CHALLENGES FACING SECONDARY SCHOOL GIRLS DURING MENSTRUATION MANAGEMENT IN TARIME DISTRICT COUNCIL, TANZANIA

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By

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A dissertation submitted in (partial) fulfillment of the requirements for the Degree of Master of Public Health of the

Muhimbili University of Health and Allied Sciences

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CERTIFICATION

The undersigned certifies that they have read and hereby recommend for acceptance by Muhimbili University of Health and Allied Sciences, a dissertation entitled **"Challenges facing secondary school girls during menstruation period management in Tarime district Tanzania"** in (partial) fulfillment of the requirements for the degree of Master of Public Health of the Muhimbili University of Health and Allied Sciences.

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Date

DECLARATION AND COPYRIGHT

I, **Hellen Mwita**, declare that this **dissertation** is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

Signature _____ **Date _____**

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DEDICATION

To my lovely children Marleen and Liam.

ABSTRACT

Background: Menstruation is an important stage for girls in their reproductive life for which every girl has a right to. Every day about 300 million women including school girls experience menstrual flow worldwide. There has been inadequate information sharing on menstruation in many Tanzanian secondary schools particularly the ones located in rural areas. Menstruation has been perceived as a shameful subject to tackle not only for school girls but also for some parents and relatives hence it has been ignored both at home and in schools.

Objective: The objective of this study was to assess the challenges facing secondary school girls during menstruation in Tarime district, Tanzania.

Methodology: A cross-sectional study design was employed. A self-administered questionnaire was used to collect data from 506 secondary school girls in Tarime district. Analysis of the data was done using SPSS version 20 and descriptive analysis, frequency and proportion measures were used to provide descriptive characteristics of the study population. The degree of association was tested using chi square test with p-value of <0.05 at 95% confidence interval was considered to be statistically significant.

Results: This study involved 506 school girls whose age ranged from 14 to 20 years. All girls had attained menarche at the time of the study and their first menstrual period ranged from 9 to 17 years. Knowledge on menstruation was moderate, according to the scale, less than 10% had high scores on the test used to measure menstrual knowledge. Half of the girls reported mothers to be their first confidants on first menstrual experience. About two third (64.0%) had history of missing school during their menstrual periods. Mesnstrual pains were the most common problem among the school girls during their menses.

All participating schools in the study had separate pit latrines for boys and girls. None of the schools had a proper place to dump the sanitary wares that girls used during menstruation or private rooms for changing sanitary pads. None of the schools had piped water, all relied on rain water stored in tanks or fetched from streams located far from the school compound. Half (50.4%) of the school girls used disposable sanitary pads during their first menstrual periods.

Conclusion: Most of the study participants had moderate knowledge on menstruation and mothers were the common source of information to the majority. Poor school envornment, sanitary facilities and the fear of staining clothes challenged girls in their school attendace during menses. There is a need to prepared girls on matters related to menstruation earlier before they attain menarche and to improve the school environment to become friendly to girls during menses. Efforts to improve accessibility and affordability of the disposable sanitary pads to school girls are also recommended

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LIST OF ABBREVIATIONS

MDGs	Millennium Development Goals
MHM	Menstrual Hygiene Management
NGO	Non-Governmental Organization
SWASH	School Water Sanitation and Hygiene
TDHS	Tanzania Demographic and Health Survey
UNESCO	United Nation Education Scientific and Cultural Organization
UNICEF	United Nation Children Education Fund
WASH	Water Sanitation and Hygiene
WHO	World Health Organization

DEFINITION OF KEY TERMS

Menstruation

The menstrual cycle is the regular natural change that occurs in the female reproductive system (specifically the uterus and ovaries) that makes pregnancy possible (1). It normally happens in a predictable pattern, once a month. The cycle is required for the production of oocytes, and for the preparation of the uterus for pregnancy.

Puberty

Puberty is the time in life when a boy or girl becomes sexually mature. It is a process that usually happens between ages 10 and 14 for girls and ages 12 and 16 for boys.

Sanitary pads

Sanitary pad is an absorbent item worn by women and girls while menstruating to absorb flow of blood from the vagina.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Menstruation is part of the female reproductive cycle that starts at the time of puberty until one reaches menopause (2). However, menstruation has been misinterpreted and wrongly perceived in most of the developing countries (3) mainly because of cultural taboos related to sexuality and reproductive health. This situation has led to poor knowledge and information about Menstrual Hygiene Management (MHM) amongst adolescents (4).

Adolescence is understood as a transitional phase in the lives of females, from girlhood to womanhood. This transition constitute an important milestone, which is marked by the onset of menarche (5). From menarche to menopause, reproductive health and menstrual hygiene are important aspects in the lives of women. However there is not much attention paid to adolescent girls' specific on the issue of menstrual period, such that notwithstanding that doing so would lay a good foundation for their physical and mental wellbeing and their ability to manage menstruation hygienically (6).

It is widely known that girls especially in rural areas face difficulties in accessing sanitary pads and other menstrual sanitary services. It is estimated that one in ten school-age African girls do not attend school during menstruation or dropped out from school at puberty due to lack of cleanliness and separate toilet facilities for female students in schools (7). Moreover, 82% of adolescent girls lack sufficient knowledge about their body changes and especially on how to handle and manage themselves during menstruation. Furthermore, many school-going girls and women in developing countries are not well equipped with full menstrual services while they are in school environments. There are no safe and clean facilities for them at schools to deal with their condition during menstruation period (8).

Among East African countries, schools especially in rural areas do not have waste disposal facilities. In this case, girls are obliged to carry soiled absorbents back home (7).

Consequently, they prefer to stay at home during their menstruation period. Evidence reveals that menstruation related challenges affects more than a third of student's class concentration, participation, socializing with friends, test-taking skills and homework task performance (9). In Tanzania, the issue around menstruation among school girls is not of any difference compared to other East African countries (Mansour, 2012). As a result, the government came up with the National strategic plan for School water, sanitation and hygiene (SWASH 2012-2017) which among other things recognizes the challenges facing MHM among school girls in rural areas. It articulates that girls are equally affected with lack of hygienic and clean facilities in schools, the majority of them in rural areas stay at home, miss classes during their monthly periods due to acute shortages of menstrual hygiene facilities and services. The strategy provides guidelines for addressing the problems including ensuring schools have proper sanitary facilities to accommodate needs of both sexes.

Given the current free education policy of the government, the majority (over 90%) of school age children go to school (10). In rural areas where some villages have no school or have fewer schools compared to the number of children eligible to start school, most of children go to the nearby schools which are not well equipped with infrastructure. Some do not have adequate toilets, others may have toilets without doors, while many of them may have fewer number of toilets compared to the number of students enrolled in the schools. Many schools also lack hand washing facilities (10) consequently, MHM becomes difficult for young girls during menstrual periods.

For proper and effective MHM to take place, it is essential that school girls have access to water and sanitation. They need sanitary facilities with privacy to change sanitary cloths or pads, hand washing facilities for washing their hands and used cloths and facilities for safely disposing of used materials or a place to dry them if reusable. As a result, Government, donors, civil society organizations (NGOs) and some of the private sector companies have been implementing several interventions including ensuring presence of improved latrines in school environment, awareness rising to parents and teachers on the importance to create supportive environment for school girls during menstruation. Despite the significant

interventions, menstruation management has not been effective (9) and the information on the challenge facing girls during their menses is scant. Moreover, cultural practices and taboos around reproductive health and menstruation in particular remains a challenge in the lives of women and girls and hence reinforce gender inequities and exclusion (14). Therefore, there is a need to explore the challenges facing school girls in managing their menses particularly in rural settings.

1.2 Problem Statement

Menstruation is a common phenomenon in the female gender where there is a discharge of unfertilized egg from the ovaries. Although it is a common condition still there is stigma and misinformation about how society thinks of it and also how to handle menstruation among women especially young girls who experience it for the first time. So far, there has been inadequate information sharing on menstruation management to secondary school girls and issues surrounding menstruation have been perceived as a shameful subject to tackle not only for schoolgirls but also for some parents and relatives and hence it has been ignored both at homes and in schools (11). Although in many societies older women in the family, such as aunties, grandmothers and sisters give guidance to newly menstruating girls, in some cases no guidance is provided, and girls are expected to look for information from siblings, friends, and school teachers (11). This has led to some shameful experiences and trauma among girls.

In many Tanzanian communities' girls are not adequately instructed about hygiene standards to be observed during menstruation (12). Mothers/female guardians are the main source of information for their children regarding menstrual management but, some of them do not discuss or share anything that has to do with sex, sexuality, private parts or menstruation issues with their children (13). This leads to very little information about menstruation among girls before they experience their first menstrual period. Such lack of information leads to various reactions including worry, shyness, embarrassment and nervousness (12). Furthermore, some schools do not have supportive environment for female staff and menstruating female students (13). This also leads to disposal of menstrual products within

the shool environment or on the streets. This situation is worse in schools located in rural area where access to information and education regarding menstruation management is limited.

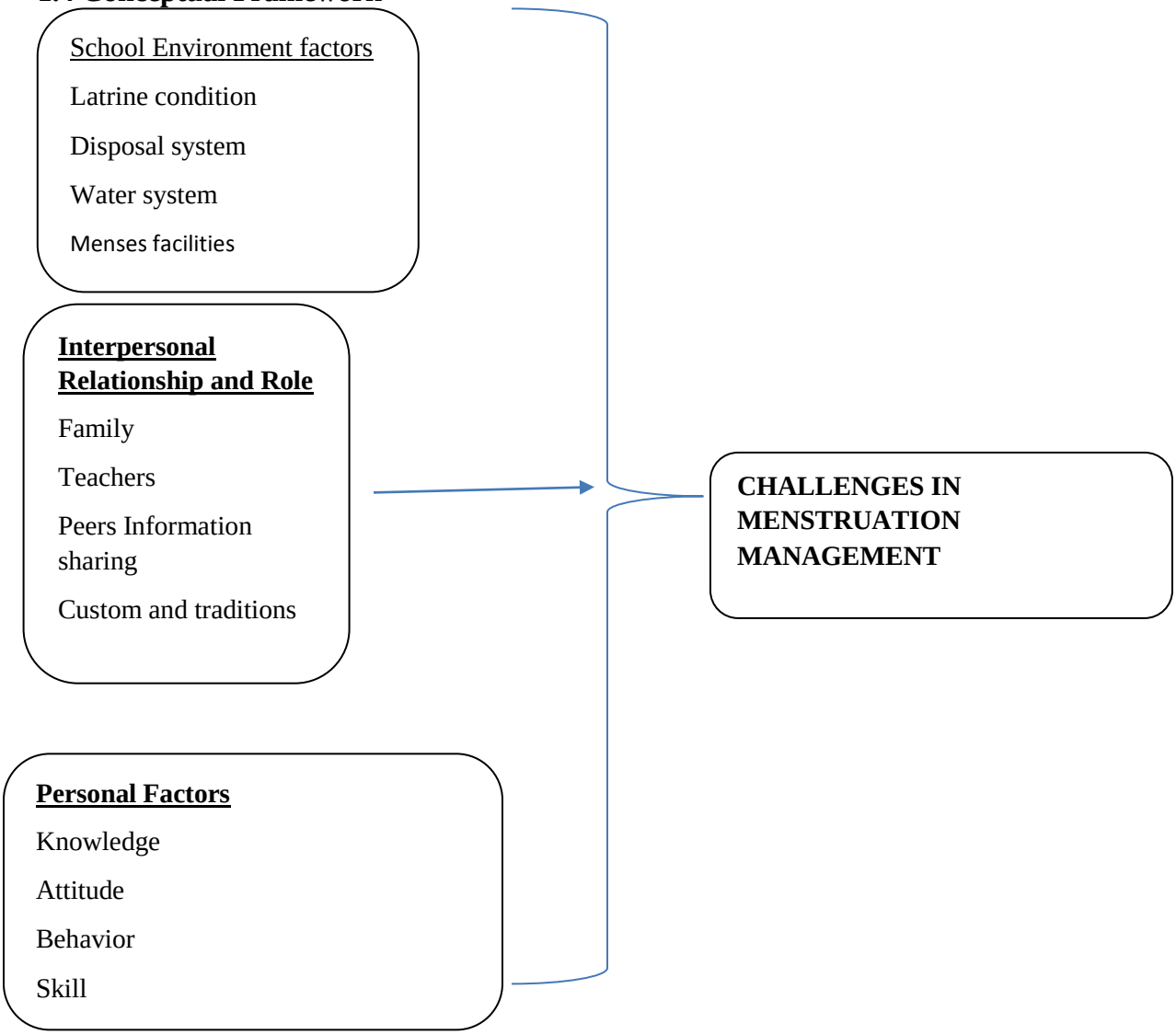
According to UNICEF in 2012, only 48% of school girls' latrines have doors, 37% have place to dispose sanitary facilities, only54% of water facilities were functional and 1% had soap for washing hands. This shows that some school girls were unable to manage their menses hygienically and properly.

Despite the existing evidence of poor menstrual management among public school girls in rural Tanzania, still there is a lot of misconception about the challenges related to menstruation management to school girls in rural areas where there is plently of social and economic challenges. It is for this reason the study was designed.

1.3 Study Rationale

The study findings will contribute into informing targeted interventions for addressing issues sharping the challenges experienced by girls during the management of their menses in secondary school and also inform strategies for improving school environments to better support to girls during their menses.

1.4 Conceptual Framework



The conceptual framework for assessing challenges facing secondary school girls during menstruation period. As indicated showing relationship between variables categorized into personal factors, interpersonal relationship and role, and school environmental factors.

1.5 Research Questions

1.5.1 General Research Question

What challenges do secondary school girls face during menstruation management in Tarime district?

1.5.2 Specific Research Questions

1. What do school girl know about menstrual hygienic management in Tarime district?
2. What are the sources of information on menstrual hygiene management among secondary school in Tarime district?
3. How is the the school environment supportive to menstruating school girls in Tarime district?
4. **What type of absorbent materials do girls use during menstruation in Tarime district?**

1.6 Objective of the Study

1.6.1 Main Objective

To assess challenges facing secondary school girls during menstruation management in Tarime district, Tanzania.

1.6.2 Specific Objectives

1. To asses' knowledge on menstruation among secondary school girls in Tarime district council.
2. To determine sources of information on menstrual hygiene among secondary school girls in Tarime district.
3. To determine the appropriateness of school environment in supporting menstruating school girls.
4. To find out what type of absorbents materials girls use during menstruation in Tarime district.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Knowledge on Menstruation

Knowledge about menstruation plays a vital role in the practices girls will undertake during menstruation. School girls represent a vulnerable group not only with regards to their social status but also in relation to their health. In this regard, menstruation is recognized as unclean or dirty in society (14). A study that was done in West Bengal with 160 respondents reported that, the majority of the girls did not fully understand the physical process of menstruation hence was not prepared for their first period (14). Furthermore, the study reported that many girls were ignorant of scientific facts about menstruation and proper hygienic practices. There was inadequate or lack of knowledge about menstruation leading to poor menstrual hygiene practices among school girls(5,15). Hence evidence gathered from South Asia reveal that formal education about reproductive health is very limited among girls attending school(16).

In a study done in south Asia (17), it was reported that girls' information on menstruation is mainly about ritual practices, cultural issues and behavioral cautiousness towards males. The study revealed that there was very little or no information regarding the physiological process. Lack of knowledge of menstruation management practices, and a very limited access to facilities needed to maintain good menstrual hygiene were all evident. Similarly, another study by Shanbagh et al (15) also revealed existence of inadequate knowledge of the menstruation process among school girls. The majority of the girls in this study said they had heard about menstruation, but none of them understood its process and its related hygiene management practices (17).

Limited understanding around menstruation among school girls as observed above exposes adolescent girls to different health risks and social difficulties. To combat the health and associated challenges menstruation poses to the girl child, development practitioners needs to have good understanding of what school girls know regarding menstruation management and implements effective interventions to educate them (18).

A study done by Reigh (19) reported that approximately 10 % of women worldwide are exposed to genital infections including urinary tract infections and bacterial vaginosis each year. Similarly, 75 % of women have a history of a genital infection due to lack of knowledge on proper menstrual management. Specifically, the common risk factors for vaginal infections include pregnancy and poor hygiene. Moreover, there is low usage of sanitary pads among women in Africa. For instance, only 18 % of Tanzanian women and school girls use sanitary pads, the rest use cloth or toilet paper during menstruation (20)

2.2 Sources of Information on Menstruation among School-Girls

Literature reveals lack of information on menstrual management among schoolgirls, a situation made worse by the shyness and embarrassment with which discussions about menstruation is treated. Most of school girls seek information about menstruation from their peers who do not know better than what is expected about menstruation, hence sometimes misled with the information given (32). Adolescence being a time of tremendous opportunity and at the same time also a time of heightened vulnerabilities, it is imperative to empower girls with adequate information and skills on crucial issues like menstrual hygiene and its management. According to findings of a study done in Nigeria (34), information on reproductive health for schoolgirls is acquired from parents (56.1%), friends (53.18%), books (45.56%), teachers (44.15%), and internet (45.19%), and health centers (54.14%). Another study revealed that mothers were the main source of information for up to 75% of girls, and sisters were the source of information for 8.6% of girls (35). However, peers and media are the most common sources of information about sexuality and reproductive health.(21).

Some students said that mothers do not teach their daughters about menstruation because they think it makes children impudent, others expressed embarrassment of discussing it with their mothers, and some students believed that their families should not be involved in their sexual education(21).

According to the study done in Egypt (22), media and peers often have negative effects, and incorrect peer education can cause irreversible health and social consequences on the students. Promotion of sex education by parents and religious leaders and their attention to their

children's attitudes about sex is related to delayed sex (23). However, it seems that mothers are the best people to convey basic information about reproductive health to their daughters, but embarrassment, inadequate knowledge, some myths, and misconceptions of mothers in fields of reproductive health becomes a barrier in this regard (24). Mothers need proper and adequate knowledge about physical and emotional changes of teenagers to recognize any deviations from reproductive health and also to overcome the shyness that might be related to sexual and reproductive health sensitization (25).

In Tanzania, the ministry of Health, Community Development, Gender, Elderly and children and the ministry of Education and Vocational Training. have been working together with organizations to promote reproductive health care as one among the main concerns (26). However, due to cultural restrictions, sexual and reproductive health education is not provided effectvelly. Lack of adequate information about puberty and menstrual hygiene in many girls in Tanzania has led to unhealthy and incorrect behaviors during the menstrual period (27).

2.3 Suitability of school environments to menstruating girls.

Lack of or proper menstrual hygiene and practices especially among girls in school environment have extremely negative consequences. Example, using of unclean sanitary cloth to absorb blood flowing from the cervix during menstruation can expose an individual to infection which she shouldn't have in the first place (28).

The absence or insufficiency sanitary products and materials of all types, water, soap, and sanitary facilities like private rooms for changing, mirrors to be used and incenarators to help burn the materials used during menstruation, influences the achievement of menstrual health management among the schoolgirls. This is because efficiency of the menstruation is higly based on the best sanitation practices as well as the individual best self hygine efforts. Otherwise it can be a threat to individual health and community at large. Example, a study conducted in Asia by (29) showed that only one out of the twenty selected schools had a girls-only private space for changing sanitary products when menstruating and only two had water close by.

Good menstrual hygiene depends on clean water supply for cleaning and washing as well as adequate sanitary facilities for changing menstrual products during menstruation especially during school sessions (30). Because of this, supplies of menstrual sanitary materials, availability of private facility for changing and access to soap and water is crucial to better hygienic and healthy well-being. On the other hand, the absence or insufficient accessibility to good menstrual facilitation resources are part of the reasons why school girls do not wash their hands or adequately manage menstrual hygiene well at government owned schools (18,29). Whereas sometimes these resources appear to be available, there could be deprived access to hygienic and functioning sanitary facilities for adolescent girls leading to poor management of menstrual flow (47).

The reason for this is attributable to the fact that the facilities may either be under lock and key or not provided (28). It is known that, there are health risks to which schoolgirls are predisposed as a result of improper hygiene practices. Example during menstruation, stigmatization of school girls on period can occur because menstrual blood has a bad odor which can spread all through the body when proper hygiene practice is not exhibited by the girl child.

Thus, researching into challenges faced by school girls in Tanzania during menstruation is very important so as to know and tackle various health issues associated with it. This is because a girl child has a right to education which is an asset that will yield long term gains for her immediate family, nation and enhance sustainable development for future generation (31). Absenteeism from school at menache atainment or onset of menstruation, is associated with menstruation health management (MHM) issues and this could become a barrier to the school girls education (29).The reason is being fear of staining their school uniform with menstrual blood, abdominal cramps and loss of concentration during school lessons (28).

2.4 Types of absorbent materials used during menstruation.

The preference of sanitary material is based on personal choice, cultural acceptability, economic status, and availability in local market. Along with basic sanitation facilities, one should be also provided with soap and menstrual absorbents to manage menstruation hygiene. The choice of absorbents varies among rural and urban girls. In rural areas, the most preferred absorbents are reusable cloth pads and in urban areas women prefer to use sanitary pads bought from the shops. Chlorine-bleached kraft is used by manufacturers to produce absorbent used to make disposable sanitary products. These products contain chemicals like organochlorines which have antibacterial activity. Due to their chemical composition, these products when buried in the soil they kill the soils microflora and delay the process of decomposition(32)

There are different menstrual products used by girls during menstruation reusable and washable cloth pads, they may be sustainable sanitary option but must be hygienically washed and dried in the sunlight. The sun's heat is a natural sterilizer sterilizes them for future use. These cloth pads are reusable so they are cost-effective, easily available, and ecofriendly. They also need to be stored in a clean dry place for reuse to avoid contamination.(32)

Commercial sanitary pads, are easily available in many stores, chemist shops, or online. They are expensive, compared to cloth pads, and not very environment-friendly. The cotton used in their making is not 100% natural and may contain pesticides.

Tampons, they are the type of absorbent that provides internal protection. They are kind of plug of soft material (cotton) which is inserted into the vagina to absorb the menstrual flow before it leaves the body. They are expensive, not easily degradable in nature and, hence, not very environmental friendly(11).

Reusable tampons, these are washable tampons made up of natural materials like bamboo, wool, cotton, or hemp. They are also knitted or crocheted using the natural absorbent material like cotton or wool. They are inserted into the vagina to absorb menstrual flow same as the disposable tampons(33).

Menstrual cups, they are a new technology for women and girls and an alternative to sanitary pads and tampons. They are like cups made of medical grade silicone rubber which makes the cup easy to fold and get inserted into the vagina to collect menstrual blood. They can be worn up to 6–12 hours depending upon the amount of menstrual flow, so it needs to be removed and emptied less frequently. They are reusable and environment-friendly. It offers sustainable, practical, and cost-effective alternative where sanitation conditions are not good(34).

Despite the fact that all these materials are available for use still there is a challenge for school girls to access and use the right sanitary ware during their menses. Moreover, there is low usage of sanitary pads among women in Africa. For instance, only 18 % of Tanzanian women and school girls use sanitary pads, the rest use cloth or toilet paper during menstruation (20).

CHAPTER THREE

3.0 METHODOGY

3.1 Study Area

The study was carried out in Tarime District. The District is located in the Lake zone of Tanzania. It has an area of about 11,150 km square and about 7,250 km square is covered with water from Lake Victoria. Tarime District is among the five districts of Mara region. The dominant tribe in the district is Kurya.

According to (Tanzania National Census 2012), the District has a population of 339,693 people out of which 176,331 are females and the rest are males. In 2011 the district had 129 primary schools, 27 secondary schools and 2 colleges. **Tarime is one of the rural areas where information on challenges facing secondary school girls in menstrual management is limited and its geographical asessibility to the researcher made it an appealing choice for the study.**

3.2 Study Design

This was a cross sectional study design.

3.2.1 Dependent variable

Challenges in menstruation management.

3.2.2 Independent variable

The independent variable included. Source of information regarding menstruation, knowledge on menstruation, school environment and sanitary facilities and sociodemographic factors such as age of the student.

3.3 Study Population

Secondary school girls in Tarime district council.

3.3.1 Inclusion criteria

School girls from form one to form four and who were present in class on the date of data collection and provided consent to take part in the study.

3.3.2 Exclusion criteria

School girls who had not yet attained menachy.

3.4 Sample Size determination

In this study the sample size was calculated using the following proportion formula.

$$n = \frac{Z^2 P (1-P)}{C^2}$$

Where by n = Sample Size, Z = Z value which is 1.96 for a 95 percent confidence level, P = Proportion of student and C= margin error

According to a study done by TAWASANET (2015) in Tanzania 27% of girls do not get support from teacher on menstrual hygiene matters. Thus this was used as the proportion to calculate the sample size.

C = Margin of error used in the study was 5% as expressed in decimal 0.05.

Therefore, n

$$= \frac{(1.96)2 \times 0.27 \times (1-0.27)}{(0.05)2} = 302 \text{ participants}$$

Since the sampling involved multi stage clusters of schools and classes, we applied a design effect of 1.5 (as per TDHS 2015/16). Thus, the sample size, n = 453 with non-response rate of 10% (453/0.9).

Therefore, sample size that was used in this study was 503

3.5 Sampling Procedure

A sampling frame consisting of secondary schools in Tarime district was created. From the list of 15 secondary schools, 6 schools were randomly selected. From each selected school a sampling frame consisting of all classes was created and in each school one class was selected randomly, and all the girls in the selected class were eligible to participate in the study.

3.6 Data Collection Method

Self-administered questionnaire was used to collect data from the student. Concepts that were measured using this tool included knowledge of menstruation, source of information on

menstrual issues, when and from whom they learned about menstruation, management of menses including what they used during menstruation.

A checklist was developed to assess the apropriateness of the school environment to accommodate requirements of girls during menstruation. This tool assessed availability of water, privacy for changing pads, availability of emergency pads, facilities for disposing used pads, and availability of pain relief medication to use during menstruation, conditions of the toilets used by the girls and the number of toilet available to accommodate the school girls.

3.7 Selection and training of Research Assistants

Two research assistants were recruited to assist with the data collection activities and were trained for two days. The training session focused on orienting the assistants on the study objectives, how to obtain informed consent from the respondents, data collection method and other ethical issues related to data collection including confidentiality and anonymity of the study participants. The training was conducted by the principal investigator.

3.7.1 Pre-testing

Before actual data collection exercise, pre-testing of the questionnaire was conducted to have a common understanding of the tool and questions that were not clear to the respondent were rectified accordingly.

3.7.2 Validity

The questionnaires were pre-tested in one school in tarime district that was not among the sampled to participate in the study. The tool was shared to two expert working with reproductive health programme in Tanzania who assesd its validity.

3.7.3 Reliability

Thorough literature review was done to determine the questions used in the study. Test-retest method was used to determine reliability. The questionnaires were pretested twice to the same respondents three weeks apart. Comparison in responses was done using t-test at 95% confidence interval.

3.8 Data management and analysis

The data collected was checked on a daily basis for completeness, consistency and accuracy. Data collected was entered, cleaned and analyzed using Statistical Package for Social Sciences (SPSS) software version 20.

The level of knowledge of menstruation was measured using 23 knowledge questions, where the questions were marked and the right answer was given a score of one and the wrong answer was given a score of zero, the lowest score on the scale was 0 and the highest was 23. Proportions, median and range were used to express descriptive data and cross tabulations were done.

Ethical Consideration

The ethical clearance for the study was obtained from the Muhimbili University of Health and Allied Sciences Institutional Review Board with refence number. Further permission to conducted the study was sought from the Mara Region adminstrative office and the Tarime District Council. Permision was granted from the Regional and District offices to carry out the study in all participating schools, Headteachers of the respective schools were also informed about the study in detail and provided permission to carry out the study in their specific schools.

During data collection, the study respondents were given information on the study, the benefits and risks for their involvement and were assured of annonymit and their confidentiality. None of the individual identifiers were collected and study results are presented in aggregates. **Written informed consent was obtained from the study respondents and all the questionares were filled in a classroom where privacy and confidentiality was assured.**

CHAPTER FOUR

4.0 RESULTS

4.1 The Study Sample

A total of 506 secondary school girls participated in this study. Their age ranged from 13 to 20 years with median age of 16 years. The majorities (75.9%) were between 15 and 17 years and only a few (4.9%) were under 15 years old. Most of them (89.1%) were in day schools while the rest were in boarding schools. Almost all of them (98.2%) were Christians and the rest were Muslims. About three fifths (61.9%) lived with both parents, 17 % lived with mothers as single parents, 7.3% lived with their fathers and 5.6% had other accommodation arrangements including living with other relatives. The demographic characteristics of the study respondents are as summarized in Table 1 below:

TABLE 1: SOCIO-DEMOGRAPHIC DESCRIPTION OF THE STUDY PARTICIPANTS

Variables	Frequency (N=506)	Percentage
Parents marital status		
Married	373	73.7
Separated	49	9.7
Single	37	7.3
Widow	38	7.5
Widower	8	1.6
Divorced	1	0.2
Fathers' level of education		
Illiterate	66	13.0
Primary	226	44.7
Secondary	135	26.7
Post-secondary	62	12.3
Mothers' level of education		
Illiterate	94	18.6
Primary	285	56.3
Secondary	109	21.5
Post-secondary	18	3.6
Occupation of the fathers		
Peasant	311	61.5
Petty business	93	18.4
Government employed	48	9.5
Private employed	19	3.8
Not employed	15	3.0
Others	4	0.8
Occupation of the mothers		
Peasant	236	46.6
Petty business	201	39.7
Government employed	19	3.8
Private employed	8	1.6
Not employed	40	7.9
Others	2	0.4

4.1.1 Menstrual History

All girls had attained menarche at the time of the study. Age at first menstrual period ranged from 9 to 17 years with median age of 14 years. About a third (31.6%) learned what to do during menstruation before the first period, 28.9% learned during the first period and the rest after the first menstrual period.

Mothers were reported to be the first confidants of the first menstrual experience to a half (53.2%) of the girls and 25.7% reported their first experience to their sisters. The rest revealed their first mentrual experience to aunts, grandmothers, teachers and peers or friends.

The first menstrual experience was associated with a variety of reactions. About two- fifth (39.7%) said they were scared, 18.8%% felt uncomfortable and the rest said they were distressed, shameful or happy as summarized in figure 1.

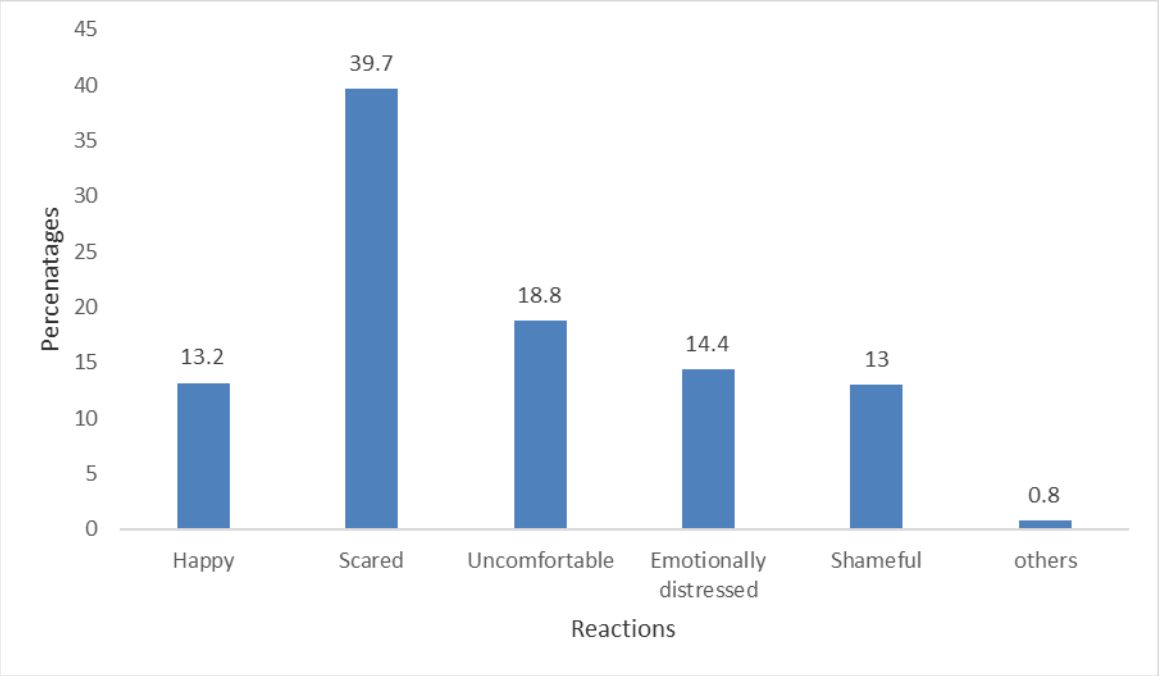


Figure 2: Respondents reactions to the first menstrual period.

4.2 Knowledge on menstruation management

A total of 23 questions were set to measure knowledge on menstruation and menstrual hygiene. Each correct answer scored one point and wrong answer scored zero. The lowest score on this scale was 0 and the highest was 23. Scores obtained by the study participants ranged from 3 to 19. Those who scored less than 11 points categorized in a low knowledgeable group, 11 to 13 were put in a moderate knowledge category and those whose scores were more than 13 were considered to have high knowledge. Based on this scale, nearly half of the girls (47.2%) had moderate knowledge about menstruation, and very few (9.9 %) had high knowledge as summarized in figure 3.

Most of girls (95.7%) knew that menstrual period is the result of hormonal changes in the body. However only 20.9% reported Urinary Tract Infection as the possible disease that one can be infected with during menstruation if she has poor hygiene. About 59% of the girls knew menstrual blood has an effect in their body while 41.5% understood that the blood flow had no effect in the body,

Awareness about menstruation was generaly low. Less than 10% had high scores in the test which was administered and 42.9% had low scores.

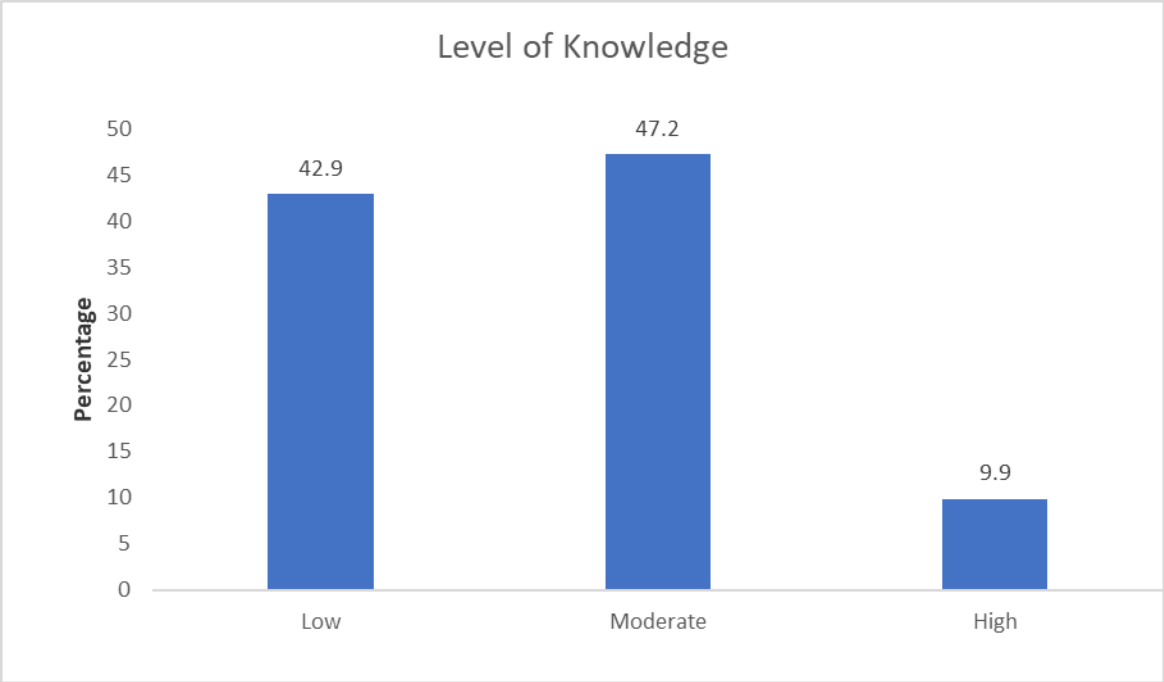


Figure 3: Level of knowledge on menstruation

Table 2: Variation of knowledge of school girls about menstruation by age

Variable	Level of knowledge				P value
Age	Low n (%)	Moderate n (%)	High n (%)	Total	
14 years	13(52.0)	12(48.0)	0(0.0)	25(100.0)	0.33
15-17 years	166(43.2)	181(47.1)	37(9.6)	384(100.0)	
18 years	38(39.2)	46(47.4)	13(13.4)	97(100.0)	
Total	217(42.9)	239(47.2)	50(9.9)	506(100.0)	

Low knowledge scores decreased with increasing age varying from 52% among study participants who were 14 years of age to 39.2% among those who were 18 years and above. High knowledge scores increased with increasing age varying from 9.6 % among girls with 15-17 years to 13.4 % among who were 18 years and above. These variation was not statistically significant, hence p value =0.33 which is more than 0.05.

4.3 Sources of information on menstrual hygiene

Mothers played a prominent role in socializing the girls on issues related to menstruation. They were the most preferred source for information on various aspects of menstruation compared to other people as summarized in table 3.

TABLE 3: SOURCES OF INFORMATION ON MENSTRUATION

Variables	My mother N (%)	My sister N (%)	Other sources N (%)
.			
First source of information on menstruation	213 (42.1)	131 (25.9)	162 (32.0)
First Source of information on use of sanitary pads	181 (35.8)	150 (29.6)	175 (34.6)
First source of information on how to clean yourself during menstruation	215 (42.5)	146 (28.9)	145 (28.7)
Source of information on effects of sex during menstruation	229 (45.3)	131 (25.9)	146 (28.9)
Source of information on how one should behave during menstruation	208 (41.1)	120 (23.7)	178 (35.2)
Source of information on restricted activities during menstruation	199 (39.3)	114 (22.5)	193 (38.1)

4.4 Suitability of the school environment for Menstruating Girls

A checklist was used to observe the school environment for its suitability in providing support to menstruating girls. It was observed that all schools had separate pit latrines for both boys and girls. None of the schools had the recommended toilet ratio of one pit for every 20 students. In all the school the toilet ratio per school girls ranged from 26 to 42 students per a hole, as shown in Table 4.

Table 4: Student toilet ratio in the schools

School code	Number of girls	Number of pit latrine.	No of student per pit latrine.
001	195	5	39
002	149	4	37
003	216	7	31
004	158	6	26
005	211	5	42
006	188	6	31

None of the shools had piped water. All schools either relied on rain water stored in tanks or fetched water from streams which were far from the school compounds. Regarding privacy in the toilets, only 3 out of 6 schools had toilets with doors that can be locked. The rest of the schools had no proper door locks or the door locks were damaged.

There was no soap or water available in any of the toilets and only one school had a dustbin for disposal of solid wastes including the sanitary wares. The rest of the schools used the pit latrines to dispose their wastes as such some of the wastes were seen littering in the school compound especially around the toilets area. None of the schools had either incenarators to burn used sanitary pads or emergency pads for menstruating girls. Furthermore, none of the schools had pain relive medicine for girls who experienced pain during menstruation.

Generaly the toilets were dirty. All schools had urine around the toilets holes, four schools had fecal materials around the toilets holes and five schools had toilets with very unpleasant smell with cobwebs, and dust spread all over.

4.5 Materials used during menstruation

During the first menstrual period girls reported to have used different types of sanitary materials. It is only 50.4% of the girls who reported to use disposable sanitary pads during their first menstruation period. However, the use rate of disposable sanitary pads among the respondents increased to 70.8 % at the time of the study, see figure 4 below:

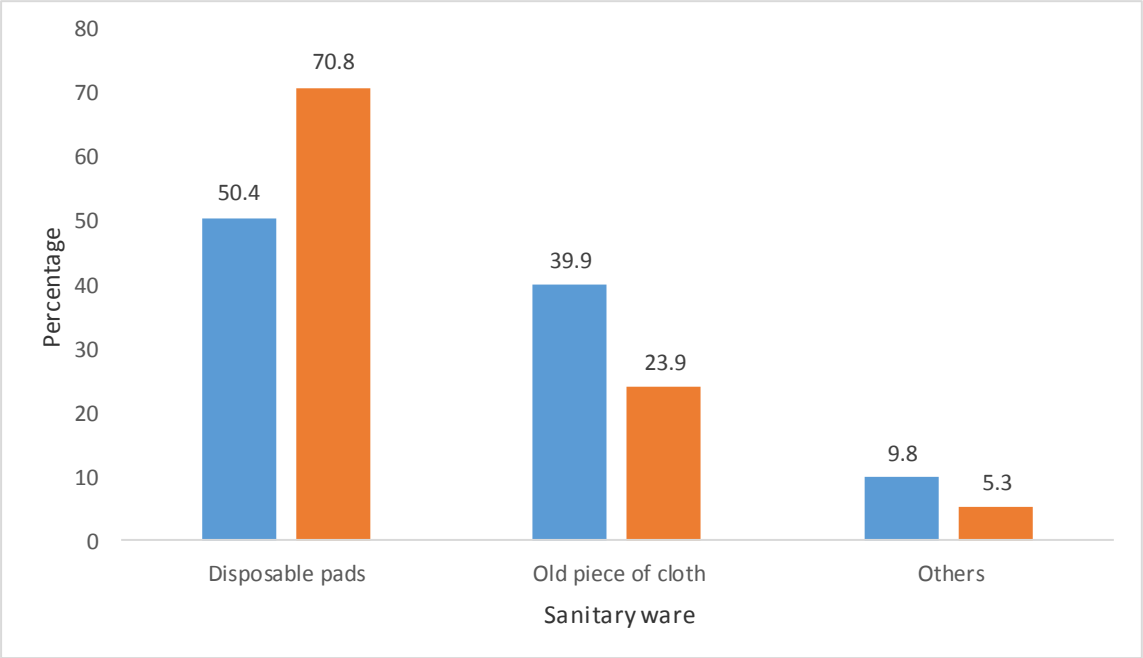


Figure 4: Materials used at first menstruation

Currently use

Use at first menstrual period

Table 5: Variation of the materials used at first menstruation by mothers' education level.

Variable	Girls used at first menstruation				P value
Mothers education level	**Disposable sanitary pads**	**Old piece of clothe**	**others**	**Total**	
Illetrate	34 (36.6)	49 (52.7)	10(10.8)	93(100)	0.01
Primary	133 (47.0)	121(42.8)	29 (10.2)	283(100.0)	
secondary	73 (67.0)	26(23.9)	10 (9.2)	109(100.0)	
Post secondary	15 (83.3)	6 (33.3)	0 (0)	18(100.0)	
Total	255 (50.4)	202 (39.9)	49 (9.7)	506(100.0)	

The table above shows that despite the education level of the parent, the girls had a chance to use the disposable sanitary wares during menstruation. But girls whose parents reached post education level were more aware of the right material to use during menstruation. None of the girls whose parents reached post education level used other material like leaves, tissues or mud.

Of the girls whose parents were illiterate 10.8 % used other materials like leaves, tissue paper and mud. Thus the education of the mother also influenced what girls used during menstruation. **This variation was statistically significant hence (X^2 =29.356 P-value =0.01)**

CHAPTER FIVE

5.0 DISCUSSION

Knowledge on menstruation among school girls

This study assessed school grils level of knowledge on menstration. About 50% of the girls had low knowledge on menstruation and the level of knowledge increased with their increased age. This is similar with the results from a study done in Nigeria that reported association of increased age withnd increased knowledge about menstruation issues.(35) Similar results were reported in West Bangal by Sarkar (14) where the majority of the girls did not fully understand the physical processes of menstruation and as a result were not prepared for their first menstrual period (14).

The results of this study showed that girls who were taught by their mothers about menstruation were more knowledgeable than those who were taught by their sisters or other people. The same observation was made in Nigeria and Nepal where mothers were are reported as the a common source of information on menstruation and girls informed about menses by their mothers were forund to be more knowledgeable than those who acquired similar information from other sources ((16),(36)).

In this study girls who learnt about menstruation before their first menstruation period were more knowledgeable than those who learned during and after first menstrual period. Having learnt things to do prior to menstruation increases the likelihood that one will inquire enough knowledge about it hence will improve her confidence in experiencing first menstrual period (49) and thus reduced challenges during menstruation (37) . Communication barrier due to social taboos in discussing menstruation with young girls contributes into making girls unprepared to manage menstruation.

Sources of information on menstrual hygiene management

The study results showed that, more than half of the girls preferred to get menstrual information from their mothers. It also shows that mothers were the main source of information to the girls on how to use sanitary wares, cleaning themselves during menstruation and effects of having sex while in their menstruation periods. This simply means that mothers play a key role in girl's upbringing such that they provide a road map to girls as they transition from teenage to adult hood. This is in line with what was reported in India and Nigeria that mothers were the common source of menstrual health information to their daughters (38), (39). Such an observation indicates the usefulness of the cultural attachments between mothers and their daughters. Mothers happened to be reliable and easily available source of information to their daughters about menstruation; however their information is sometimes occupied by cultural based myths and customs that may not always be healthy and hygienically recommended (14). This calls for the need to continuously engage mothers in reproductive health education programmes to facilate the transfer of the right knowledge for safe and healthly growth especially during adolescence period

Suitability of the school environment for Menstruating Girls

In the study it was observed that there was no water or soap available in the toiles in all schools visited. Half of the schools had toilets with inside locking doors and only one school had dust bin available for disposing used sanitary wares. All schools had no incinarators to help the girls burn the pads in the school compound. Unsatisfactory supporting environments for menstruating girls in school have been also reported in other settings ((7), (40), (11), (41)), where poor supporting school environment for menstruating girls is linked with missing school during menstruation. In the current study that half of the girls reported missing schools during their menses with majority mentioning fear of staining their clothes and inability to buy sanitary pads as reasons for the practice. Poor school envirionment regarding menstrual health and lack of finances contributes to deprivation in quality education for adolescent girls as they have to miss schools during their menstrual periods to maintain their privacy. This is similar to what

has been reported by Vashisht et al **from a study among teenage girls in India whereby about 75% of the girls could not attend school during their menstruation days due to poor school infrastrusture to avoid shame and physchological torture associated with menstruation.**

Materials used during menstruation

Half of the girls in the study used disposable sanitary pads during their menstrual periods, more than one third used old piece of clothes and less than a quarter used other materials. This finding is different to a study conducted in north west Tanzania in 2009 where only 18% of the girls reported the use of sanitary pads during their menses (20). Similar observation was also recorded in India where only one fifth of the school girls used disposable sanitary pads in their menses (41). This difference may be explained by advancement in technology, promotion and awareness raising activities on the use of sanitary pads as well as the effect of different community programmes that tagets on accessibility and affordability of sanitary pads to school girls. (37). Although the higher use of sanitary pads in the study may suggest success of the reproductive health and menstrual hygiene management compaigns yet efforts are needed to improve accessibility and affordability of disposable sanitary pads to school girls to ensure no one is left behing into using other natural materials like piece of clothes or foam of mattress as they may not be healthy.

Study limitation

Due to sensitivity of the study on girls' personal hygiene some were not willing to participate in the study to share their personal information. This was minimized by ensuring confidentiality and that the questionnaires are filled privately in a separated classroom that was only used for research on the data collection date.

CHAPTER SIX

6.1 CONCLUSION

Most of the study participants had moderate knowledge on menstruation and mothers were the common source of information to the majority. Poor school envornment, sanitary facilities and the fear of staining clothes challenged girls in their school attendace during menses.

There is a need to prepare girls on matters related to menstruation earlier before they attain menarche and to improve the school environment to become friendly to girls during menses.

Although the higher use of sanitary pads in the study may suggest success of the reproductive health and menstrual hygiene management compaigns yet efforts are needed

Efforts to improve accessibility and affordability of the disposable sanitary pads to school girls are recommended, to ensure no one is left behing into using other natural materials like piece of clothes or foam of mattress as they may not be healthy.

6.2 RECOMMENDATIONS

The following recommendation should be considered to improve menstruation management among school girls.

1. **Health and reproductive health education sesseions in school should be strenghterned to include talks on menstruation hygiene management to help student's increase knowledge on menstruation.**

2. **Efforts to improve accessibility and affordability of the disposable sanitary pads to school girls should be strengthened.**
3. **School envrionments needs to be improved with special consideration on safety and privacy of the girls during menstruation.**

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APPENDICES

Appendix 1: informed consent form– English version

Muhimbili University of Health and Allied Sciences

Directorate of Research & Publications.

Id-no _____

Consent to participate in this study

Greetings, my name is hellen mwita from Muhimbili University of health and allied sciences, Dar es Salaam. We are carrying out a study on challenges facing secondary student girls during menstruation in tarime district council.

Purpose of the study

This study has the purpose of collecting information from secondary student girls on challenges facing secondary student girls during menstruation period in tarime district council. You are being asked to participate in this study because you have particular knowledge and experiences that may be important to the study.

What participation involves

If you agree to participate in this study, you will be required to answer series of questions that have been prepared for the study in order to obtain the intended information regarding challenges faced during menstruation period in tarime district council.

Confidentiality

I assure you that all the information collected from you will be kept confidential. Only people working in this research will have access to the information. We will be compiling a report which will contain responses from several secondary girls' students without any reference to any individual. We will not put your name or other identifying information on the records of the information you provide.

Risks

You will be asked questions about challenges that are faced during menstruation period in the school environment. Some questions could potentially make you feel uncomfortable. You may refuse to answer any particular question and stop the interview at any time. We do not expect any harm to happen to you because of participation in this study.

Right to withdraw and alternatives

Taking part in this study is completely your choice. If you choose not to participate in the study or if you decide to stop participating in the study you will not get any harm. You can stop participating in this study at any time, even if you have already given your consent. Refusal to participate or withdrawal from the study will not involve penalty or loss of any benefits to which you are otherwise entitled.

Benefits

The information you provide will help to increase our understanding on menstruation challenges for secondary students in tarime district council, and communicate the findings to policy makers in the council and ministry for improvement of menstruation hygiene services in the district as well as in the country.

In case of injury

We do not anticipate that any harm will occur to you or your family as a result of participation in this study.

Who to contact

If you have questions about this study, please don't hesitate to contact:

Hellen mwita, the **principal investigator** muhimbili University of Health and allied sciences (muhas), P.O BOX 65001, dar es salaam (Tel. No. 0752817439).

You may also contact my supervisor, professor melkizedeck leshabari P.O. BOX 65001, dar es salaam (+255754287062).

If you ever have questions about your rights as participants, you may call Dr. Bruno sunguya chairman of senate research and publications p. O. Box 65001, Dar es Salaam. Tel: 2150302-6, 2152489.

Signature

Do you agree?

Participant agrees…… participant does not agree……..

I ……. Have read the content in this form, my questions have been answered, i agree to participate in this study

Signature of participant…….……

Signature of research assistant……

Date of signed consent……

Kitambulisho; 2

CHUO KIKUU CHA AFYA NA SAYANSI YA TIBA MUHIMBILI

KURUGENZI YA UTAFITI NA UCHAPISHAJI

FOMU YA RIDHAA KUSHIRIKI KATIKA UTAFITI

ID-NO _____

Ridhaa ya kushiriki

Habari. Ninaitwa……. Ninafanya kazi ya kutafiti changamoto anazozipata mwanafunzi wa kike anapokua katika hedhi shuleni,katika wilaya ya Tarime vijijini mkoa wa Mara.

Madhumuni ya utafiti

Utafiti huu unakusudia changamoto anazozipata mwanafunzi wa kike anapokua katika hedhi shuleni,katika wilaya ya Tarime vijijini mkoa wa Mara. Unaombwa kushiriki kwenye utafiti huu kwa sababu unaoujuzi ama unafahamu matukio ambayo ni ya muhimu.

Nini kinahitajika ili kushiriki

Ili kushiriki katika utafiti huu inabidi kukubali na kujiunga kwa kujibu maswali toka kwenye dodoso wa kwa ajili ya utafiti huu.

Usiri

Ninakuhakikishia kuwa taarifa zitakazokusanywa kutoka kwako kupitia dodoso hili zitakua siri na hakuna mtu yeyote ambaye hafanyikazi kwenye utafiti huu atakayeambiwa ulichosema. Itaandaliwa taarifa ya utafiti huu ambao hautamtaja mshiriki yeyote. Jina lako wala

utambulisho mwingine wowote hautawekwa kwenye taarifa unazozitoa. Taarifa zako zitaingizwa kwenye ngamizi kwa kutumia namba za utambulisho.

Hatari

Hakuna hatari yeyote itakayotokea kwako kutokana na ushiriki wako kwenye utafiti huu

Haki ya kujitoa au vinginevyo

Ushiriki katika utafiti huu ni hiari. Kutokushiriki au kujitoa kutoka kwenye utafiti hakutakua na adhabu yeyote na hutapoteza stahili zako endapo utaona ni vema kufanya hivyo.

Faida

Kama utakubali kushiriki kwenye utafiti huu itakua ni fanasa kwa vile utafiti huu una lengo la kuboresha huduma za wasichana wa kike wanapokua shuleni wakati wa hedhi kwenye wilaya ya Tarime Vijijini Mkoa wa Mara.

Endapo utapata madhara au la

Hatutegemei kupata madhara yoyote kutokana na ushiriki wako katika utafiti huu.

Nani wa kuwasiliana naye

Kama kuna swali kuhusiana na utafiti huu itakubidi kuwasiliana na mtafiti mkuu Hellen Mwita wa Chuo Kikuu cha Afya na Sayansi ya Tiba Muhimbili, S.L.P. 65001 DSM. Simu (Tel: 0752817439). Kama una maswali zaidi unaweza kuwasiliana na msimamizi wangu wa utafiti professor melckezedeck leshabari P.o. Box 65001, dar es salaam (+255754287062).

Pia unaweza kuwasiliana na Daktari Bruno Sanguya, kaimu Mkurugenzi wa Utafiti na Uchapishaji, Chuo Kikuu cha Muhimbili S.L.P. 65001 DSM, simu namba: 2150302-6, 2152489

Je, Umekubali?

Mshiriki amekubali…… Mshiriki hajakubali……

Mimi……...nimesoma maelezo ya fomu hii, maswali yangu yamejibiwa na nimeridhika. Nakubali kushiriki katika utafiti huu.

Sahihi ya Mshiriki……

Sahihi ya mtafiti msaidizi……

Tarehe ya kutia sahihi ya kushiriki…….

Tareheyakutiasahihiyakushiriki…….

Questionnaire for school girls

Part a: demographic characteristics: i would like to ask you about yourself. (Please put a tick on or write the correct answer required)

1. How old are you? ……..(years)
2. Please write down your year and month of birth…….
3. Please tick the religion you belong to
    a. Christian
    b. Muslim
    c. Others……..
4. Please tick the form you belong to
    a. Form 3
    b. Form 4
5. Is your school a mixed school of boys and girls or a girls school only?
    a. Mixed
    b. Girls only
6. Is your school private school or a government school?
    a. Private
    b. Government
7. Is your school a bording school or aday school?
    a. Boarding
    b. Day school
8. What is your parent's marital status?
    a. Married
    b. Separated
    c. Single
    d. Widow GO TO QN 12
    e. Widower
    f. Co habiting
    g. Divorced

9. What is your father's education level?
    a. Illiterate
    b. Primary
    c. Secondary
    d. Post-secondary education
10. What is his occupation?
    a. Peasant
    b. Petty business
    c. Employed –government
    d. Employed –private
    e. Non employed
    f. Other specify…….
11. What is your mother's level of education?
    a. Illiterate
    b. Primary
    c. Secondary
    d. Post-secondary education
12. What is her occupation?
    a. Peasant
    b. Petty business
    c. Employed –government
    d. Employed –private
    e. Non employed
    f. Other specify
13. Who do you live with?
    a. Both parents
    b. Father
    c. Mother
    d. Other relatives

e. Hostel
f. Rent accommodation
g. Others (specify)…….

14. State the level of education of the person you live with as you indicated in question 13 above
    a. Illiterate
    b. Primary
    c. Secondary
    d. Graduate
15. What is the type of occupation of the person you live with as you indicated in question 13 above?
    a. Peasant
    b. Petty business
    c. Employed –government
    d. Employed –private
    e. Non employed
    f. Other specify…….

Knowledge on menstrual hygiene: please let us now talk about menstruation.in this section you will answer the question based on your knowledge about menstruation.

16. Menstruation period is a result of?
    a. Don't know
    b. Hormonal change
    c. Sexual transmitted diseases
17. From which organ does menstrual blood comes from?
    a. Don't know
    b. Vagina
    c. Abdomen
    d. Uterus

18. What is it that should be used to clean your external genitalia during menstruation period?
    a. Water only
    b. Water and soap
    c. Don't know
19. What is the frequency of menstruation for a girl within a month?
    a. Once every month
    b. Twice every month
    c. More than three times every months
20. What are some of the hygienic practices a girl should do during her menstruation period? (please tick all that is correct)
    a. Take a bath frequently
    b. Change her menstrual product regularly
    c. Clean with soap and water
    d. None of above
21. How many times a day during menstruation when the flow is heavy should menstrual product be changed?
    a. Once a day
    b. Twice a day
    c. Three or more times
22. Does blood flow during menstruation have any effect in your health?
    a. Yes
    b. No
23. Can one be infected by some diseases if she does not handle herself hygienically during menstruation?
    a. Yes
    b. No

24. What are some of the diseases one may be infected with if not hygienically handled during menstruation? (please tick the correct answer)
    a. Urinary tract infection
    b. Bacterial vaginosis
    c. Don't know
25. What are some of the problems one may face during menstruation? (please tick all that apply)
    a. Hemorrhage
    b. Nausea and vomiting
    c. Abdominal and back pain
    d. Low hemorrhage
    e. Constipation and diarrhea
    f. Acne
    g. Headache
    h. None
    i. Others……
26. Is there a possibility for one to get pregnant while menstruating?
    a. The possibility is high
    b. Depends with ones body structure
    c. The possibility is small
    d. Don't know
27. Is menstruation a disease?
    a. Yes
    b. No
    c. Don't know
28. Do menstrual blood come from the stomach where food is digested
    a. Yes
    b. No
    c. Don't know

29. Does menstrual blood contain harmful substances in the body?
    a. Yes
    b. No
    c. Don't know
30. Is it harmful for a woman's body if she dances during menstruation?
    a. Yes
    b. No
    c. Don't know

Menstrual history: please give a brief about your menstruation history (please put **a tick on the correct answer or write the correct answer needed)**

31. At what age did you start your first period? ……..(years)
32. What was the reaction when you first started to menstruate?
    a. Was happy
    b. Was scared
    c. Felt uncomfortable
    d. Was emotional distressed
    e. Shameful
    f. Others specify…….
33. When did you learn what to do when you are in your menstrual period?
    a. Before the first menstrual period
    b. During the first menstrual period
    c. After the first menstrual period
34. Who first taught you what to do during menstruation?
    a. Mother
    b. Father
    c. Aunt
    d. Sister
    e. Grandmother

f. Male teacher

g. Female teacher

h. Health worker

i. Friend

j. Others specify…….

35. When you started your menstruation for the first time to whom did you share the experience?

a. Mother

b. Father

c. Aunt

d. Sister

e. Other female relative

f. Female teacher

g. Male teacher

h. Health worker

i. Friend

j. Others specify…….

36. . What did you use to protect yourself during the first menstrual period?

a. Disposable pads from the shop

b. Old piece of cloth

c. Cotton wool

d. Matress foam

e. Toilet paper

f. Natural materials (e.g. leaves, mud)

g. Others (please mention)…….

37. What do you normally use to protect yourself during your menstrual period?

a. Disposable pads from the shop

b. Old piece of cloth

c. Cotton wool

d. Piece of matress foam

e. Toilet paper

f. Natural materials (e.g. leaves, mud

g. Others (please mention)…….

Challenges faced during menstrual period: please let us talk about some of the difficulties you undergo during menstruation period while at school (please tick or write down the correct response expected).

38. Have you ever missed school due to menstruation? (please tick the correct answer)

    a. Yes
    b. No → go to qn 42

39. In the last month during your period did you miss school?

    a. Yes
    b. No → go to qn 41

40. How many days did you miss school last month due to menstruation?

    a. 2 days
    b. 3 days
    c. 4 days
    d. Others…….

41. The last time you missed school due to menstruation what was the reason? (please tick all that apply is applicable)

    a. Afraid of staining my clothes
    b. Afraid of boys making fun of me
    c. Periods makes me tired and uncomfortable
    d. Periods can make one feel pain
    e. Due to lack of proper material to use during my periods
    f. Others specify……

42. Are there any restrictions during menstruation in your community?
    a. Yes
    b. No → go to qn 44

43. Which of the following things are you restricted to do in your community when you are menstruating? (please tick all that apply)
    a. Dancing
    b. Cooking
    c. Fetching water
    d. Attending religious functions
    e. Attending school
    f. Others (mention)……

44. Which of the following menstrual products have you ever heard of?
    a. Tampon
    b. Disposable sanitary pads
    c. Menstrual cup
    d. Re usable pads that can be washed and reused again
    e. Cotton wool
    f. Old piece of clothes

45. What do you normally use during your periods?
    a. Disposable sanitary pad
    b. Toilet paper
    c. Mattress
    d. Natural materials (leaves, mud)
    e. Pieces of clothes cut from old clothes
    f. Others (specify)……..

46. How do you dispose your sanitary products after use while at school?
    a. Hide and take them home to dispose after school
    b. Throw in the pit latrine

c. Burn in the school incinerator
d. Throw in the school bush
e. Wash and re use
f. Others please mention……

47. If you are using pieces of clothes durimg menstruation how do you dry the pieces of clothes used during menstruation?
    a. Wash and dry outside the house in the sun
    b. Wash and dry inside the house
    c. Wash and dry outside the house in a shed
    d. Throw them away
48. Have you ever bought sanitary pads from a shop?
    a. Yes
    b. No
49. Have you ever wanted to buy sanitary pads but you were unable to?
    a. Yes
    b. No → go to qn 51
50. Why were you unable to buy it?
    a. Lack of money to purchase
    b. Shyness
    c. Lack of knowledge to use
    d. No sanitary pads sold in the shops
    e. Others (specify)…….
51. While at school if you stain is there soap to clean yourself during menstruation?
    a. Yes
    b. No
52. While at school do you have enough water to clean yourself during menstruation?
    a. Yes
    b. No

53. Do you have access to emergency pads while at school?

    a. Yes
    b. No →go to qn 54

54. What do you do when menstruation starts while you are in school and you cannot access the material to help you stay comfortable?

    a. Go back home immediately
    b. Sleep in classs
    c. Stay in class
    d. Others ……

55. What challenges do you experience in your body when menstruating?

    a. Loose concentration in class
    b. Experience stoma ache
    c. Lose confidence
    d. Backache
    e. Mood swim
    f. Others (please mention)……

56. Do you have a proper room for changing when in your menstrual periods at school?

    a. Yes
    b. No → go to qn 57

57. What do you do to make yourself comfortable when at school during menstruation when you want to change?

    a. Go back home immediately
    b. Stay in class till time to go home
    c. Get out of class until time to go home
    d. Others (please mention)……

Source of information on menstruation: please let us now discuss on how you get to learn or know about menstruation. (Please tick only one answer)

58. From whom do you prefer to get information about menstruation (please tick only one answer)
    a. From my mother
    b. From my father
    c. From my sister
    d. From my brother
    e. From my health teacher
    f. From our matron at school
    g. From peers/friends
    h. From media (radio, tv, newspapers, and social media)
    i. Books
    j. None
59. For the first time where did you learn about menstruation?
    a. From my mother
    b. From my father
    c. From my sister
    d. From my brother
    e. From my health teacher
    f. From our matron at school
    g. From peers/friends
    h. From media (radio, tv, newspapers, and social media)
    i. Books
    j. Others……(mention)
60. For the first time where did you learn about the use of pads or other products used during menstruation?
    a. From my mother
    b. From my father

c. From my sister
d. From my brother
e. From my health teacher
f. From our matron at school
g. From peers/friends
h. From media (radio, tv, newspapers, and social media)
i. Books
j. Others……(mention)

61. For the first time where did you learn how to clean yourself during menstruation?

a. From my mother
b. From my father
c. From my sister
d. From my brother
e. From my health teacher
f. From our matron at school
g. From peers/friends
h. From media (radio, tv, newspapers, and social media)
i. Books
j. Others……..(mention)

62. For the first time where did you learn the effects of having sex during menstruation?

a. From my mother
b. From my father
c. From my sister
d. From my brother
e. From my health teacher
f. From our matron at school
g. From peers/friends
h. From media (radio, tv, newspapers, and social media)
i. Books

j. Others……..(mention)

63. For the first time where did you learn how to behave during menstruation?

a. From my mother
b. From my father
c. From my sister
d. From my brother
e. From my health teacher
f. From our matron at school
g. From peers/friends
h. From media (radio, tv, newspapers, and social media)
i. Books
j. Others…….(mention)

64. For the first time where did you learn about the restricted activities during menstruation?

a. From my mother
b. From my father
c. From my sister
d. From my brother
e. From my health teacher
f. From our matron at school
g. From peers/friends
h. From media (radio, tv, newspapers, and social media)
i. Books
j. Others…….(mention)

Appendix II: General questions to teachers/matron (To be filled by the person incharge from the school)

I am here to ask a few questions on the sanitation status of the school in relation to menstruation status of the school girls your feedback will help to improve the menstruation status among school girls.

School name…….

School code……

1. Number of female students…….
2. Number of male students…….
3. Type of water source in the school?
    a. Piped water
    b. Bore hole
    c. Stream water
    d. Rain water
4. Is water available all the time?
    a. Yes
    b. No
5. What type of toilet do use in school?
    a. Pit latrine
    b. Flush toilet
    c. Others……(mention)
6. Number of toilet holes for male students……
7. Number of toilet holes for female students…….
8. Do school girls access emergency pads for use while in school?
    a. Yes
    b. No

9. Do teachers have separate toilets from the students?
    a. Yes
    b. No

Appendix III checklist: Aseparate tool for each school (observation done by the field assistant or the research leader)
Observation of availability of sanitary facilities in school for school girls.

School name……..

Number of female students……

Number of male students…….

	Resource	**Yes**	**No**
1	Availability of water in the toilets		
2	Availability of soap in the toilets		
3	Availability of handwashing facility		
4	Toilets doors for girls lock for privacy		
5	Are there Separate latrine for boys and girls		
6	Is there a roof on top of the toilets		
7	Are the doors in good condition to avoid someone seeing through		
8	There is dust bins in the facilities for disposal of used sanitary pads		
9	Is there a mirror in the girls toilets		
10	Are there toilets for girls with disability		
11	Is there an incinerator		
12	Is there dust on the walls of the toilet		
13	Are there cobwebs in the toilet		
14	Do windows have proper ventilation		

Appendix IV: checklist

School name……..

School code……

Rating scale on girls' toilet facility (rate scale 0-5)

Rating scale, 0-5 (0-none, 1-very poor, 2-poor, 3- slightly good, 4-good, 5- very good)

12	Environment surround the toilets clean						
13	Environment inside the toilet clean						
14	Smell inside the toilets						
15	Fecal matter around the toilet holes						
16	Urine around the toilet holes						

DODOSO YA KISWAHILI

Sehemu ya kwanza

Taarifa za mshiriki: asante kwa kuridhia kushiriki katika utafiti huu,sasa ningependa utoe taarifa zako binafsi. (tafadhali zungushia jibu lililo sahihi)

1. Una umri gani? .... (miaka)
2. Tafadhali andika mwaka na mwezi wa kuzaliwa.....
3. Wewe ni muumini wa dini gani?
    a. Mkristo
    b. Mwislam
    c. Nyingine .....
4. Upo kidato cha 3 au cha nne?
    a. Kidato cha 3
    b. Kidato cha 4
5. Shule yako ni ya mchanganyiko au ni ya wasichana peke yake?
    a. Mchanganyiko
    b. Wachichana peke yake
6. Shule hii inamilikiwa na nani?
    a. Binafsi
    b. Serikali
7. Shule yako ni ya kutwa au ya bweni?
    a. Shule ya bweni
    b. Shule ya kutwa
8. Hali ya ndoa ya wazazi wako ni ipi kati ya zilizotajwa hapo chini?
    a. Wanandoa na wanaishi pamoja
    b. Hajaoa
    c. Hajaolewa
    d. Mjane -nenda swali la 12

e. Mgane
f. Wametalikiana

9. Baba yako ana kiwango gani cha elimu?
    a. Hakusoma
    b. Elimu ya watu wazima
    c. Msingi
    d. Sekondari
    e. Elimu ya juu ya chuo
10. Baba yako anafanya kazi ipi kati ya zifuatazo?
    a. Mkulima
    b. Mfanyabiashara mdogo
    c. Mfanyakazi wa serikalini
    d. Ameajiriwa shirika binafsi
    e. Hana kazi
    f. Nyingine .....
11. Je, mama yako ana kiwango gani cha elimu?
    a. Hakusoma
    b. Elimu ya watu wazima
    c. Shule ya msingi
    d. Shule ya sekondari
    e. Elimu ya juu chuo
12. Mama yako anafanya kazi ipi kati ya zifuatazo?
    a. Mkulima
    b. Mfanya kazi wa serikali
    c. Ameajiriwa shirika binafsi
    d. Hana kazi
    e. Mfanya biashara mdogomdogo
    f. Nyingine (taja)……

13. Kwa sasa unaishi na nani?
    a. Baba na mama
    b. Baba peke yake
    c. Mama peke yake
    d. Ndugu wengine
    e. Hosteli
    f. Nyumba ya kupanga
    g. Nyingine (taja) .....
14. Mtu unayeishi naye ana kiwango gani cha elimu?
    a. Hakusoma
    b. Elimu ya watu wazima
    c. Shule ya msingi
    d. Shule ya sekondari
    e. Elimu ya juu chuo
15. Mtu unaeishi naye anafanya kazi gani?
    a. Mkulima
    b. Mfanya biashara mdogomdogo
    c. Mfanyakazi wa serikali
    d. Ameajiriwa shirika binafsi
    e. Hana kazi
    f. Nyingine……taja.

Ufahamu kuhusu hedhi:

Sehemu hii inahusu unachokifahamu kuhusu hedhi kwa wasichana. Zungushia jibu unalofikiri ni sahihi kwenye kila swali

16. Chanzo cha hedhi ni nini?
    a. Sijui
    b. Mabadiliko ya kimwili
    c. Magonjwa ya zinaa
    d. Mengineyo eleza……..
17. Damu ya hedhi hutokea sehemu ipi ya mwili?
    a. Sijui
    b. Ukeni
    c. Tumboni
    d. Uterasi
18. Unatakiwa kutumia nini kusafisha sehemu yako ya siri wakati wa hedhi?
    a. Maji tu
    b. Maji na sabuni
    c. Sijui
19. Mzunguko wa hedhi kwa msichana ndani ya mwezi hutokea mara ngapi?
    a. Mara moja kila mwezi
    b. Mara mbili kila mwezi
    c. Zaidi ya mara tatu kila miezi
20. Ni mazoea yapi ya usafi msichana anapaswa kufanya katika kipindi chake cha hedhi?
    a. Kuoga zaidi ya mara moja
    b. Badilisha bidhaa zake za hedhi mara kwa mara
    c. Kujisafisha kwa sabuni na maji
    d. Hamna jibu

21. Mara ngapi kwa siku wakati wa hedhi mtiririko unapokua mzito unapaswa kubadilisha bidhaa unayotumia kuzuia damu?
    a. Mara moja kwa siku
    b. Mara mbili kwa siku
    c. Mara tatu au zaidi
22. Je, mtiririko wa damu wakati wa hedhi una athari yoyote katika afya yako?
    a. Ndiyo
    b. Hapana
23. Je,mtu anaweza kuambukizwa magonjwa yoyote asipokuwa msafi wakati wa hedhi?
    a. Ndiyo
    b. Hapana → nenda swali la 25
24. Ni magonjwa gani mtu anaweza kuambukizwa asipozigatia usafi wakati wa hedhi?
    a. Maambukizi ya njia ya mkojo
    b. Magonjwa ya zinaa
    c. Kuharisha
    d. Sijui
25. Ni matatizo gani mtu anaweza kukabiliana nayo wakati wa hedhi? (zungushia majibu yote yaliyo sahihi)
    a. Kutokwa damu nyingi
    b. Kichefuchefu na kutapika
    c. Maumivu ya tumbo na mgongo
    d. Ukosefu wa damu
    e. Kuvimbiwa na kuhara
    f. Chunusi
    g. Kichwa kuuma
    h. Hakuna
    i. Mengine .....

26. Je uwezekano wa kupata mimba wakati wa hedhi ni?
    a. Mkubwa sana
    b. Inategemea na umbo la mtu
    c. Mdogo sana
    d. Sijui.....
27. Je hedhi ni ugonjwa?
    a. Ndio
    b. Hapana
    c. Sijui
28. Je damu ya hedhi hutokea tumboni ambapo chakula husagwa?
    a. Ndio
    b. Hapana
    c. Sijui
29. Je damu ya hedhi in amadhara yoyote mwilini?
    a. Ndio
    b. Hapana
    c. Sijui
30. Je ni hatari mwanamke kucheza wakati wa hedhi?
    a. Ndio
    b. Hapana
    c. Sijui

Taarifa yako kuhusu hedhi: tafadhali toa kwa kifupi historia yako ya hedhi (zungushia jibu sahihi au uandike jibu sahihi linalohitajika)

31. Je, ulianza kupata hedhi ukiwa na umri wa miaka mingapi ?.....(Miaka)
32. Ulipoanza kupata hedhi yako kwa mara ya kwanza ulijisikiaje?
    a. Nilipata furaha
    b. Nilipata uoga
    c. Nipata wasiwasi
    d. Nilipata mawazo

e. Nilipata aibu
f. Nyingine (taja)…….

33. Ni wakati gani ulijifunza nini cha kufanya wakati wa hedhi?

a. Kabla ya kipindi cha kwanza cha hedhi
c. Wakati wa kwanza wa hedhi
b. Baada ya kipindi cha kwanza cha hedhi

34. Ni nani aliyekufundisha kitu cha kufanya wakati wa hedhi?

a. Mama mzazi
b. Baba mzazi
c. Shangazi
d. Dada
e. Ndugu wengine
f. Bibi
g. Mwalimu wa kiume
h. Mwalimu wa kike
i. Mtaalamu wa afya
j. Rafiki
k. Mtu mwingine (taja)……

35. Ulipoanza kuona hedhi kwa mara ya kwanza ni nani mtu wa kwanza kumweleza yaliyokukuta ?

a. Mama mzazi
b. Baba mzazi
c. Shangazi
d. Dada
e. Ndugu wengine
f. Mwalimu wa kike
g. Mwalimu wa kiume
h. Mtaalamu wa afya
i. Rafiki

j. Mtu mwingine (tafadhli taja) .....

36. Siku ya kwanza ulipoanza hedhi ulitumia kitu gani kujisitiri ?

a. Pedi ya dukani
b. Kitambaa cha zamani
c. Pamba
d. Kipande cha godoro
e. Karatasi ya chooni
f. Vifaa vya asili (k.m. majani, matope)
g. Vingine (taja) .....

37. Je,kwa kawaida wewe unatumia nini kujisitiri wakati wa hedhi?

a. Pedi ya dukani
b. Kitambaa cha zamani
c. Pamba
d. Kipande cha godoro
e. Karatasi ya chooni
f. Vifaa vya asili (k.m. majani, matope)
g. Vingine (taja) .....

Changamoto unazozipata wakati wa hedhi:

Tafadhali toa majibu sahihi yanayoelezea juu ya changamoto zinazotokea wakati msichana anapokua katika hedhi wakati wa shule

(tafadhali zungushia au andika majibu sahihi yanayotakiwa).

38. Je! Umewahi kukosa shule kwa sababu ulikua kwenye hedhi?

a. Ndiyo
b. Hapana → nenda swali la 42

39. Katika mwezi uliopita wakati wa kipindi chako cha hedhi je, ulikosa shule?

a. Ndiyo
b. Hapana → nenda swali la 41

40. Ni siku ngapi ulishindwa kufika shuleni mwezi uliopita kutokana na hedhi?
    a. Siku 2
    b. Siku 3
    c. Siku 4
    d. Siku zingine (taja) .....
41. Mara ya mwisho uliposhindwa kwenda shuleni kutokana na hedhi ilikuwa sababu zipi? (tafadhali zungushia majibu yote yanayofaa)
    a. Hofu ya kuchafua nguo zangu kwa damu
    b. Hofu ya kuchekwa na wavulana
    c. Hedhi hunifanya nipate uchovu na wasiwasi
    d. Hedhi hunifanya nipate maumivu
    e. Kutokana na ukosefu wa bidhaa/kitu cha kujistiri wakati wa hedhi
    f. Zingine (taja) .....
42. Je kuna shughuli yeyote unayozuiwa kufanya wakati wa hedhi katika jamii yako?
    a. Ndiyo
    b. Hapana → nenda swali la 44
43. Je, ni mambo gani yafuatayo ambayo unazuiwa kufanya katika jamii yako wakati unapokua kwenye hedhi? (tafadhali zungushia yote yanayostahili)
    a. Kucheza
    b. Kupika
    c. Kuchota maji
    d. Kuhudhuria shughuli za dini
    e. Kuhudhuria shule
    f. Kuhudhuria shughuli za mila
    g. Mengine (taja) .....
44. Kati ya vitu vinavyotumika wakati wa hedhi vifuatavyo ni vipi umeshawahi kuvisikia?
    a. Tampon
    b. Pedi kutoka dukani

c. Always
d. Jessy
e. Freestyle
f. Kikombe cha hedhi
g. Pedi ambayo unaweza kusafisha na kutumia tena
h. Pamba
i. Kitambaa cha zamani

45. Je,kwa kawaida wewe hutumia nini wakati wako wa hedhi?
    a. Pedi ya dukani
    b. Karatasi ya choo
    c. Kipande cha godoro
    d. Vifaa vya asili (majani, matope)
    e. Kipande cha nguo za zamani
    f. Kingine (taja) ....
46. Je, huwa unahifadhi wapi vitu unayvotumia kujisitiri wakati wa hedhi baada ya kuvitumia unapokua shuleni?
    a. Ninakificha na kukipeleka nyumbani baaada ya shule
    b. Ninatupa kwenye shimo la choo shuleni
    c. Ninachoma kwenye incinerator ya shule
    d. Hutupa kwenye kichahaka karibu na
    e. shule
    f. Ninaosha na kutumia tena
    g. Kingine (taja).....
47. Iwapo unatumia kitaambaa cha nguo hua unasafishaje kipande cha nguo unachotumia kujistiri wakati wa hedhi?
    a. Ninaosha na kukianika nje ya nyumba kwenye jua
    b. Ninaosha na kukianika ndani ya nyumba
    c. Ninaosha na kukianika kivulini?
    d. Ninatupa

e. Nyinginezo, taja …….

48. Je, Umewahi kununua pedi dukani?
    a. Ndiyo → nenda swali la 50
    b. Hapana
49. Kwa nini ulishindwa kununua?
    a. Ukosefu wa fedha
    b. Gharama kubwa
    c. Uwoga
    d. Ukosefu wa ujuzi wa kutumia
    e. Ukosefu wa pedi madukani
    f. Kingine (taja) .....
50. Unapokua shuleni ukajichafua kutokana na hedhi huwa unapata mahali pa kujisafisha?
    a. Ndiyo
    b. Hapana
51. Unapokua shuleni ukajichafua wakati wa hedhi huwa unapata sabuni ya kujisafisha?
    a. Ndiyo
    b. Hapana
52. Unapokua shuleni ukajichafua wakati wa hedhi huwa unapata maji ya kujisafisha?
    a. Ndiyo
    b. Hapana
53. Je, shule yako inatoa pedi za dharura?
    a. Ndiyo
    b. Hapana
    c. Sijui
54. Kama ni hapana swali la 53 huwa unafanya nini unapopata hedhi ghafla unapokua shuleni?
    a. Ninarudi nyumbani mara moja
    b. Ninakaa darasani mpaka muda wa kuondoka
    c. Kingine (taja).....

55. Ni changamoto zipi wewe unazopata katika mwili wako wakati wa hedhi?
    a. Usikivu darasani hupungua
    b. Maumivu ya tumbo
    c. Hukosa ujasiri
    d. Maumivu ya mgongo
    e. Hupoteza furaha
    f. Zingine(taja) .....
56. Je,kuna sehemu ya kujisitiri wakati wa hedhi unapokua shuleni ?
    a. Ndiyo
    b. Hapana
57. Kama hapana .je wewe hufanya nini ili kujistiri?
    a. Hurudi nyumbani mara moja
    b. Hukaa darasani hadi wakati wa kwenda nyumbani
    c. Hukaa nje ya darasa hadi wakati wa kwenda nyumbani
    d. Kingine (taja) .....

Chanzo cha habari juu ya hedhi:

Tafadhali zungushia au andika jibu sahihi kuhusu chanzo chako cha habari cha yafuatayo.

58. Ni nani kati ya wafuatao ungependa kupata habari kutoka kuhusu hedhi
    a. Kutoka kwa mama yangu
    b. Kutoka kwa baba yangu
    c. Kutoka kwa dada yangu
    d. Kutoka kwa ndugu yangu
    e. Kutoka kwa mwalimu wangu wa afya
    f. Kutoka kwa matron wa shuleni
    g. Kutoka kwa rika zangu / marafiki
    h. Kutoka kwa vyombo vya habari (radio, tv, magazeti, na kijamii)
    i. Vitabu

j. Kwingine(taja)……..

59. kwa mara ya kwanza ulijifunza kutoka kwa nani kuhusu hedhi?(tafadhali chagua jibu moja)

a. Kutoka kwa mama yangu mzazi
b. Kutoka kwa baba yangu mzazi
c. Kutoka kwa dada yangu
d. Kutoka kwa shangazi yangu
e. Kutoka kwa ndugu zangu wengine
f. Kutoka kwa mwalimu wangu wa afya
g. Mwalimu wa kike.
h. Kutoka kwa matron wa shuleni
i. Mtaalam wa afya
j. Kutoka kwa rika zangu / marafiki
k. Kutoka kwa vyombo vya habari (radio, tv, magazeti, na kijamii)
l. Vitabu
m. Kwingine(taja)……..

60. Kwa mara ya kwanza ulijifunza kutoka kwa nani kuhusu matumizi ya pedi au kitu unachotakiwa kujisitri nacho wakati wa hedhi? (tafadhali chagua jibu moja)

a. Kutoka kwa mama yangu mzazi
b. Kutoka kwa baba yangu mzazi
c. Kutoka kwa dada yangu
d. Kutoka kwa ndugu yangu wengine
e. Kutoka kwa mwalimu wangu wa afya
f. Mwalimu wa kike
g. Kutoka kwa matron wa shuleni
h. Kutoka kwa rika zangu / marafiki
i. Kutoka kwa vyombo vya habari (radio, tv, magazeti, na kijamii)
j. Vitabu
k. Kwingine(taja)

61. Kwa mara ya kwanza ulijifunza kutoka kwa nani athari za kufanya ngono wakati wa hedhi?(chagua jibu moja)
    a. Kutoka kwa mama yangu mzazi
    b. Kutoka kwa baba yangu mzazi
    c. Kutoka kwa dada yangu
    d. Kutoka kwa ndugu yangu wengine
    e. Kutoka kwa mwalimu wangu wa afya
    f. Mwalimu wa kike
    g. Kutoka kwa matron wa shuleni
    h. Kutoka kwa rika zangu / marafiki
    i. Kutoka kwa vyombo vya habari (radio, tv, magazeti, na kijamii)
    j. Vitabu
62. Kwa mara ya kwanza ulijifunza kutoka kwa nani kuhusu kujisafisha wakati wa hedhi? (tafadhali chagua jibu moja)
    a. Kutoka kwa mama yangu
    b. Kutoka kwa baba yangu
    c. Kutoka kwa dada yangu
    d. Kutoka kwa ndugu yangu
    e. Kutoka kwa mwalimu wangu wa afya
    f. Kutoka kwa matron wa shuleni
    g. Kutoka kwa rika zangu / marafiki
    h. Kutoka kwa vyombo vya habari (radio, tv, magazeti, na kijamii)
    i. Vitabu
    j. Kwingine (taja)…….
63. Kwa mara ya kwanza ulijifunza kutoka kwa nani jinsi ya kuishi wakati wa hedhi? (tafadhali chagua jibu moja)
    a. Kutoka kwa mama yangu
    b. Kutoka kwa baba yangu
    c. Kutoka kwa dada yangu

d. Kutoka kwa ndugu yangu
e. Kutoka kwa mwalimu wangu wa afya
f. Kutoka kwa matron wa shuleni
g. Kutoka kwa rika zangu / marafiki
h. Kutoka kwa vyombo vya habari (radio, tv, magazeti, na kijamii)
i. Vitabu
j. Kwingine(taja)…….

64. Kwa mara ya kwanza, ulijifunza wapi kuhusu shughuli zinazozuiwa kufanywa wakati wa hedhi? (tafadhali chagua jibu moja)
    a. Hakuna shughuli yoyote ninayozuiwa kufanya ninapokuwa kwenye hedhi
    b. Kutoka kwa mama yangu
    c. Kutoka kwa baba yangu
    d. Kutoka kwa dada yangu
    e. Kutoka kwa ndugu yangu
    f. Kutoka kwa mwalimu wangu wa afya
    g. Kutoka kwa matron wa shuleni
    h. Kutoka kwa rika zangu / marafiki
    i. Kutoka kwa vyombo vya habari (radio, tv, magazeti, na kijamii)
    j. Vitabu
    k. Kwingine (taja)

Kiambatanisho cha II

Maswali kwa mwalimu /matron (maswali yatajibiwa na kujazwa na mwalimu husika)

Mimi ninfanya utafiti kuhusu hedhi kwa wasichana wa shule.ningependa kupata taarifa chache kutoka kwako ambazo utazijaza kufuatana na swali litakalokua limeulizwa.lengo ni kuweza kuboresha mazingira kwa mwanafunzi wa kike anapokua shuleni wakati wa hedhi,nitashukuru sana kwa ushiriakiano wako.

Jina la shule.....

Cheo cha mwalimu……

1. Idadi ya wanafunzi wa kike .....
2. Idadi ya wanafunzi wa kiume .....
3. Chanzo cha maji shuleni ni?
    a. Maji ya bomba
    b. Maji ya kisima
    c. Maji ya mto
    d. Maji ya mvua
    e. Nyingine
4. Je maji yanapatikana wakati wote?
    a. Ndiyo
    b. Hapana
5. Je, vyoo vinavyotumika shuleni ni vya aina gani?
    a. Vyoo vya shimo
    b. Vyoo vya maji
    c. Nyingine (taja) .....
6. Idadi ya mashimo ya vyoo kwa wanafunzi wa kiume .....
7. Idadi ya mashimo ya vyoo kwa wanafunzi wa kike .....
8. Je, kuna pedi za dharura kwa wanafunzi wa kike wanapokuwa shuleni?
    a. Ndiyo
    b. Hapana
9. Je wanafunzi huchangia vyoo na walimu?
    a. Ndio
    b. Hapana

Kiambatisho III observation checklist (Itajazwa na mtafiti msaidizi au mtafiti mkuu)

Kuchunguza upatikanaji wa vifaa vya wasichana kutumia shuleni wakati wa hedhi.

Jina la shule ....

Idadi ya wanafunzi wa kike shuleni.....

Idadi ya wanafunzi wa kiume shuleni .....

	Rasimali	Ndiyo	Hapana
1	Kuna maji katika vyoo		
2	Kuna sabuni ndani ya vyoo		
3	Kuna sehemu ya kunawia mikono		
4	Mlango unafunga mtu anapokua ndani		
5	Je mlango una matobo au nafasi mtu anaweza kukuona ukiwa ndani?		
6	Kuna vyoo tofauti kwa wavulana na wasichana		
7	Je, kuna paa juu ya choo		
8	Kuna chombo cha kuwekea uchafu		
9	Je, kuna kioo ndani ya choo cha wasichana		
10	Je, kuna vyoo kwa wasichana wenye ulemavu		
11	Je, kuna sehemu ya kuchomea taka		
12	Je,kuna vumbi kwenye ukuta wa choo		
13	Je,kuna buibui kwenye kuta za vyoo		
14	Je, madirisha yanapitisha hewa vizuri		

Utathimini wa kiwango cha usafi katika mazingira ya vyoo vya shule vya wasichana

(kiwango 0-5)

Kiwango, 0-5 (0-mbaya sana, 1-mbaya kidogo, 2-, mbaya 3- nzuri kidogo, 4-nzuri, 5- nzuri sana)

		0	1	2	3	4	5
12	Usafi wa mazingira ndani ya choo						
13	Usafi wa mazingira nje ya choo						
14	Harufu ndani ya chumba cha choo						
15	Kinyesi pembeni ya shimo la choo						
16	Mkojo juu ya choo						