged 10-15 years in KCPS, Mwizi sub county in Mbarara district.

Research questions

- i. What is the level of knowledge about Menstrual Hygiene Management among girls aged 10-15 years in KCPS, Mwizi Sub County in Mbarara district?
- ii. What are the practices of primary school girls aged 10-15 years towards MHM in KCPS, Mwizi Sub County in Mbarara district?
- iii. What are the challenges faced by primary school girls aged 10-15 years towards MHM in KCPS, Mwizi Sub County in Mbarara district?

Justification Of the study Nursing practice

It will be important to policy makers and stake holders in organizing trainings

aimed at imparting knowledge to the girls about menstruation. Emphasis on MHM is necessary to establish confidence of the girls in primary schools.

Nursing educators

The findings of this study will help in creating awareness among health staffs, teachers, health tutors and parents to advocate for good MHM.

METHODOLOGY

Study Design and rationale

A descriptive cross sectional study design was used involving quantitative methods of data collection. A cross-sectional study is the one that is carried out at a point in a time or over a short period of time. It is a good design when the purpose of the study is descriptive and helps to find the prevalence of the outcome of interest for a group in a population. It was chosen because of its simplicity and nature of the study which is descriptive and numerical data is required.

Area of Study

The study was conducted at Karamurani Catholic Primary School, Mwizi Sub County in Mbarara district. Geographically, KCPS is found in Ngoma Parish, near Karamurani Trading centre in Mwizi Sub County, Mbarara district in South Western Uganda. Mwizi Sub County is located approximately 27 Kilometers by road from Ruti-matooke market alongside Mbarara-Kabale road. Majority of Pupils came from Mwizi Sub County, Some from neighboring Sub Counties of Bugamba and Nyakayojo. There were fourteen government aided Primary Schools and two private owned primary schools. This study area was chosen because girls in this school are unlikely to have access to what they need to manage their menstrual flow and are thus more at risk of absenteeism from school.

Study Population

The study was conducted on knowledge, practices and challenges on MHM among girls aged 10-15 years in upper classes (Primary five-seven) at KCPS located in Mwizi Sub County, Mbarara district.

Sample size determination

The sample size was determined by using [14] formula.

Nursing researchers

The study findings will be used as reference for future researchers who will be interested in carrying out research on the same topic. This research will also be essential for continuous improvement of MHM in schools.

Equation1: Kish Leslie Formula;

$$n = \left(\frac{Z^2 p q}{d^2} \right)$$

Where, n= desired sample size

z= the standard normal deviation, usually set at 1.96 which correspond to 95% confidence level.

p= the proportion of target population estimated to have a particular characteristic, estimated as 50% =0.5

q= proportion of the population without desired characteristics, 1-p.

d= the measure of anticipated error as a proportion of standard deviation 5% which is 0.05 as constant.

Taking; z = 1.96, p=0.5, q=1-p, q=0.5 and d =0.05

Therefore, from the above formula,

$$n = \left(\frac{1.96^2 * 0.5 * 0.5}{0.05^2} \right)$$

$$n = 384$$

Since the sample population was less than 10,000.

N= Total number of girls (10-15) at that time of survey =117

Equation2: Target population of < 10,000

$$nf = \left(\frac{n}{1 + \frac{n}{N}} \right); \quad nf = \left(\frac{384}{1 + \frac{384}{117}} \right);$$

$$nf = 90 \text{ respondents}$$

Where *nf* sample size for N, population less than 10,000

The study however considered the value of 90 respondents.

Sampling procedure

This is a process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they are selected. A sample is a smaller collection of units from a population used to determine truths about that population. In this study, simple random sampling method was

used to select participants from the study population, where by 90 participants were chosen at random from total 118 girls in Primary five to seven that were obtained from class registers. To reduce bias, the number of girls who were present at the time of data collection were elicited, equal number of papers assigned “yes” and “no” were folded, then mixed in a box and each girl was given chance to pick one, those who randomly pick “yes” were given questionnaires to fill. A girl who selected “no” was not an eligible participant and the sample size was not realized, this was repeated by another round of randomly picking folded papers assigned “yes” or “no” by those who were not selected in the first round until a sample size of 90 girls were reached. This method was preferred because it is easily understood, time saving, economical and it involves a selection process in which each member in the population had an equal independent chance of being selected.

Inclusion criteria

- i. Primary Schoolgirls aged 10-15 years, who had started experiencing menses, who were in class five, six and seven and were present on the days of data collection.
- ii. Respondents who had voluntarily consented.

Exclusion criteria

- i. Those who had not attained menarche and were not in the age bracket of (10-15 years).
- ii. Those who did not consent for the study.

Definition of variables

Knowledge, practices and Challenges on MHM were composed of independent and the dependent factors or variables.

Dependent variables

Menstrual hygiene management among girls aged 10-15 years in Karamurani Catholic Primary School.

Independent variables

Knowledge, practices and challenges in menstrual hygiene management.

Research instruments

A semi-structured questionnaire with leading questions was used to generate information from the respondents. Data was collected through administered questionnaires.

Pre-testing of the research Instrument

Questionnaire was pre-tested in one of the Primary Schools that was not chosen for the study three days before data collection for validity and reliability. Any observed inconsistencies of the questions were corrected to meet the intended objectives before time of data collection.

Data collection procedures

A pre-test was carried out in one of the Primary schools that was not chosen for the study.

This facilitated clear testing on the reliability and validity of the research instrument in relation to the appropriateness of the questions. The collected data was checked by the supervisor for any incompleteness and inconsistency. This helped to make clear adjustments where necessary before the primary data collection. Every participant in the study had consented and each acquired a questionnaire. Privacy and confidentiality were maintained throughout the process of data collection. Responses were recorded in the questionnaires.

Data management and quality control

Data obtained was kept in safe custody and treated with respect and confidentiality. Coding and sorting at the end of data collection process was done to ensure adequacy, completeness and correctness of information collected.

Data processing and analysis

Data entry and analysis were performed using SPSS version 20 software package. To explain the study population in relation to relevant variables, frequencies, percentages and summary statistics was used. Associations between dependent and independent variables were assessed and presented using tables, graphs, and pie charts.

Ethical considerations

The Primary School where the study was conducted was presented with an

introductory letter from Kampala International University School of Nursing Sciences seeking approval to undertake the study. Voluntary participation in the study was ensured by explaining its indirect and direct benefits to the Pupils before obtaining written consent. The respondents were asked to consent before

participating in the study. The study was conducted in a manner that enabled every Pupil to respond freely and openly in the absence of any other adult person apart from for confidentiality. Names of the respondents were not included in the questionnaires to ensure confidentiality.

RESULTS

Social - demographic information

Table 1; shows social demographic information. n=90

Variables		Frequency (n)	Percentage (%)
Age (years)	10-11 years	3	3.3%
	12-13 years	12	13.3%
	14-15 years	75	83.3%
Total		90	100%
Tribes	Banyankole	51	57%
	Bakiga	39	43%
	Baganda	0	0%
	Others	0	0%
Total		90	100%
Menarche age	9-10 years	0	0%
	11-12 years	21	23%
	13-15 years	69	77%
Total		90	100%
Education level	Primary five	30	33.3%
	Primary six	30	33.3%
	Primary seven	30	33.3%
Total		90	100%
Religion	Catholics	54	60%
	Protestants	29	32%
	Muslims	0	0%
	Others	7	8%
Total		90	100%

Majority (83.3%) of the girls were aged 14-15 years, followed by age group of 12-13 years (13.3%) and the least (3.3%) were in age group of 10-11 years.

The study revealed that majority of the participants were Banyankole with (56.6%) followed by Bakiga with (43.3%). Findings further revealed that majority (76.6%) of girls attained menarche at 13-15 years,

(23%) at 11-12 years and no one was in age group of 9-10 years.

The study showed that participant from three classes (Primary five, Primary six and Primary seven) were equal each class with (33.3%). Majority of the respondents were Catholics (60%), followed by Protestants (32%) and the rest (8%) and belonged to other Denominations like Pentecostals.

KNOWLEDGE ABOUT MENSTRUATION
Table 2: If girls had started menarche. n =90

Response	Frequency (n)	Percentage (%)
Yes	90	100%
No	0	0%
Total	90	100%

Question (6) of part 2 asked if the girls had started menarche. It was found out

that of all girls who participated (100%) had started periods.

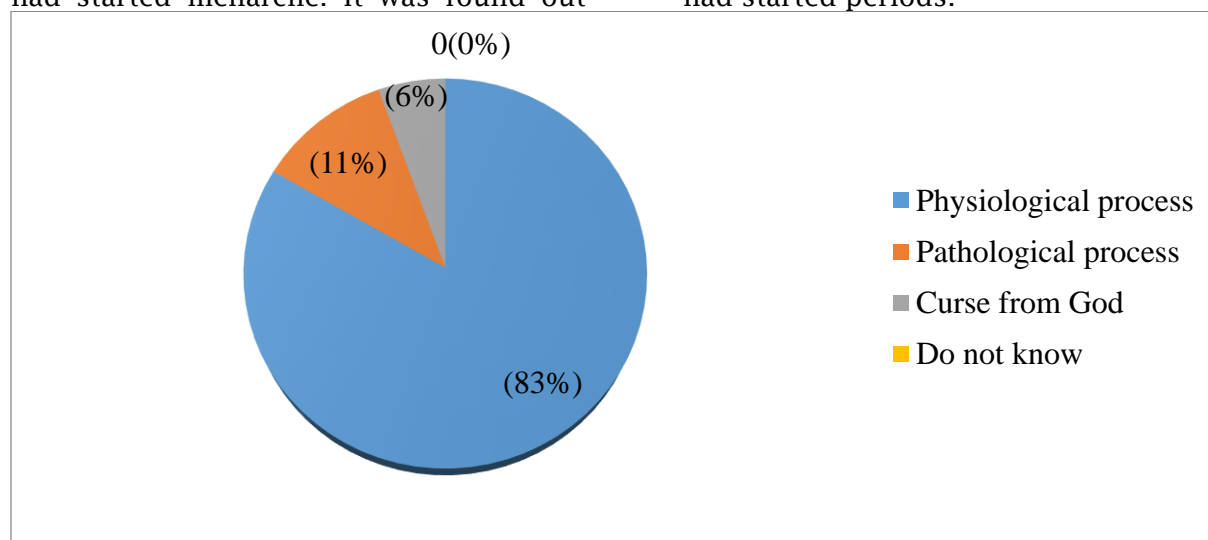


Figure 1: shows participants' knowledge about the meaning of menstruation. n=90

According to the data obtained from participants, figure 1 above shows that majority (83%) of the participants knew that menstruation was a physiological process, followed by (11%) of the

participants who believed that menstruation was a pathological process and the least (6%) believed that it's a curse from God.

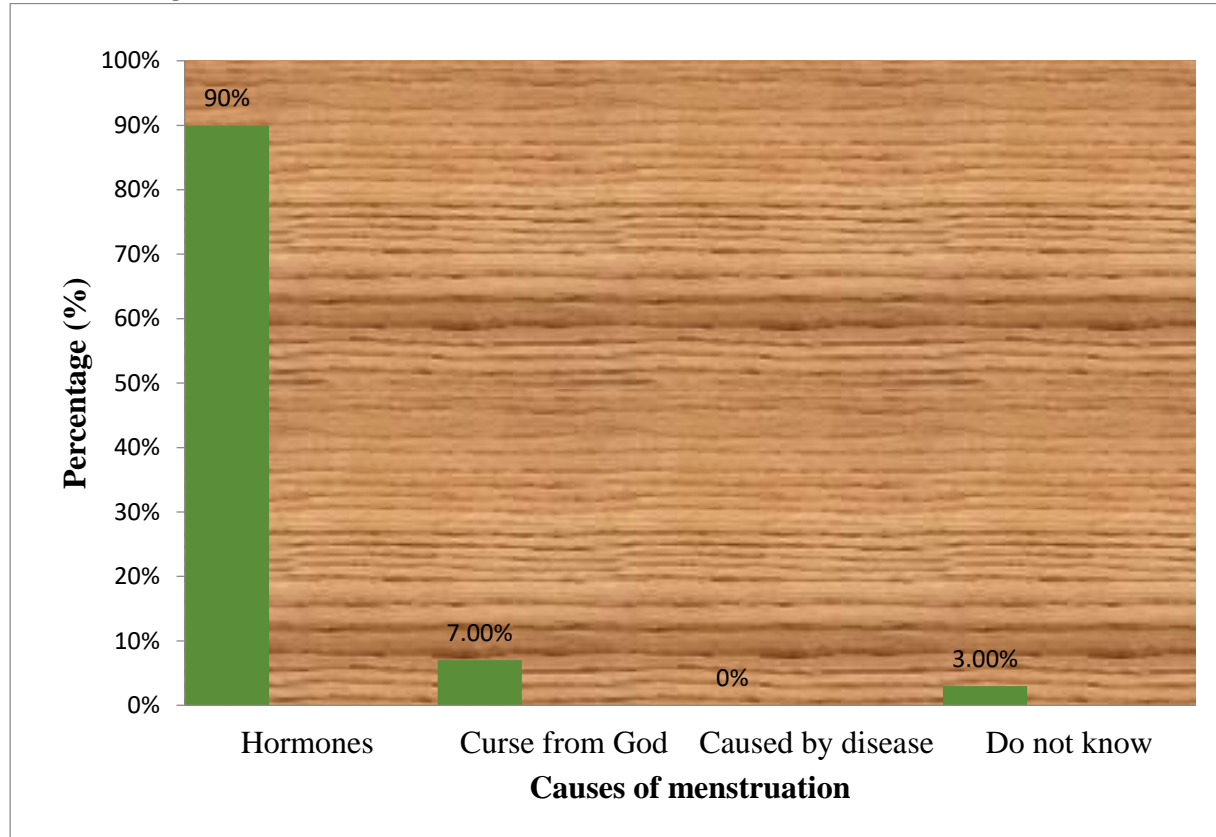


Figure 2: shows the respondents' beliefs about the cause of menstruation. n =90

Majority (90 %) of the respondents revealed that the cause of menstruation is hormones, (7%) believed that the cause of

menstruation is a curse from God and the least (3%) did not know the cause of menstruation.

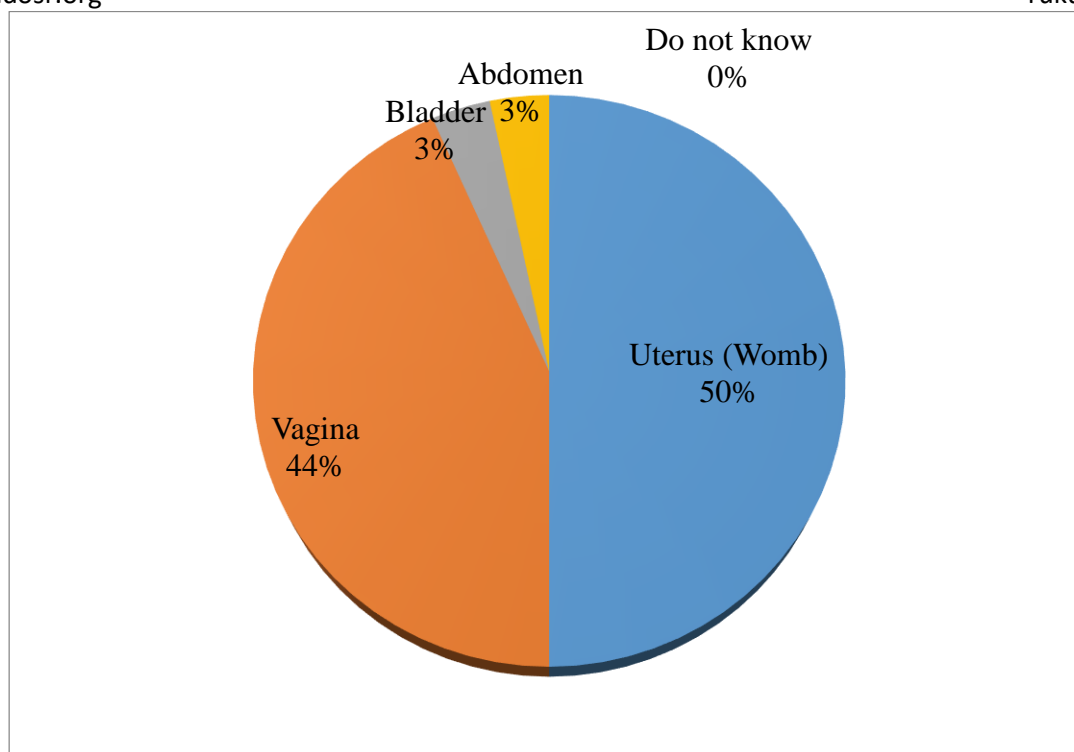


Figure 3: Shows source of menstrual blood. n =90

Half (50%) of the respondents knew that the origin of the menstrual blood is from the uterus (womb), followed by vagina (44%), bladder (3%) and abdomen also (3%).

Table 3: Shows participants' responses to the questions about menstruation. n=90

Questions	Yes		No	
	Frequency(n)	Percentage (%)	Frequency(n)	Percentage (%)
Had you ever heard about menstruation before attaining menarche?	84	93.3%	6	6.6%
Had you known about menstrual hygiene before?	87	96.6%	3	3.3%
Is there any foul (bad) smell during menstruation?	75	83.3%	15	16.6%
Is the menstrual blood is unhygienic?	66	73.3%	24	26.6%
Do old women do menstruate?	21	23.3%	69	76.6%
Is menstruation a disease?	42	46.6%	48	53.3%
Do pregnant women menstruate?	27	30%	63	70%

Majority (93.3 %) of girls has heard about menstruation before attaining menarche and (6.6%) had not heard about it. Ninety-six-point six percent (96.6%) of girls knew about menstrual hygiene and (3.3%) had

not heard about menstrual hygiene. Eighty-three-point three percent (83.3%) reported that there is a foul (bad) smell during menstruation and (16.6%) reported that there is no foul (bad) smell during

menstruation. More than half 73.3% of the girls incorrectly answered that menstrual blood contained harmful substances, (23.3%) believed that old women do not menstruate and majority (76.6%) thought

that old women do menstruate. Forty-six-point six percent (46.6%) reported menstruation is a disease and (30%) of the participants thought that pregnant women menstruate.

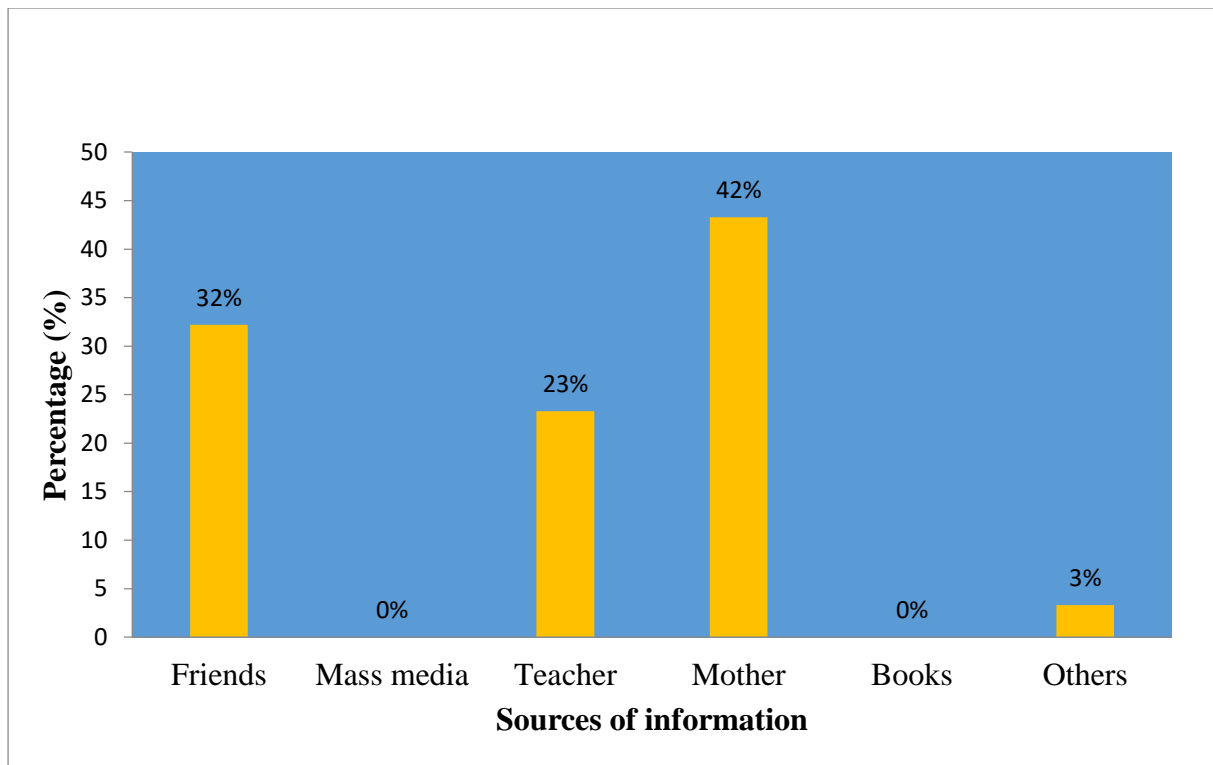


Figure 4: Represents respondents' source of information about menstruation. n=90

The results of the study revealed that majority 42% of the respondents got information about menstruation from

their mothers, followed by friends 32%, teachers 23% and 3% got information from other sources e.g. Sisters.

HYGIENIC PRACTICES DURING MENSTRUATION.

Table 4: shows respondents' hygienic practices during menstruation. n =90

Parameters of practices	Yes Number (%)	No Number (%)
Uses absorbent materials during menstruation	57 (63.3%)	33 (36.6%)
Uses commercially made sanitary pad as absorbent material during menstruation	39 (43.3%)	51 (56.6%)
Cleans cloths with soap and water	84 (93.3%)	6 (6.6%)
Dry cloths in sunlight	84 (93.3%)	6 (6.6%)
Changing pads or cloths more than three times and above during menstruation	60 (66.6%)	30 (33.3%)
Disposes used sanitary Pads in dustbin	21 (23.3%)	69 (76.7%)
Uses paper to dispose the pads by wrapping	54 (60%)	36 (40%)
Takes bath daily with soap during menstruation	90 (100%)	0 (0%)
Cleans external genitalia during menstruation	87 (96.6%)	3 (3.3%)
Cleans external genitalia with soap and water during menstruation	81 (90%)	6 (10%)

Majority (63.3%) of girls were using absorbent materials during menstruation and almost half (43.3%) of girls were using commercial made sanitary pads as absorbent material during menstruation. Ninety-three-point three percent (93.3 %) of the respondents were washing clothes with soap and water. Ninety-three-point three percent (93.3%) of the respondents dried their washed clothes in sunlight. Two-thirds (66.6%) of girls change their pads or clothes three and More times per

day. Majority (76.7%) of the respondents were not disposing their sanitary pads in dustbin while (23.3 %) of the respondents were disposing their used sanitary pads in dustbin. More than half 54 (60 %) of girls use paper to dispose the pads by wrapping. One hundred percent (100 %) of respondents were taking bath daily with soap during menstruation. The biggest proportions (96.6%) of the girls clean their external genitalia during menstruation and (90%) clean with soap and water.

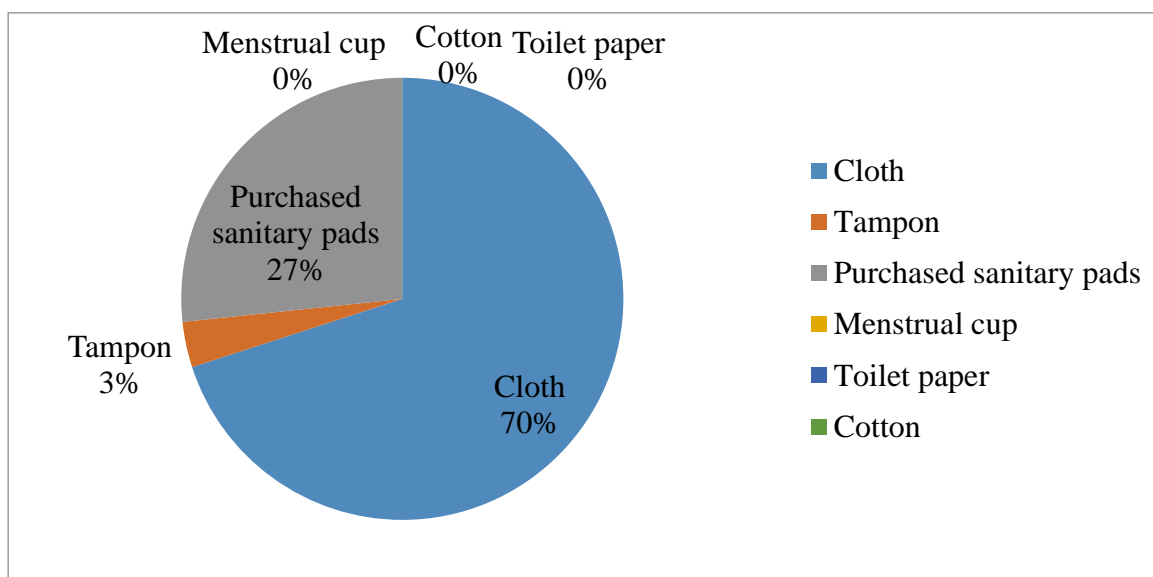


Figure 5: Illustrates Products normally used by respondents during menstruation n =90
 The figure above illustrated what girls reported as products they normally use during menstruation. The most common product normally used was cloth (70%), followed by the use of purchased sanitary pads (27%) and (3%) reported the use of tampon.

CHALLENGES FACED BY SCHOOL GIRLS DURING MENSTRUATION.

Table 5: Summary of girls’ responses on the availability of sanitary pads and money, n =90

	True n (%)	False n (%)	Don’t know N (%)
Have you bought disposable sanitary pads from the shop in the last 6 months?	39 (43.3%)	51 (56.6%)	0 (0%)
Have you ever wanted to buy disposable sanitary pads from a shop but been unable to?	78 (86.6%)	12 (13.3%)	0 (0%)
I do not have enough money to buy disposable sanitary pads from a shop	75 (83.3%)	15 (16.6%)	0 (0%)
There are no disposable sanitary pads in the shop	24 (26.6%)	60 (66.6%)	6 (6.6%)

Just (56.6%) of girls had bought disposable sanitary pads in the last 6 months but the majority of participants (86.6%) had been unable to buy disposable sanitary pads in the past.

Eighty-three-point three percent (83.3%) of girls reported that this was due to a lack of money and (26.6%) reported that this was due to a lack of availability of disposable sanitary pads in shops.

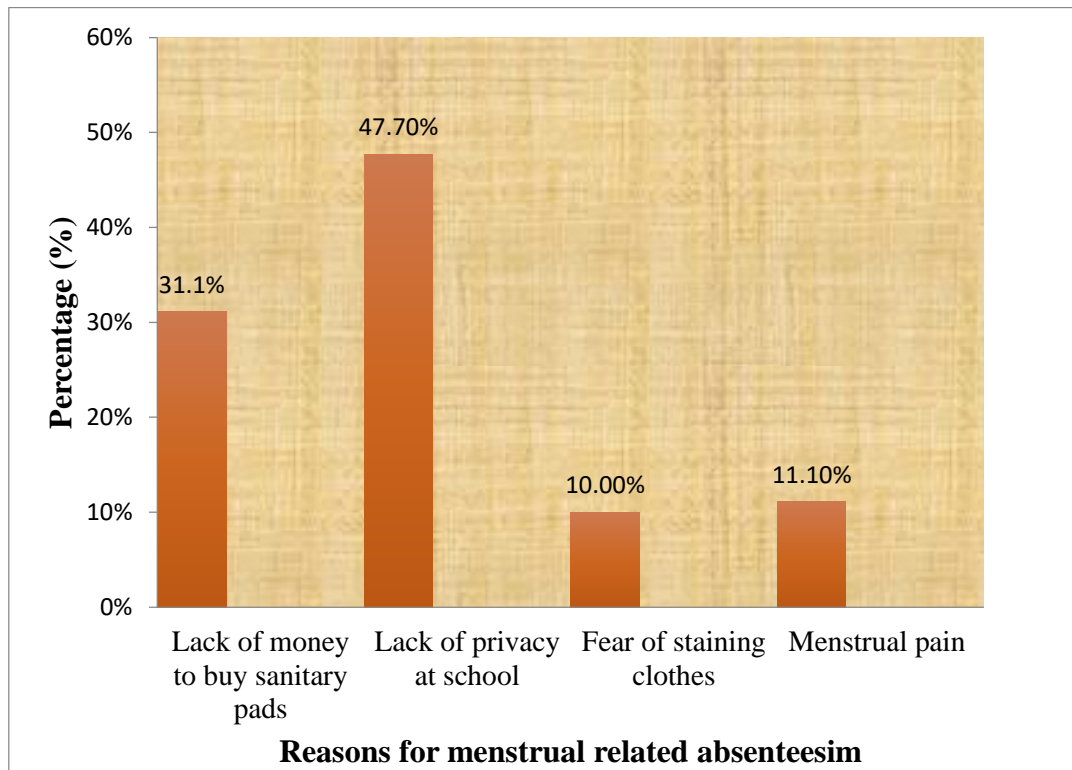


Figure 6: Shows reasons for missing days of school during menstruation. n=90

Almost half (47.7%) of the girls reported normally missed some days of school during menstruation due to lack of privacy to wash and change at school,

followed by lack of money to buy sanitary pads (31.1%), Menstrual pain (11.1%) and fear of staining clothes (10%).

DISCUSSION

Social demographic information

Results showed that 90 respondents participated in the study which was within the same range with a number of studies. Majority of the respondents (57%) were Banyankole and Bakiga constituted 43%. Banyankole are the natives of the study area. It is important to note that different tribes have different cultural beliefs regarding menstruation. Majority of the respondents were of age 14-15 years (83.3%) this was because it was the average age group for pupils in P.5 to P.7 and the least were ranging from 10-11 years (3.3%). In this study, majority (76.6%) of Participants attained menarche

at the age of (13-15 years), this could be because it was the average age group for girls to start menses and the rest (23.3%) were in age group (11-12 years). All of the three classes had equal number (33.3%) of respondents. The level of education affects one's reasoning and judgment skills as well as the ability to use hygienic menstrual practices and level of knowledge about menstruation. Results showed that Catholics were the majority (60%), Protestants were (32%), 8% were from other religions and Muslims had no representative. This was because the school was a Catholic based.

Knowledge of primary school girls about menstruation

In this study, majority of the respondents had good knowledge about menstruation and its hygiene. The majority (83%) of girl knew that menstruation is a physiological process, this could be due to communication between mothers and their daughters in families about menstruation and menstrual hygiene issues and was similar to only one recent study of women and girls in Eastern Nigeria which indicated an adequate level of knowledge of menstruation and menstrual hygiene, though the community still lacked confidence to discuss the issue openly [6]. Ten (11 %) of them believed that menstruation was a pathological process and others (6%) of the girls believed that menstruation was a curse from God. The fact that a large number 90% of girls in this study indicated that menstruation is caused by hormones, this could be due to knowledge acquired from teachers in class especially senior woman teacher, 6.6% believed that menstruation was caused by curse from God and 3.3% did not know the cause of menstruation. However, no studies in sub-Saharan Africa are available to compare with results of this study.

Half (50%) of the respondents reported that the origin of menstrual blood is from the uterus (womb), this could be due to discussions between girls and senior woman teacher about menstruation and knowledge acquired in class and the least 3.3% believed that it comes from the abdomen. This was due to their non-attendance to menstruation discussions. Majority (93.3 %) of girls had heard about menstruation before attaining menarche. This could be due to communication between mothers and their daughters in families about menstruation. Similarly, a study conducted in Ethiopia showed most (92 %) students were aware of menstruation before menarche. Contrary to the findings of this study, a Kenyan study revealed that some girls receive little or no guidance either before or after menarche [15].

Ninety-six-point six percent (96.6%) of girls knew about menstrual hygiene, this was due to communication between mothers and their daughters and senior woman teacher and (3.3%) had not heard about menstrual hygiene, this could be because of their non-attendance to menstrual hygiene discussions from school teachers and their mothers or sisters. Eighty-three-point three percent (83.3%) reported that there is a foul (bad) smell during menstruation and (16.6%) reported that there is no foul (bad) smell during menstruation. More than half 73.3% of the girls incorrectly answered that menstrual blood contained harmful substances. This could be due to misinterpretation of information, as menstrual blood if left unchanged or unwashed on pads can cause infection.

The fact that almost half 46.6% of the respondents in this study thought that menstruation is a disease, this could be due to menstrual related pain and discomfort. This was supported by other studies in Tanzania where girls also reported this belief [16]. Almost half 42% of the respondents received information about menstruation from their mothers. This was because mothers spend most of the time with their daughters at home. This agrees to a Ugandan study conducted by [17] which demonstrated that the majority of girls from rural areas receive information from their mothers, followed by friends (32%), teachers (23%) and other sources e.g. sisters (3%) were the main sources of menstrual information in this study.

Practices during menstrual hygiene management

In this study, majority of the respondents had good practice of menstrual hygiene. Sixty-three-point three percent (63.3%) of girls were using absorbent material during menstruation. Out of 63.3%, (43.3%) of girls were using commercial made sanitary pads as absorbent material during menstruation. The findings of this study was higher than studies conducted in Tanzania and Ethiopia which were 18% and 37.6% [18] [19] respectively Thus, the reason for the observed difference could be due to low awareness and

communication of menstrual hygiene by Tanzanian and Ethiopian girls which affects their menstrual hygienic practice. More girls 70% in this study used traditional materials, like cloth, rather than sanitary pads, this could be due to lack of money to buy commercial made sanitary pads. This was supported by results from studies conducted in Tanzania, Nigeria and Ethiopia which were 82%, 56% and 62.4% by [18][20][21] respectively. In this study, majority (66.6%) of girls reported changing pads or cloths more than three times and above during menstruation, this could be because of prior information about menstrual hygiene given to girls by their mothers at home and teachers at school. This draws a comparison to a study conducted by [22] in Ethiopia which shows that eleven percent (11%) of girls change their menstrual cloths once a day. In this study some girls (23.3%) disposed used sanitary pads in dustbin. This was thought to be related to lack of proper places to dispose their used menstrual padding products. Contrary to a Ugandan study which highlighted that sanitary pads are disposed in the latrines or toilets in most schools [17].

Challenges faced by school girls during menstruation

In this study, almost half (47.7%) of girls reported normally missing some days of school per month due to lack of privacy to wash and change at school during menstruation. This was supported by the senior woman teacher from the study area who stated that girls missed days of school during their period and it was also supported by the study conducted in Uganda which revealed that girls in rural primary schools are unlikely to have access to what they need to manage their menstrual flow and are thus more at risk of absenteeism from school [7]. However, in this study, there were other factors contributing to girls' absenteeism from school during their periods whereby lack of money to buy sanitary pads was ranked (31.1%) followed by menstrual pain (11.1%) and fear of staining clothes (10%). This draws comparison to an Ethiopian study which suggested that many other

factors play a larger role in keeping girls out of school [23]. Girls in this study found it difficult to use disposable pads partly because of finance and access to relevant shops. Less than half (43.3%) of the girls in this study were able to buy sanitary pads in the last six months. This was supported by a study conducted by [24] in Ghana which highlighted that girls in urban settings typically use sanitary pads because they are more readily available and families can more frequently afford them. However, in rural and pre-urban areas, the adults stated that their daughters wear cloth or toilet paper because they cannot afford sanitary pads. Each female family member often has one or two pieces of cloth. They usually wear one while the other one is cleaned and dried. In some cases, female family members have to share cloths. Some families communicate that even toilet paper is expensive because it is disposable and has to be purchased every menstrual cycle [24].

In this study more girls (83.3%) reported being unable to buy sanitary pads because of lack of money but less (26.6%) of the girls reported the inability to buy pads due to the lack of availability in shops. This could be due to the extremely rural location of many of the villages around the study area. Most schools and therefore village shops lacked accessibility because of poor road conditions and demand. This finding however agrees with the study findings of [4] which stated the cost of pads was also seen as a significant issue for girls in multiple studies from different countries in sub-Saharan Africa which value a pack of 10 sanitary pads between \$1 and \$2, depending on the brand and location. Most girls use three sanitary pads a day, with average menstrual periods lasting between three and five days. However, there wasn't quantitative data from the study to compare results. According to the results, disposable sanitary pads were clearly the preferred method for managing menstruation but lack of money and availability in shops has left girls in KCPS unable to buy them. Comparatively, many studies specify that the preferred

feminine hygiene product among school girls is sanitary pads. The school girls expand on the advantages of sanitary pads and describe the challenges with

reusable cloths. Nigerian girls claim that using sanitary pads is a satisfactory experience, helpful for hygiene purposes, and boosts their self-confidence [25].

CONCLUSION

Basing on the results of the study, the following conclusions were made as per objective of the study.

Overall, all respondents who participated in the study had attained menarche. Majority of them had an average good knowledge about menstruation and menstrual hygiene. Furthermore, more than half of the participants knew that menstruation is a physiological process, more than three-quarters reported that the cause of menstruation is hormones, half of the respondents knew that the uterus is the source of menstrual blood and other questions were fairly answered. This was due to communication between mothers and their daughters in families about menstruation and menstrual hygiene issues and knowledge acquired from teachers in class especially senior woman teacher. However, the findings also showed that the knowledge and practice of menstrual hygiene is low. Awareness regarding the need for information about good menstrual practices is very important. Menstrual hygiene practices have been investigated among girls in KCPS. The findings of the study indicated an average level of practice among girls during menstruation.

Factors such as financial constraints and inaccessibility of already made sanitary pads were known to have effect among respondents of this study. The results revealed that majority of the respondents use clothes as their padding product during menstruation. The study had shown that menstruating girls face many challenges. Managing their menstruation and maintaining a good standard of menstrual hygiene was difficult for the respondents because of the factors established in this study, such as inadequate knowledge, lack of money to buy sanitary pads, lack of privacy at school, fear of staining clothes and menstrual pain. This study showed that majority of the participants miss some days of school during menstruation due to the above-mentioned factors. This study showed that majority of the participants miss some days of school during menstruation due to the above-mentioned factor. The latter factors were not planned to be explored right from the beginning, not the least because of its crosscutting nature. Menstruation is a natural part of a woman's life and girls should not have to suffer in any way because of it.

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