



The Demographical Survey Study of Nature of Menstrual Hygiene Among Adolescents' Girls in St. Theresa's Upper Basic School, Kanifing, The Gambia

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Abstract

Menstrual hygiene is an important issues that every girl and woman has to deal with in life. Although menstruation is a normal physiological process, it is still surrounded with social taboos, supernatural beliefs, misconceptions and malpractices which are very challenging for every girl. Adolescent school girls in low-income and middle-income lack appropriate facilities and support in school to manage menstruation. Therefore, the objective of this study is to assess the Demographical Survey study of Nature of Menstrual Hygiene among Adolescents' Girls in St. Theresa's Upper Basic School, Kanifing, The Gambia.

Method: A cross-sectional quantitative study involving 140 adolescent girls who were sampled randomly from grade (8) class using a self-administered questionnaire as a data collection tools. The data was analyzed using descriptive and the result was presented in frequency tables and percentages. The analysis of the data was done using SPSS version 20. The approval to conduct the research project was given by The St Theresa's Upper Basic School Principal.

Results: Mothers were found to be the main source of information on menstrual hygiene. 92% (n = 129) of the respondents lack knowledge on the organs from which menstrual blood comes from. 63.6% (n = 89) had traditional believe that influences their menstrual practices and 20% (n = 28) experienced secondary stigma as a result of menstruation. 7.1% reported using antiseptic to clean the genital and 56.4% (n = 22) reported flushing of the soiled absorbents in the school toilets. 70% (n = 98) reported lack of adequate facilities in school and about 4.3% (n = 6) reported being restricted from going to school when menstruating.

Conclusion: The study findings show that the respondents had fair knowledge, negative attitude and fairly good practices towards menstrual hygiene.

Keywords: Adolescent; Menstruation; Menarche; Puberty and Menstrual Hygiene Managements

Introduction

Menstruation is a monthly normal biological process in which many women and adolescent girls experienced around the world [1]. The Menstruation happens as a result of no pregnancy and it's triggered by the fall of progesterone level [2]. The menstrual flow is made up of blood and tissues from the uterus. The menstrual

blood flows through the cervix and expelled out through the vagina [3].

The aged of adolescent is measured to be aged 10-19 years. Furthermore, adolescence is the changeover stage from childhoods to adulthood and is characterized by physical, psychological and

biological development of a girl [4]. The first time menstruation by an adolescent is considered to be menarche and the average age for menarche is 12 and 13 years of age [5].

Menstrual hygiene is a personal hygiene that involved proper use of clean menstrual absorbents like pad and tampon, frequent change of soiled absorbents, and frequent wash of body most especially the genital area.

Although menstruation is a normal biological process, however it is still considered a taboo in many countries. For example in India, although menstruating girls are being celebrated, still they face cultural taboo restrictions from religious activities and restrictions on freedom of movement. Many adolescent girls get mentally and physically disturbed due to the secrecy towards menstruation and its practices, from the constant body shaming to the pain related to menstruation [6].

Problem statement

Menstruating adolescent girls in low-middle income countries lack adequate knowledge and proper understanding towards menstruation before menarche, resulting in unhygienic practices and probably school-drop out among menstruating school girls [7].

Globally, About over 800 million of adolescent girls and women menstruate yet many menstruating adolescent girls around the world experience shame, fear and confusion, due to lack of social support, ongoing social hygienic taboos, inadequate knowledge prior to menarche, unavailability of clean water and proper waste disposal facilities in school [8]. According to World Bank [4] an estimation of 500 million menstruating women and adolescent girls lack adequate facilities to perform proper menstrual hygiene management especially in schools and workplaces.

In Gujarat, the western coast of India, about 91% of menstruating girls do not go to flowing water (running water from the mountain) when menstruating due to cultural beliefs concerning menstrual blood as it is considered to be unclean in India [9]. However in South Asia about 20% of menstruating adolescent girls and women who have access to safe toilets hold back from using the toilet due to the fear of staining the toilet with menstrual blood [9]. According to a study conducted by [10] it was indicated that although majority of adolescent girls had fair to good knowledge and practices towards

menstruation and its hygienic practices still there was poor attitude towards menstruation as majority of menstruating girls faces restriction from kitchen and cooking. A study conducted in Philippines by [11] it was indicated that lack of access to clean water, proper disposable facilities, unclean facilities and insufficient toilets in the school were the major barrier to effective menstrual hygiene.

In Sub Sahara Africa, most of the menstruating adolescent girls enter menarche unprepared with poor knowledge on menstruation and its hygienic managements as peer group, female siblings and mothers remain the primary source of information [12]. Furthermore in the study it was indicated that majority of the menstruating girls experience difficulty in accessing safe and hygienic menstrual absorbents materials [12]. In the rural Zambia, menstruating adolescents prefer staying at home when menstruating than be uncomfortable, inactive at school due to the poor menstrual hygiene facilities in school and also due the fear of being tease by boys.

A study conducted in Ugandan by [13] indicated that many menstruating girls' main reasons for school absenteeism was due to lack of private place to change soiled menstrual absorbents, fear of menstrual blood stained in the school uniform, fear of falling soiled absorbents and pain related to menstruation. Although the level of menstrual hygiene in the Northern part of the Ghana is average, still menstruating adolescent girls lack clean water, soap, privacy, dustbin in the school [14]. A study conducted in Janjangbureh, the central Region of The Gambia by [15] indicated that a lot of students miss school during their menstrual cycle because they use clothes as absorbent which are more often result in bruises and menstrual stain on their uniform which is usually embarrassing and uncomfortable to participate in school activities.

Significance of the study

The finding of the study will add to the available literature on the knowledge, attitude and practice of menstrual hygiene amongst adolescent school girls. The findings from the research will be used as a reference by other researchers. The study will also be of great significance to the school administration as well as the health care administration in policy formulation, review and implementation in order to improve the health status of the students.

Aims of the study

To assess the demographical survey study of nature of menstrual hygiene among adolescents' girls in St Theresa Upper Basic School at Kanifing.

Objectives of the study

- To assess the knowledge on menstrual hygiene among adolescent school girls in St Theresa Basic School at Kanifing.
- To determine the attitude on menstrual hygiene among adolescent school girls in St Theresa Basic School at Kanifing.
- To determine the practices of menstrual hygiene among adolescent school girls in St Theresa Basic School at Kanifing.

Literature Review

Knowledge of adolescent school girls on menstrual hygiene

Most of the adolescent girls start menstruation without being informed and prepared for [16]. A study by [17] indicated that about 53.6% of school girls in Ghana lack proper knowledge on menstruation most especially adolescent who do not have television or radio sets at home.

A study conducted by [18] in Limpopo province of South Africa indicated that 15% of girls lack knowledge on the causes of menstruation as they thought menstruation is an act of removing dirt from the stomach and abdomen. A study conducted in Karachi, Urban Pakistan by [19] indicated that about 50% of girls lack an understanding on the age at which puberty or menstruation begins.

A study by [20] indicated that about 67.4% of adolescent school girls had fair knowledge on menstruation and about 24.4% had adequate knowledge on menstrual hygiene. A study in Indonesia by [21] indicated that some of the study participants consider menstrual blood to contain harmful substances.

A study by [22] indicated that 19.1% of study participants were able to defined menstrual hygiene and more than three quarters of participants were unaware on the source of menstrual bleeding as mothers were found to be the primary source of information.

Attitudes of adolescent school girls towards menstrual hygiene

A study conducted by [20] indicated that half of the adolescent school girls had positive attitude towards menstrual hygiene management. A study conducted in Egypt by [23] indicated

that adolescent school girls slightly agree that menstruation is unbearable, inconvenient and natural event. Further in the study it was indicated that girls with prior information from mothers on menstruation tends to have more positive attitude than those with no prior information. A similar study by [24] shows that poor attitude and menstrual practices were significantly associated with inadequate premenstrual preparation.

A study conducted in Hindus, Nepal by [25] indicated that 84.5% of menstruating girls are restricted from religious activities, and from cooking and about 45.5% saw menstruation as bother or curse.

In rural Zambia, a study by [26] shows that menstruating school girls would rather stay at home than go to school due to a fear of being teased by boys and embarrassment from menstrual leakage. About 41% (931) of menstruating school girls in Bangladeshi misses school because they believed menstruation interfered with school performance. Furthermore in the study it was stated that school absenteeism was common among girls who are forbidden from school sport activities during menstruation [27].

A study conducted by UNICEF [28] shows that about 21% of respondents agree that menstruating adolescents are susceptible to get possessed by an evil spirits. Furthermore in the study it was indicated that about 67.7% of participants agreed that the only good thing about menstruation is that, its shows them that they are free from pregnancy.

A study conducted by [29] in Uganda shows that nearly 50% of adolescent school girls missed school due to menstrual pain and leaving them to feel like not menstruating.

Practices of adolescent school girls towards menstrual hygiene

A study conducted by Belayneh and Birhanie [30] indicated that about 33.9% of adolescent school girls use sanitary pad during menstruation, 23.7% uses homemade absorbents like dry clothes, double pants and sponges. Also about 69.5% uses water and soap to wash their private part. In conclusion, it was reported that 60.3% of menstruating girls have poor menstrual hygiene practice.

Due to cultural beliefs many believe menstrual clothes should be washed and then buried or reused. And it was also indicated that adolescent girls wash their wrapper/clothes wore during menses

only at night when others are sleeping due to fear of being cursed as menstrual blood is being linked to witchcraft and dangers to women by causing infertility [31].

In Nepal about 28.2% of girls noted absence of disposable facilities in schools as a reason for missing school days, especially during menstruation.

A study conducted in the Northern Karnataka of India by [32] indicated that 70.7% of girls used commercial sanitary Napkins, 12.7% used clothes and 15.3% used both. Those who used clothes as absorbent were not drying the cloth in sunlight. However, majority of the girls reported washing their genital twice a day. 50.8% of the respondents reported disposing their used pads in the dustbin, 37.7% burned and 4.9% buried their used pads.

A study conducted among school girls in Sub-Sahara Africa by [33] indicated that menstruating adolescent girls uses cotton wool, socks, toilet paper, pages torn from school exercise book and newspapers, pieces of sponge torn from mattresses as menstrual absorbents. It was also indicated in the study that 25% of menstruating adolescent girls in Ethiopia do not use anything as a menstrual absorbent instead they isolate themselves during menstruation.

Majority of menstruating adolescent girls in Ethiopia dispose their used pads in school latrine and open field. Furthermore in the study it was indicated that majority of the respondents who lived in urban area were more likely to have good knowledge on menstrual hygiene than the ones in the rural area [34]. A study in western Kenya by [35] indicated that adolescent's school girl's insert menstrual cup into the Vagina to collect menstrual blood.

Methods and Materials

Study design

A cross-sectional quantitative study was used to assess the knowledge, attitude and practices towards menstrual hygiene among adolescent school girls in St Theresa's Upper Basic School, Kanifing.

Study setting/area

St Theresa Upper Basic School was established in the year 1957. It geographically located at Kairaba Avenue, Kanifing, The Gambia. The school operates on two shifts that is morning and afternoon,

whereby grade 9 with 10 sections of grade 8 comes in the morning and grade 7 with 4 sections of grade 8 comes in the afternoon. Grade 8 comprises of 879 students ranging from section A-N and each of the section comprises of 60 students. Generally the grade 8 class is made of 364 boys and 514 girls and about 711 Muslim and 167 Christian.

Study population

The study was conducted among grade 8 adolescent school girls in St Theresa Upper Basic School, Kanifing, The Gambia.

Sampling technique

A simple random sampling technique was used by the researcher to select the study respondents. A balloting box was filled with "Yes and No". The researcher proceeded by giving the potential respondents who was be qualified an opportunity to pick papers from the balloting box and anyone who picked "Yes" was requested to participant in the study.

Sample size/sample size determination

Using Nassium's Formulae $n = NC^2/[C^2 + (N-1) e^2]$ sample size determination, A simple random technique was used by the researcher to select 140 adolescent school girls from grade (8) class for the study.

Using Nassium's Formulae $n = NC^2/[C^2 + (N-1) e^2]$

Where n = Sample Size, N = Target population/Study population (514), C = coefficient of variance 21% to 30% and e = standard error 0.02 to 0.05.

$$N = 514 (27.66\%)^2/[27.66\%]^2 + 514-1 (0.02)^2$$

$$N = 514 (27.66/100)^2/(27.66/100)^2 + (513) (0.0004)$$

$$N = 514 (0.2766)^2/(0.2766)^2 + (513) (0.0004)$$

$$N = 514 (0.07650756)/[0.07650756+ (513) (0.0004)$$

$$N = 39.3248858/0.28170756 = 139.594712 = 140//$$

Therefore, the desire sample size = 140.

Inclusion criteria

The inclusive criteria were menstruating adolescent school girls in grade 8 class and those who accepted to be part of the study.

Exclusion criteria

The exclusive criteria were adolescent school girls who were absent at the time of data collections and those who have haven't started menstruating.

Data collection technique/tool

An adapted questionnaire from a similar study by Wanjiku [22] was used by the researcher as data collection tool for the study. The questionnaire consisted of four sections namely; section A- socio demographic characteristics of the respondents, section B- knowledge on menstrual hygiene, section C- attitude towards menstrual hygiene and section D- practices of adolescent girls towards menstrual hygiene.

Pre-testing

The research questionnaires was tried and piloted on 10 respondents at Gambia Methodist Academy in order to identify problems with the data collection tools and area of improvement. The mentioned school had similar characteristics to that of St Theresa's Upper Basic School where the study was based. The pilot testing ensured credibility, accuracy and reliability of the questions.

Data analysis

The data was analyzed using computer software SPSS Version 20 and the study findings were presented in frequency tables and percentage. The data was coded and entered into SPSS software for cleaning/corrections as well as eliminating errors such as typing error. Then the quantitative data was analyzed using descriptive and analytical statistic inferences to show the level of association between the variables under the research study.

Ethical consideration

A permission letter was written by the researcher in order to obtain consent from St Theresa's Head of School prior to data collection. After the approval of the permission letter, the researcher proceeded to seeking consent from grade (8) teachers and also from the grade (8) adolescent girls. An information sheet was given to study participants and confidentiality of the respondents' information was maintained. There is no conflict of interest, this research was not sponsored and it is purely for academic purpose.

Results

Introduction

This chapter presents results of the study on Knowledge, Attitude and Practices of menstrual hygiene among adolescent

school girls in St Theresa Upper Basic School Kanifing, The Gambia. Data was obtained from a sample of 140 respondents. The results are presented below.

Description of demographic data

Variables	Frequency	Percentage
Age range		
Less than 13 years	18	12.9
14 - 16 years	120	85.7
17 years and above	2	1.4
Age of menarche		
Less than 10 years	5	3.6
11-14 years	129	92.1
15 years and above	6	4.3
Who do you live with?		
Biological parents	112	80
Guardians	24	17.1
Forster parents	4	2.9
Educational level of the mother		
Educated	101	72.1
Non- educated	39	27.9
Educational level of the father		
Educated	124	88.6
Non- educated	16	11.4
Family capability of providing sanitary pads		
Yes	119	85
No	21	15

Table 1: Finding of the demographic characteristics of the study population.

Majority 85.7% (n = 120) of respondents were aged 14-16 years while minority 1.4% (n = 2) were aged 17 years and above. Considering the aged of menarche majority of the respondents 92% (n = 129) experienced menarche at the age of 11-14 years. Majority 80% (n = 112) live with their biological parent and minority 2.9% (n = 4) live with foster parents whereas majority 72% (n = 101) of mothers were educated and minority 11.4% (n = 39) of fathers were none educated. And 15% (n = 21) came from a family's that were not capable of providing them with sanitary pads.

Description of the knowledge of adolescent girls on menstrual hygiene

According to the finding it was indicated that majority 80% (n = 113) were knowledgeable on the meaning of menstrual

Variable	Frequency	Percentage
Source of information		
Mother	109	77.9
Sister	23	16.4
Peer	2	7
Teachers	4	2.9
What is menstruation		
Effective management of menstrual bleeding	113	80
Treating of female disease	27	19.3
Causes of menstruation		
Natural or physiological body change	116	82.9
Disease	4	2.9
Don't know	20	14.3
Organs where menstrual blood comes from		
Vagina	129	92.1
Uterus	2	1.4
Stomach	1	7
Don't know	8	5.7
Product heard of		
Sanitary pads	101	72.1
Tampon	2	1.4
Menstrual cup	12.1	
Clothes	2	8.6
Tissue paper	4	1.4
Cotton wool	4	2.9
Clothes, pads and tampon	7	7.9
Sanitary pad and clothes	11	5.0
Ever heard of menstruation before menarche		
Yes	119	85
No	21	15

Table 2: Showing knowledge of adolescent girls on menstrual hygiene.

hygiene as they said menstrual hygiene to be an effective management of menstrual bleeding and minority 19.3% (n = 27) said to be treatments of female disease. The respondents were also knowledgeable on the causes of menstruation as majority 82.9% (n = 116) said menstruation to be caused by natural or physiological body change. Majority 72.1% (n = 101) of the respondents were knowledgeable about the ideal material used during menstruation whereby 72.1% (n = 101) of the respondents indicated disposable

sanitary pads to be the ideal material. The study respondents were also knowledgeable about menstruation prior to menarche as reflected by majority 85% (n = 119).

However the respondents were not knowledgeable on the organs from which menstrual blood/bleeding comes from as reflected by only 1.4% (n = 2) who knew correctly the source organ to be uterus.

Description of the Attitude of adolescent girls on menstrual hygiene

Variable	Frequency	Percentage
Any traditional belief that influence your menstrual hygiene		
Yes	89	63.6
No	51	36.4
Perception regarding sanitary products		
Comfortable	7	5
Not comfortable	6	4.3
Expensive	101	72.1
Expensive and not comfortable	26	18.6
Ever encounter secondary stigma as a result of menstruation		
Yes	28	20
No	112	80
Are there bad words, terms, or phrases used to describe girls who are menstruating		
Yes	32	22.9
No	108	77.1
At school are you treated differently if they know you are menstruating		
Yes	26	18.6
No	114	81.4
Have you ever had your period while at school		
Yes	137	97.9
No	3	2.1
How did you feel at your first encounter while at school		
Normal	54	38.6
Fear and confused	67	47.9
Upset	5	3.6
Ashamed and embarrassed	14	10

At school, do you get any of the following advantages while menstruating		
Rest from regular school work	55	39.3
Leave school early	30	21.4
Respect from others	35	39.3

Table 3: Showing the Attitude of adolescent girls towards menstrual hygiene.

Finding from the study indicated that the respondents had negative attitude towards menstrual hygiene as reflected by 63.6% (n = 89) of the respondents had traditional beliefs that influence their menstrual hygiene. Majority 72.1% (n = 101) had perception that sanitary products were expensive, while 4.3% (n = 6) had a perception that the sanitary product were not comfortable. It was also recorded in the study that 39.3% (n = 55) of the respondents rest from school activities while menstruating and also leave school early when menstruating as reflected by 21.4% (n = 30).

About 47.9% (n = 67) of the respondents reported that they felt fearful and confused and about 10% (n = 14) felt embarrassed and shameful on their first encounter of menstrual bleeding while at school. Furthermore in the study it was also revealed that 18.6% (n = 26) of the respondents are treated differently and 22.9% (n = 32) reported of boys using bad words, phases on them while menstruating.

Description of the Practices of Adolescent girls on menstrual hygiene

Variable	Frequency	Percentage
Type of absorbent used during menstruation		
Clothes	13	9.3
Tampon	2	1.4
Sanitary pad	109	77.9
Tissue	5	3.6
Cotton wool	6	4.3
Sanitary pad and clothes	5	3.6
Change of absorbent while at school		
Yes	60	42.9
No	80	57.1
Do you reuse the sanitary clothes		
Yes	36	25.7
No	104	74.3

What do you use to wash the sanitary clothes		
Plain water	12	8.6
Luke warm water	6	4.3
Soap and water	122	87.1
What do you use to clean your genital area		
Plain water	56	40
Luke warm water	18	12
Soap and water	56	40
Antiseptic	10	7.1
How do you store your sanitary protection materials		
Bathroom	76	54.3
Store with routine clothes	17	12.1
Hide under the bed	39	27.9
Don't store	80	5.7
At school, how do you dispose sanitary materials		
Burn it	9	6.1
Throw inside pit latrine	2	15.7
Flush it inside water system toilet	79	56.4
Bury it on the ground	2	1.4
Throw inside waste disposal	28	29
Hand washing after changing sanitary material		
Yes	133	95
No	7	5
Adequate sanitary facilities at school		
Yes	42	30
No	98	70
Restriction placed on you during menstruation		
Yes	122	87.1
No	18	12.9
Type of restrictions		
Religious activities	70	50
Household work	17	12.1
Cooking	2	1.4
Mobility	4	2.9
Participation in class	6	4.3
Playing activities	1	7
Not allowed to go to school	6	4.3
Religious and household work	34	24.3

Table 4: Showing the practices of adolescent girls on menstrual hygiene.

The study findings revealed that the respondents had good practices as regards to menstrual hygiene as reflected by majority 77% (n = 109) of the respondents used sanitary pads material. About 40% (n = 56) uses soap and water and another 40% (n = 56) uses only plain water for cleaning of external genital area. Majority 95% (n = 133) of the respondents reported washing of hands after changing sanitary materials.

Furthermore in the study, it was revealed that slightly high respondents had poor practices concerning menstrual hygiene as about 57% (n = 80) reported not changing of menstrual materials while at school, about 25.7% (n = 36) of the respondents reported reusing their sanitary clothes. Slightly high 54.3% (n = 76) of the respondents store their menstrual protection in the bathroom and about 27.9% (n = 39) of the respondents reported hiding under the bed.

A highly percentage of 87.1% (n = 122) reported they had restrictions attached to them when menstruating and about 50% (n = 70) reported being restricted from religious activities, 12.1% (n = 17) restricted from household work, 2.9% (n = 4) restricted from mobility, 4.3% (n = 6) are restricted from going to school and 1.4% (n = 2) are restricted from cooking.

Discussion of Study Findings

This chapter presents the analyzed results in relation to the specific objectives which guided the study. The aim of this study was to assess the demographical survey study of nature of menstrual hygiene among adolescents' girls in St. Theresa's upper basic school, Kanifing, the Gambia. The study comprises of 140 respondents and the findings are discussed as follows.

Knowledge of menstrual hygiene among adolescent girls

This study findings shows that mothers were the respondents first main source of information on menstrual hygiene as majority got their first menstrual lesson from their mothers. This finding is in line with the study findings of [16] which stated that mothers are the main source of menstrual hygiene information for most adolescent girls in developing countries. It is however in contrary with [20] findings which stated that teachers are the main source of menstrual information for female adolescent students. This finding revealed that those who received menstrual hygiene management from their mothers had fair good information on menstrual hygiene management. This suggests that intervention aimed at improving

knowledge of menstrual hygiene management among adolescent school girls in St Theresa Upper Basic School should include both mothers and teachers.

Majority of the study respondents knew correctly that menstrual hygiene is an effective management of menstrual bleeding. The explanation of this observation could be due to the fact majority 72% (n = 101) of the participants mothers were educated. However, majority of the respondents lack knowledge on the organs which menstrual blood come from and 14.3% (n = 20) lack knowledge on the causes of menstruation. This finding explains that respondent's informant's lack the necessary knowledge about the organs from which the menstrual blood comes from and the causes of menstruation. This finding is in line with a study conducted by [18] in Limpopo province of South Africa which stated that girls lack knowledge on the causes of menstruation as they thought menstruation is an act of removing dirt from the stomach and abdomen.

Prior awareness regarding menstruation among the study respondents was generally high as majority 85% (n = 119) of the respondents were aware of menstruation before menarche. This could be as result of interplay of number of factors like school program and perceived knowledge from various sources of information like peers, multimedia, mothers and teachers. These finding are not in line with [16] which stated that most of the adolescent girls start menstruation without being informed and prepared for.

About three quarter of the study respondents had heard of disposable sanitary pad, the awareness of sanitary pad is higher which is possibly due to interplay of number of factors like availability, accessibility, cost exposure to mass media as well as storage disposable issues.

Attitude of menstrual hygiene among adolescent school girls

Majority 63.6% (n = 89) of the study respondents had traditional beliefs that influences their attitude towards menstrual hygiene. From the explanation of this observation, it could be that many adolescent girls could have combined many of the prevailing cultural views of menstruation early in life, yet many of this view are negative and non-preparative for womanhood. This finding is in line with a study conducted by [31] stated that due to cultural beliefs many believe menstrual clothes should be washed and then

buried or reused. And it was also indicated that adolescent girls wash their wrapper/clothes wore during menses only at night when others are sleeping due to fear of being cursed as menstrual blood is being linked to witchcraft and dangers to women by causing infertility.

Majority 72.1 (n = 101) of the respondents had a perception that the disposable sanitary pads were expensive. The explanation for this observation could be related to the socio economic status of the respondents as majority of them are below the legal age of employment, thus do not have an independent income. This finding is in line with a study conducted by [37] which stated that the disposable sanitary pads was the biggest barrier for proper menstrual hygiene management among the adolescent school girls as majority of the family couldn't afford to buy them.

About less than a quarter of the study respondents experienced secondary stigma as a result of menstruation. This observation could be as a result of menstrual calamities associated with menstrual stained on the uniform which the school communities have not embraced hence stigma. This finding is in line with a study that was conducted by [26] which indicated that menstruating school girls would rather stay at home than go to school due to a fear of being teased by boys and embarrassment from menstrual leakage. Similarly, there is a need to sensitize male students to support rather than ridiculing menstruating girls.

A little less than a quarter reported the use of bad words, terms and phrases to describe girls while menstruating. The observation for this could be that boys find menstruating girls smelly and objectionable. This finding is in line with a study conducted by [9]. In Gujarat, the western coast of India, which indicated that menstruating girls do not go to flowing water (running water from the mountain) when menstruating due to cultural beliefs concerning menstrual blood as it is consider to be unclean in India. This means that girl's right to discrimination, bodily integrity, equality, privacy, health and right to freedom from inhumane and degrading treatment from abuse and violence is not observed.

It was observed that 39.3% (n = 55) of respondents get respect from others when menstruating. The observation for the respect could be as a result of the relationship between menstruation and pregnancy, as a study conducted by UNICEF [28] indicated that about 67.7% of the study respondents agreed that the only good

thing about menstruation is that, its shows them that they are free from pregnancy. About 39.3% (n = 55) reported being absence from school as result of lack of adequate sanitation facilities in school. This finding is contrary to a study conducted in Janjangbureh, the central Region of The Gambia by [15] which indicated that a lot of student's misses' school during their menstrual cycle because they use clothes as absorbent which are more often result in bruises. Absenteeism appears to be closely associated with lack of privacy and limited availability of water and sanitation facilities at schools.

A generally high percentage 97.9% (n = 137) of respondents had ever experienced their period while at school, and a little less than half of the respondents felt fearful and confused, 3.6% (n = 5) reported being upset and 10% (n = 14) reported being ashamed and confused on their first encounter. This could be as a result of lack of inadequate knowledge about menstruation and low level of pre-menarche knowledge among adolescent.

Practices of Grade 8 adolescent school girls in St Theresa Upper Basic School

In term of menstrual hygiene practice, majority 77.9% (n = 109) of the respondents prefer using sanitary pads as a menstrual absorbents. The apparent reason for using sanitary could be as result of availability and knowledge of sanitary pad been the best absorbent material for menstrual blood. Also from the finding it was reported that 9.3% (n = 13) uses clothes, 3.6% (n = 5) uses tissue, 4.3% (n = 6) uses cotton wools and 3.6% (n = 5) uses both sanitary pads and clothes. This observation could be due to the socio- economic status of the participants as 15% (n = 21) reported family incapability of providing sanitary pads. This study is in line with a study by [33] indicated that Girls in resource-poor countries around the world tend to use old cloths, tissue paper, cotton or wool pieces, or some combination of these items to manage their menstrual bleeding.

It was reported that a little more than half of the respondents do not change their absorbents while at school. This must; however be as a result of lack of proper sanitary facilities in school. Findings of a study in Ethiopia revealed that over 80% of students do not change their menstrual absorbent materials in school; they prefer to do so at home mainly because of lack of suitable water, sanitation, and hygiene facilities in the schools [17]. Studies have shown that poor menstrual hygiene practice can be a reason for reproductive

and genitor-urinary tract infection, school absenteeism and poor academic performance or drop-out [37]. Moreover, contrary to [35] which stated that third of adolescent female in India changed their pads in school.

About 25.7% (n = 36) respondents reported reusing their sanitary clothes. Majority 87.1% (n = 122) reported using soap and water, 4.3% (n = 6) uses Luke warm water and 8.6% (n = 12) uses plain water to wash their sanitary clothes. The use of soap and water would be because of the awareness and availability of the resources.

Generally about 40% (n = 56) of the study respondents uses plain water and soap and water to wash their genital respectively. 12% (n = 18) uses Luke warm water and 7.1% (n = 10) uses antiseptic to wash genital. The reason for the observed difference could be due to low awareness and communication of menstrual hygiene by respondents. And majority 95% (n = 133) reported washing of hands after change of soiled menstrual absorbent, meaning the importance to the practice of hand washing has been recorded among the study respondents.

About 54.3% (n = 76) store their menstrual absorbent in the bathroom, 12.1% (n = 17) store with routine clothes, 27.9% (n = 39) hide under the bed and about 5.7% (n = 80) do not store. The difference in the observation could be as result cultural taboo surrounding menstruation as a study conducted by [31] indicated that adolescent girls wash their wrapper/clothes worn during menses only at night when others are sleeping due to fear of being cursed as menstrual blood is being linked to witchcraft and dangers to women by causing infertility.

Majority 56.4% (n = 22) of the study respondents disposed their soiled menstrual absorbents by flushing it in the school water system toilet, 15.7% (n = 22) through pit latrine, 6.1% (n = 9) burn it, 1.4% (n = 2) bury and 20% (n = 28) throw it the school dust bin. This observation could be as a result of lack of adequate disposal facilities in school. This finding is in with a study conducted by [38] which stated that failing to provide an adequate disposal facility in school for used sanitary material can result in the blockage of toilet or cause the toilet to fill up quick.

Majority 70% (n = 98) of the respondents reported lack of adequate facilities in school and about 30% (n = 42) reported there

is adequate facilities in school. The absence of adequate facilities in school would be due the socio- status of the school and lack of awareness and knowledge regarding menstrual hygiene by the school administration. Due to inadequate water, toilet, and dumping facilities for sanitary materials at school, many menstruating girls would rather stay at home than be uncomfortable in school. The lack of appropriate facilities to help them manage their periods discouraged many from regularly attending school [14].

Higher percentage 87.1% (n = 122) reported being restricted while menstruating and about 12.9% (n = 18) do not get restricted while menstruation. Slightly higher percent 50% (n = 70) reported being restricted from religious activities, 12.1% (n = 17) household work, 1.4% (n = 2) cooking, 2.9% (n = 4) mobility, 4.3% (n = 6) reported restriction from not allowing to go to school and to participate in school respectively, 7% (n = 1) restricted from playing and about 24.3% (n = 34) got restricted from religious and household activities. The difference in this observation could be due to the cultural taboos, religious beliefs, ignorance and false perception surrounding menstruation and its hygienic practices. This finding is line with a study conducted by [6] which stated that many adolescent girls get mentally and physically disturbed due to the secrecy towards menstruation and its practices, from the constant body shaming to the pain related to menstruation.

Summary

This study shows that menstrual hygiene management among adolescent school girls in St Theresa Upper Basic School is very challenging. The overall level of knowledge on menstrual hygiene among the respondents was fair enough however, majority could not tell the organs source of menstrual blood.

This study shows that the study respondents generally have negative attitude towards menstrual hygiene due to cultural beliefs, religious beliefs, taboos, stigma, discrimination and false perceptions of menstruation.

Also it was revealed in the study that adolescent school girls in St Theresa Upper Basic School practiced unsafe practice during menstruation due to the inadequate sanitary facilities in the school as reflected by majority not changing their soiled absorbents while at school, flushing of the soiled absorbents in the school toilet, and also burring the soiled absorbents on the school ground.

Conclusion

The study findings show that the respondents had fair knowledge, negative attitude and fairly good practices towards menstrual hygiene.

Generally, the findings suggest that a qualitative study is necessary to explore the socio-cultural factors influencing adolescent student's attitude and practices of menstrual hygiene management.

Recommendations

- Both male and female adolescent students should be sensitized about menstruation so as to improve their knowledge on menstrual hygiene.
- Menstrual hygiene topics should be introduced in the school curriculum.
- The school authority needs to collaborate with the ministry of Health and Kanifing Municipal council to implement fully, the WASH policy in the school.
- Matters concerning menstrual hygiene should be discussed with parents and their children and solution thought to improvise on disposal bins in the school.

Bibliography

1. Anne Sebert Kuhulmann., *et al.* "Menstrual hygiene management in resource-poor countries". *Obstetrical and Gynecological Survey* 72.6 (2017): 356-376.
2. Critchley O D Hilary., *et al.* "Physiology of the endometrium and regulation of menstruation". *Physiology Review* 100.3 (2020): 1149-1179.
3. OASH. "Your menstrual cycle". (2020).
4. World Bank. "Menstrual hygiene management enable women and girls to reach" (2018).
5. Rajanbir Kaur., *et al.* "Menstrual hygiene management and waste disposal: practices and challenges faced by girls/women of developing countries". *Journal of Environmental and Public Health* (2018).
6. Herdis Sveinsdottire. "Menstruation, objectification and health related quality of life". *Journal of Clinical Nursing* 27.3-4 (2017): E503-E513.
7. Chet Kant Bhusal. "Practice of menstrual hygiene and associated factors". *Advances in Preventive Medicine* (2020).
8. Sommer Mani., *et al.* "A time for global action: addressing girl's menstrual hygiene". *PLOS Medicine* (2016).
9. Ayechew Ademas., *et al.* "Does menstrual hygiene management and water, sanitation, and hygiene predict reproductive tract infections among reproductive women in urban areas in Ethiopia?". *PLOS One* (2020).
10. Sonika Sangra., *et al.* "Assessment of knowledge, attitude and practice about menstruation and menstrual hygiene among adolescent girls in rural district Kathua, Jumma and Kashmir". *The International Journal of Community Medicine and Public Health* 6.12 (2019).
11. Harver Jacquelyn., *et al.* "Mentoring menstrual health and hygiene" (2019).
12. Derrick Ssewanyana., *et al.* "Menstrual hygiene management among". *SAGE Journal* (2017).
13. Boosey Robyn., *et al.* "Menstrual hygiene manangement amongst school girls". *Journal Pan-African Medical Journal* (2014)
14. Maxwell Til Kumbeni., *et al.* "Menstrual hygiene among adolescent girls in junior high school". *Pan-African-medical Journal* 37 (2020): 190.
15. Drammeh. "Study reveals girls 10-20% school days during". (2021).
16. Chandra-mouli ventkatrama and Sheila Vipul Patel. "Mapping the knowledge and understanding of menarche, menstrual hygiene and menstrual health among adolescent girls in low-and middle income countrie". *Journal of Reproductive Health Biomed* 30 (2017).
17. Mohammed Shamsudeen., *et al.* "Menstrual Knowledge, Sociocultural restrictions, and barriers to menstrual hygiene management in Ghana: Evidence from a multi-method survey among adolescent schoolgirls and schoolboys". *PLOS One* 15.10 (2020): e0241106.
18. Rajanbir Kaur., *et al.* "Menstrual hygiene management and waste disposal: practices and challenges faced by girls/women of developing countries". *Journal of Environmental and Public Health* (2018).

19. Tazeen Saeed Ali and Syeda Nagma Rizi. "Menstrual knowledge and practices of female adolescents". *Journal of Adolescence* 33.4 (2010): 531-541.
20. Yadav Ram Naresh. "Knowledge, attitude and practices on menstrual hygiene among adolescent". *Journal of Nepal Health Research Council* 15.3 (2018): 212-216.
21. Davis Jessica., et al. "Menstrual hygiene management and school absenteeism among". *Journal of Tropical Medicine and International Health* 23.12 (2020): 1350-1363.
22. Wanjku Damaris Wambul. "Knowledge, Attitude and Practice of Menstrual Hygiene-Dspace Home".
23. Abeer Eswi., et al. "Menstrual attitude and knowledge among Egyptian female adolescent". *Journal of American Science* 8.6 (2012).
24. Samiha Suhail Jarrah and Andaleeb Abu Kamel. "Attitude and practices of school-aged girls towards menstruation". *International Journal of Nursing Practices* 12.3 (2012): 308-315.
25. Amrita Mukherjee., et al. "Perception and Practices of menstrual restrictions among". *Journal of Reproductive Health Biomed* 81 (2020).
26. Joyce Chinyama., et al. "Menstrual hygiene management in rural school of Zambia". *Journal of BMC Public Health* 16 (2019).
27. Manhub-UI Alam., et al. "Menstrual hygiene management among Bangladeshi". *Journal of BMJ* 9.7 (2017): e015508.
28. UNICEF. "Menstrual hygiene". UNICEF (2018).
29. Miiro George., et al. "Menstrual health and school absenteeism among adolescent". *Journal of BMC Women's Health* 4 (2018).
30. Belayneh Zelalem and Birhanie Mekuriaw. "Knowledge and menstrual hygiene practice among adolescent school girls". *Journal of BMC Public Health* 19 (2019): 1595.
31. Kaur Rajanbir., et al. "Menstrual hygiene , management and waste disposal". *Journal of Environmental and Public Health* 2081 (2018): 1730964.
32. Yaliwa G., et al. "Menstrual morbidities, menstrual hygiene, cultural practices during". *Obstetrics and Gynecology International* 2020 (2020): 6238193.
33. Jacqueline Grace Vaughn. "A review of menstruation hygiene management among schoolgirls in Sub-Saharan Africa" (2019).
34. Gultie Teklemariam., et al. "Age of menarche and knowledge about menstrual hygiene". *PloS One* 9.9 (2014): e108644.
35. Van Eijk., et al. "Menstrual hygiene management among adolescent girls". *BMJ Open* 6.3 (2018).
36. Katsuno Chikako., et al. "Quality of public school toilets and the frequency of changing sanitary". *Journal of Tropical Medicine and Health* 47.5 (2019).
37. Belayneh Z and Mekuriaw B. "Knowledge and menstrual hygiene practice among adolescent school girls in southern Ethiopia: a cross-sectional study". *BMC Public Health* 19 (2019): 1595.
38. Al Rashe Fatima and Carol Muller. "Menstrual hygiene and management in Bwaim, The Gambia". UPENN (2019).