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Investigating the status of Menstrual Hygiene Management absorbent interventions in Malawi – A situation analysis in the schools of Malawi

By

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DECLARATION

I Anna Sylvia Masanda hereby declare that this dissertation is my original work and has not been presented for any other awards at the University of Malawi or any other University.

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ABSTRACT

Menstrual Hygiene Management (MHM) is a challenge in low and middle income countries (LMICs) due to limited resources. Despite presence of various MHM absorbent interventions[1] in Malawi, anecdotal evidence and grey literature suggest that women and girls still face MHM challenges.

This study was aimed at investigating the status of Menstrual Hygiene Management interventions in the schools of Malawi. In order to meet the set objective, a desk review of relevant MHM policies/guidelines governing MHM interventions on absorbents and infrastructure were reviewed. To get more details on the available interventions, relevant stakeholders at central and district level were contacted and schools benefiting from MHM interventions were visited to appreciate integration of MHM in WASH infrastructure interventions. 118 schools were selected using convenient sampling from selected 14 districts in the country.

This study found that Malawi has no standalone policy on MHM and there are no designated infrastructure standards for MHM facilities. The research found 56 organizations that are working on MHM interventions where all of them have a component on absorbent MHM but only 12 also have a component on MHM infrastructure.

Despite existence of efforts in integrating MHM in other policies, there is a need for a clear policy to govern MHM interventions in Malawi. Malawi should consider having a live database that should be updated from time to time that will help targeted interventions.

[1] Menstrual Hygiene Management (MHM) absorbent interventions refers to menstrual hygiene management interventions that focus on absorbent materials that women and girls use during their menses.

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ABBREVIATIONS AND ACRONYMY

LMICs	Low and middle income countries
MHM	Menstrual Hygiene Management
NGO	Non-Governmental Organization
RHU	Reproductive Health Unit
UNICEF	United Nations Children's Fund
UTI	Urinary Tract Infections
WASH	Water Sanitation and Hygiene

CHAPTER ONE: INTRODUCTION

1.1 Background information

Menstrual Hygiene Management (MHM) is an emerging topic of interest in the Water and Sanitation (WASH) sector. While it has previously been under-researched there is now increasing momentum and focus on this important topic (1). Menstrual Hygiene Management refers to “Women and adolescent girls use of a clean material to absorb or collect menstrual blood, and this material can be changed in privacy as often as necessary for the duration of the menstrual period(2). MHM includes soap and water for washing the body as required, and access to facilities to dispose of used menstrual management materials(2).

In low income and middle countries (LMIC) women and girls face a lot of challenges managing their menses(3). Due to limited resources in these countries, there is poor access to clean water, sanitation and hygiene facilities for them to manage the menstruation hygienically(3). They also lack adequate blood absorbent materials, private safe and hygienic place to wash, dry and store menstrual materials if reusable and an adequate disposal system for disposable menstrual materials(3). Inadequate resources negatively affect women and girls in management of MHM. For example, due to lack of reliable blood absorbent materials, they resort to using poor absorbent menstrual products e.g. used cloths which end up staining their clothes due to blood leakage(3)(4). The blood leakage has psycho-social effects such as embarrassment, shyness, anxiety, shame and stigmatization(3)(5). In order to avoid these psycho-social effects that comes due to blood leakage, adolescent girls and women prefer to manage menstruation at home(6) which in

the end causes them to miss valuable productive work hours and time in public spaces. On the other hand, school going adolescent girls often miss school activities and may eventually drop out of school(7). In study conducted in Rwanda by UNICEF, many girls explained how menses restricts their normal activities. Girls often refrain from sports due to menstrual cramping or fear that menstrual cloths or pads will not be adequate during sports activities(2).

A key priority for women and girls is to have the necessary knowledge, facilities and cultural environment to manage menstruation hygienically, and with dignity(7). Yet, the importance of menstrual hygiene management is mostly neglected by development practitioners within the WASH sector (7). Most girls and women from LMIC are struggling with nearly complete ignorance of their normal biological maturation and its consequences, and when they do receive education, still struggle with inadequate sanitary materials and insufficient physical support like sanitary infrastructure and emotional support like managing anxiety that comes with MHM(8).

Globally women and girls have developed their own preferred ways on how to cope with menstruation. These vary greatly from country to country, and within countries, dependent on an individual's personal preferences, available resources, economic status, local traditions and cultural beliefs and knowledge (9). Due to these restrictions women often manage menstruation with methods that could be unhygienic, particularly in poorer settings(9). Unhygienic menstrual practices can affect the health of the girls(10). These may include increased vulnerability to reproductive tract infections and pelvic inflammatory diseases and other complications(11). For example, lack of hand washing after changing

sanitary pad can facilitate the spread of hepatitis B and thrush whilst use of unhygienic reusable pads is associated with urogenital infections like bacterial vaginosis(5). Table 1 below summarizes the various MHM absorbent materials and their advantages and disadvantages globally.

Table 1: Advantages and disadvantages of different sanitary protection material(5)

Sanitary protection option	**Advantages**	**Disadvantages**
Natural materials (e.g. mud, cow, dung, leaves)	Free Locally available	High risk of contamination Difficult and uncomfortable to use
Strips of clothes	Easily available in the local market Re-usable Better absorbents	If old clothes are not cleaned well they can become unhygienic Users need somewhere private, with a water supply and soap, to wash and dry the cloths
Toilet paper or tissues	Easily available in the local market	Loses strength when wet and can fall apart Difficult to hold in place May be too expensive for the poorest users
Re-usable pads	Available locally	Users need somewhere private,

	Income generation opportunity, if locally made Cost effectiveness as they are re-usable More environmentally friendly than disposable pads	with water supply and soap to wash and dry the pads If commercially produced, cost is prohibitive to many potential users
Tampons	Convenient and comfortable to use	Not available in many contexts Generates a lot of waste to dispose, not environmentally friendly May not be culturally appropriate, particularly for adolescent girls, as need to be inserted into the vagina Hygiene and availability of water and soap for hand-washing are particularly important, as need to be inserted into the vagina
Menstrual cups	Re-usable Only need emptying,	May not be culturally appropriate for use, particularly for

	washing and drying	adolescent girls, as need to be inserted into the vagina Hygiene and availability of water and soap are particularly important, for washing hands and menstrual cup, as need to be inserted into the vagina Expensive first investment outlay
Panties / underwear	Useful for keeping a sanitary product in place Good for keeping the vaginal area hygiene	Cost may be prohibitive to potential users Cheap elastic can wear out relatively quickly

MHM is a topic which has reached national and international agendas and its implementation policies have been formulated and considered crucial. In Malawi, the Government and some Civil Society Organizations and development partners have taken steps towards improving MHM through various interventions. These include construction of girl friendly sanitary facilities (e.g. schools with girls' washrooms and incinerators), supporting mother groups, providing low cost sanitary towels and/or menstrual kits especially for school going girls.

(13). Challenges include limited access to adequate water supply for washing, lack of information on MHM as it is mostly not talked about and lack of safe, affordable,

convenient menstruation management methods. Consequently, they resort to poor MHM methods like using old cloths, toilet paper, dirty napkins and other unhygienic materials.

1.2. Statement of the problem

Despite the increased number in MHM interventions in Malawi to improve the lives of women and girls, MHM still remains a challenge to both women and adolescent girls especially those in rural and/or low socio-economic status households. The challenge is due to availability, affordability and comfort of the available absorbent interventions(14). This poses questions on the status of these available MHM absorbent interventions and the official guidance governing them like policies and guidelines on operation of such interventions. In Malawi, there are various WASH infrastructure interventions taking place in schools. However, the status of how many of such interventions are integrated with MHM infrastructure to promote MHM is not known. Lack of knowledge on the status of available MHM interventions and availability of official guidance brings inconsistence in the implementation of these interventions. Hence may affect effectiveness.

1.3 Literature review

1.3.1 Global situation of menstrual hygiene management

There are growing efforts from academia, the development sector, and beyond to understand and address the challenges facing menstruating schoolgirls in low and middle income countries (LMIC) (15). A body of research has documented menstruating girls' experiences of shame, fear, and confusion across numerous country contexts and the challenges girls face attempting to manage their menstruation with insufficient information, a lack of social support, ongoing social and hygiene taboos, and a shortage of suitable

water, sanitation and waste disposal facilities in school environments(15). The accruing evidence reveals the gender discriminatory nature of many school environments, with female students and teachers unable to manage their menstruation with safety, dignity, and privacy, negatively impacting their abilities to succeed and thrive within the school environment(16)(17). Lack of MHM supporting environment has adverse effects which includes school absenteeism among girls.

Girls in poor countries attribute frequent school absences to difficulties managing their menses. In a Ugandan study of rural schoolgirls, nearly two-thirds said they miss school at least once per month because of menstruation(18). In India, only 54% of girls reported attending school while menstruating. In Egypt, more than one-third of girls in an urban secondary school reported staying home from school on the first day of menstruation. Similarly, in Amhara province, Ethiopia, more than half of girls in secondary and preparatory schools reported being absent during menstruation(18)(19). This shows that MHM is leading school absenteeism in most poor countries. Even if girls are not absent and manage to attend school during menstruation, they report being distracted, unable to concentrate, and less willing to participate because, for example, standing to answer questions is the custom in many schools, and writing on a blackboard in front of the class may expose them revealing menstrual stains, leakage, or odors(18)(20).

In Malawi, girls who reported that school toilets lacked privacy (an MHM change room) were more than twice as likely to be absent during their menstrual periods than girls at schools where more privacy was available(21). This situation of lack of privacy contributing to absenteeism is similar to a study that was conducted in Uganda where , 43%

of the girls felt that did not have enough privacy changing at school while 13% preferred changing at home (22).

In the long run, the poor girls school attainment reduces girls' economic potential over the life course because of the low education attainment; impacts population health outcomes and also extends to girls' sexual and reproductive health outcomes, self-esteem, and sense of agency (15).

Lack of MHM knowledge is another challenge being faced by girls and women. A growing evidence base from South Asia, sub-Saharan Africa and other low-income regions indicates that many girls reach puberty with inadequate guidance and information on this important developmental stage and physiological change, or on how to manage their menses and body hygiene with confidence(23). However, some women who may have knowledge, may manage their menses un-hygienically because they do not have alternatives. For example, women in Zimbabwe expressed concerns about reusing old cloths and know that ironing or drying the cloths in the sun would be best, but they often avoid doing this because of embarrassment, a desire for secrecy, and/or a lack of electricity or coal to heat an iron(24). In India, female residents of urban slums report particular challenges in dealing with their menses. They do not have the space to dispose of soiled cloths or other materials(25) and neither do they have sufficient privacy to wash and dry used cloths as they would be able to do in rural areas(26).

Apart from availability of MHM facilities and materials and knowledge, Knowledge is another factor affecting MHM. For example, qualitative studies indicate that girls who

know about commercial sanitary products may prefer these products because they are seen as more comfortable and less likely to leak, but for many girls such products are usually unavailable and/or unaffordable(24).

Cultural restrictions and discriminatory gender roles is another factor that exacerbate women's difficulties during menstruation. The extent to which schoolgirls are constrained and restricted is determined by tribal and family ideologies(4). In Bolivia, girls believe that burying used menstrual pads is an acceptable form of disposal, but incineration is not. Girls also believe that washing themselves with cold water will cause blood clots and heavy bleeding. When only cold water is available, which is the case in school facilities, they prefer not to wash(27). Below is a table showing some of the myths on MHM(4).

Table 2: Examples of general cultural myths on menstrual hygiene management(4)

Associated Belief	**Restrictions on menstruating women**
A menstruating woman is unclean	Confinement to a room or a separate menstruation hut to avoid interaction with men
Objects, especially food and drink, that are touched become contaminated and cause the user/consumer to be cursed	Prohibited from cooking, fetching water, sweeping or doing any housework
Crossing a road will increase a woman's menstrual flow	Not allowed to cross roads or walk around freely
The produce will rot or yield a poor	Forbidden from walking through gardens

harvest	where certain food is growing (e.g. Pumpkins or groundnuts)
The cows will miscarry	Forbidden from entering a kraal (cattle pen) containing pregnant cows
The well may dry up or become filled with blood	Prohibited from using open wells
Those who see such cloths, especially if blood-stained, will be cursed. Women whose protection materials are sniffed by dogs become infertile.	Women must hide menstrual cloths and protection products

1.3.2 Successes and Challenges of various MHM interventions

During recent years, there has been growing interest in exploring and addressing the menstrual hygiene management challenges that are faced by schoolgirls through the incorporation of MHM in WASH. A safe, clean and private space for changing materials, water and soap to maintain personal hygiene is essential(28). Below are some of the successes and challenges around MHM interventions.

1.3.2.1 Successes

Governments and NGOs are now working together in order to achieve successes in MHM. For example with support from UNICEF, Rwandan primary schools have seen remarkable improvements in the availability of water, sanitation and hand-washing facilities throughout

the past few years. Many schools have designated teachers to counsel girls on menstruation, and there have been campaigns to provide sanitary pads in schools(2).

UNICEF's WASH-supported programs in Nigeria have already focused on ensuring that many schools have separate toilet facilities for boys and girls. The separation of toilets enhances privacy for menstruating girls. After the study, girls' facilities in 150 schools were redesigned to include a separate changing room with its own squat toilet, hand-washing facility, soap dispenser, waste bin and full-length mirror(29).

Japan has offered menstrual leave policies since 1947, when a law was passed allowing any woman with menstrual pains, or whose job might exacerbate period pain, to take time off(30).

South Korea granted women menstrual leave in 2001, though the policy has since come under fire from men who see it as a form of reverse discrimination. And in Indonesia, women are entitled to two days off a month for period pain(30).

The Government of India has made some strides towards increasing knowledge and the accessibility of sanitary materials in some areas. The National Rural Health Mission programme, for example, provides sanitary napkins at subsidized prices to adolescent girls in 259 districts and is supporting the production of sanitary napkins by women's groups in 45 additional districts(2).

Canada removed Tax on Tampons and other female products like menstrual belt and menstrual cups(31).

1.3.2.2 Challenges

WASH infrastructure

Water, sanitation and hygiene (WASH) facilities are essential for MHM. A safe, clean and private space for changing materials, water and soap to maintain personal hygiene and –if required- also for washing and drying materials is essential. According to the UN Development Goals Report approximately 2 billion people still do not have access to proper sanitation facilities(23). In a study conducted in Rwanda by UNICEF, it revealed that girls expend considerable energy trying to keep their menses a secret. This poses particular challenges in schools where the infrastructure does not provide privacy. A research in Rwandan primary schools showed that most school toilets are not equipped with doors that lock from the inside(2). In Philippines, hand-washing sinks in schools are stationed outside the toilet facilities and this poses a problem for girls who hope to wash bloodstains from their clothes in private(2). In Malawi, most schools are dilapidated and do not offer privacy(14) to support MHM.

Menstrual management absorbents

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(32). Women and girls resort to using unhygienic, unsafe materials during their menstruation due to several factors such as: unavailability of menstrual blood absorbing materials, shame experienced when purchasing products publicly, and/or inability to pay or a matter of choosing not to spend limited financial means on menstrual needs(28). In

Bolivia, even though most girls greatly prefer pads in managing their menses, these are not accessible to all of them due to the cost and the rural locations of the communities(2).

Disposal

The lack of or inadequate unsafe disposal for soiled materials, with women being forced to dispose it in secrecy reinforces the stigma and shame surrounding menstruation(28). A research conducted in South Africa revealed that most women use disposable sanitary pads even though they were aware that they are non-biodegradable. Women also expressed that sites lacked discreet disposal options. Therefore, considerable energy was devoted to concealing and containing menstrual waste(3).

Information and education

A growing evidence base from South Asia, sub-Saharan Africa and other low-income regions indicates that many girls reach menarche with inadequate guidance and information on this important developmental stage and physiological change, or on how to manage their menses and body hygiene with confidence(2). Added to this, many female students encounter challenges in managing their menses en route to and within the school environment(2). In many low and middle income countries there is no mandated and very limited education in schools concerning menstruation. Teachers are hesitant or unwilling to discuss MHM due to the taboo, being uninformed themselves(28). This is also enhanced by the predominantly male science teachers uncomfortable to deliver the subject(4). At home MHM is usually delivered to girls by aunts and grandmothers who often have limited

information on MHM. As a result, they may recount and reinforce myths which are biologically incorrect(4).

1.3.3 Menstrual hygiene interventions in Malawi

There are several organization in Malawi e.g. WaterAid Malawi, Save The Children and Campaign for Female Educationalists(14) providing MHM interventions including absorbent materials. To improve girls' access to accurate MHM information, UNICEF is partnering with school-based volunteer mother groups in primary and some secondary schools as an important alternative resource for girls. In collaboration with local partners, UNICEF has supported MHM trainings of three to five days for these groups, and developed a manual covering a wide range of topics affecting girls' education(2). However, these interventions are not consistent. Hence, it is not known if there is official guidance on these in Malawi.

1.4 Justification and significance of the study

This study mapped out the status of MHM absorbent material interventions in Malawi, WASH infrastructure interventions integrated with MHM in the schools of Malawi and it found out the status of guiding policies and guidelines governing these MHM interventions. This will bridge the information gap on what kind of MHM absorbent interventions are existent in Malawi and add information to the growing evidence on MHM in Malawi. The results from this study will also help policy makers in identifying gaps in the availability of MHM guidelines which is important for more consistent and effective MHM interventions.

1.5 Objectives of the study

1.5.1 Broad objective

The overall objective of the study was to assess the status of menstrual hygiene management absorbent interventions in Malawi.

1.5.2 Specific objectives

The specific objectives were as follows:

1 To review current policies/guidelines and advocacy methods surrounding Menstrual hygiene Management in Malawi.

2 To compile existing Menstrual Hygiene Management absorbent interventions in Malawi.

3 To assess WASH infrastructure interventions related to MHM in schools.

CHAPTER TWO: METHODS

2.1. Study design

This was a descriptive cross-sectional exploratory study. Information on MHM interventions was collected at one point in time. This study design was chosen because the study wanted to establish the current status of MHM interventions in Malawi, data was collected at one point in time.

The study was non-interventional where both qualitative and quantitative approaches were used in data collection because the data collected was both qualitative and quantitative in nature. Quantitative approach was used to collect data on number of MHM sanitation related facilities in schools and number of MHM interventions to address objective number 2 and 3 whilst qualitative approach was used to collect data on available policies and guidelines governing MHM interventions.

2.2. Place of study

Mapping of organizations working on MHM was done in schools in 14 sampled districts (Table 2&3). Convenient sampling was used in identifying these districts where districts which had more number of schools with MHM interventions were selected. The MHM interventions were on absorbents, education or infrastructure.

Table 3: Distribution of visited schools by district and type

District	Type of School		Total
	Number of Primary	Number of Secondary	
Nkhatabay	2	3	5
Mzimba	5	0	5
Nkhotakota	5	0	5
Kasungu	8	0	8
Salima	5	3	8
Lilongwe	8	3	11
Mchinji	4	4	8
Dedza	12	2	14
Balaka	7	2	9
Machinga	8	2	10
Mangochi	10	0	10
Zomba	12	2	14
Chikwawa	4	0	4
Nsanje	6	1	7
	96	**22**	**118**

Table 4: Regional distribution of schools

Region	Number of Primary School	Number of Secondary School	Total	Regional %
Northern	7	3	10	**8%**
Central	42	12	54	**46%**
Southern	47	7	54	**46%**

2.3. Study population

The study population consisted of Non-Governmental Organizations (NGO) and government agencies representatives that had Menstrual Hygiene Management (MHM) interventions in Malawi and district education managers in order to address objective number 2. Reproductive Health Directorate (RHD) representatives and ministry of education representative were contacted to address objective number 1 and schools' representatives that were benefiting from MHM interventions were also contacted in order to address objective number 2 and 3.

Inclusion and exclusion

The study participants included NGOs representatives, RHD representatives, representatives from district education office and head-teachers from schools that are benefitting from MHM interventions. People that could not read and write, illiterate participants, were not involved because they were not applicable in this study.

2.4. Study period

The study took a period of 14 months (July, 2018 to August, 2019) to complete. Activities included training of research assistants that helped in data collection, analysis of results and dissemination of result. However, final report was completed by August, 2019.

2.5. Sample size

Decision on the sample size was arrived at in consideration of the effects that a sample size has on the study which are; power of results, study cost, the time required for completing the research and the number of data collectors required.

In order to sample districts, Purposive sampling was used in selecting the 14 districts by looking at districts with more MHM interventions (having more MHM organizations working in the district).This sampling technic was used because it was of no use selecting districts where they don't have MHM interventions. Snow balling was used in identifying number of MHM interventions in the country. This is a sampling method where a respondent identifies another member and this technic was chosen because it was difficult to identify members of the sample. First of all, RHD was contacted for a list of MHM interventions but it communicated that it did not have. Later on, through contact with organizations representatives working on MHM at national level which were identified through Water Environmental Sanitation Network (WESNET) and contact with District Education Offices (DEM) at district level, the available number of interventions per district was established.

In order to select schools that were visited to assess MHM infrastructure within the selected districts, convenience sampling was used. This is a type of sampling method where

selection is based on convenient accessibility. This method was chosen because roads to some schools were in accessible. A sample size of 118 schools was calculated using 95% Confidence level. In cases where there was no enough information at district level (i.e. if a list of schools with MHM interventions could not be provided) to know which schools have MHM interventions in before visiting them, snow balling was also used to identify the schools. There was no uniform number of schools visited per district because some districts had fewer schools with MHM interventions. Therefore, the target was reaching the sample size from the overall population.

2.6. Data collection

In order to address the first objective on reviewing MHM policies and guidelines, data was collected using desk review and key informant interviews. A questionnaire (appendix 1) was used in collecting data during key informant interviews. Main issues in the questionnaire included; describing policy framework if available, when and how it was formulated, main issued and action points from the policy. Key Informant Interviews (KIIs) were done with RHD representatives because of the directory's mandate in coordinating integration of Sexual and Reproductive Health Services (SRH) at all levels; develop SRH Policies, Strategy and Guidelines; guide implementation of SRH services as well as monitor and evaluate SRH services. In addition, further information was sought from the Chief School Health Nutrition and HIV AIDS Officer from ministry of education because of their leading role in school infrastructure following advice from RHD.

Through the KII with RHD and ministry of health policies that have MHM issues were identified which were later desk through thematic analysis. The reviewed documents were

National Girls Strategy (NGES), integrated school health and nutrition strategy (ISHN) and readmission policy.

To address the second objective on mapping out MHM absorbent interventions in Malawi, data was collected through key informant interviews with NGOs and government agencies that have MHM interventions (intervention on MHM absorbents with or without other MHM interventions like toilets, incinerators, handwashing facilities) where a questionnaire data collection template was used (Appendix 1). Firstly, Reproductive Health Unit director was contacted to find out if it had a list of organizations that had MHM interventions in Malawi because of its leading role on MHM. The director highlighted that it had no compilation who then directed me to WESNET for assistance. WESNET is an association that connects all water, environmental and sanitation development partners in Malawi with an aim of enhancing knowledge sharing and providing synergy in implementation of WASH interventions. Through WESNET a list of WESNET members that have MHM interventions was provided. Non WESNET member organizations were identified through snowballing at both national and district level. Information on what kind of MHM interventions was providing was collected through organizations' representatives working on MHM through a structured questionnaire (Appendix 1). Further information collected included target population and the location where the interventions are being offered.

The last objective was aimed at assessing WASH infrastructure that supports MHM. To address this, data was captured through direct non-participant observation using a checklist and interviews with headteachers of schools benefiting from MHM interventions using a Questionnaire (Appendix 1). The checklist was used to explore issues like number of MHM

handwashing facilities and incinerators for disposal of disposable sanitary pads. Other issues explored included, number of teachers trained in MHM education and presence of mother groups in schools that supports adolescent girls in MHM management among others. GPS was used to collect GPS coordinates in schools to map where interventions are in the districts. This information is important because in case of a new organization that has interest in supporting MHM interventions in schools, it will know which areas/schools that already received support. This will in the end prevent having a lot of MHM interventions in one area or geographical area and leaving other areas undeserved.

2.7. Data analysis

To address objective 1 on available policies/strategies/guidelines governing MHM interventions, data which was qualitative in nature was extracted through desk review. And it was thematically analyzed in the following themes; policies, strategies and guidelines.

To address objective 2 on mapping the organizations working on absorbent MHM interventions and objective 3 on assessing MHM infrastructure data was collected using ODK Collect, a mobile application that provides a first level analysis of results. Data cleaning was done in ODK collect and later, the quantitative data was exported to SPSS where a deep analysis of results was done. No scientific test was used since the objective was to look at number of organizations working on MHM, MHM absorbents being offered, the availability of MHM hand washing facilities, disposal facilities, and source of MHM information for adolescent girls among others. Qualitative data was analyzed using thematic analysis. Excel was used to filter the results, edit graphs, pie charts and tables from SPSS.

2.9. Study limitation

Some government/development partners were too busy to be contacted for information or clarifications despite efforts in making appointments in advance. This lengthened data collection period.

2.10. Ethical consideration

Ethical approval was sought from College of Medicine Research and Ethics Committee (COMREC)(approval # P.04/18/2380), a letter of support was also sought from ministry of Education and ministry of Health as a permission to collect information at Reproductive Health Unit (RHD), NGOs working on MHM and in schools that are benefiting from MHM interventions. In addition, full disclosure of the purpose of the study and who provided financial support was made to the participants.

CHAPTER 3: RESULTS

In this chapter the results of the study are presented with reference to the aim of the study.

3.1.0 Current Policies, guidelines and advocacy efforts surrounding MHM in Malawi

3.1.1. KII results

Characteristics of people interviewed

Table 5: Key informants consulted of MHM policy and guidelines

No	Designation	Length of service on the position	Background
1	Deputy director for Reproductive Health Directorate	1.5 years	Medical doctor
2	Chief School Health Nutrition and HIV AIDS Officer	10 years	Bachelor of science in education

When asked about policy/guidelines, the Deputy Reproductive Health Directorate had this to say "*There is no policy on MHM and this is still a new area in the country and we are still exploring the area, we are piloting it through Malawi Girl Guides Association (MAGGA) and later on, we might engage someone to research on it*". When further asked if there are any guidelines in place to govern MHM interventions, he said that as a directorate, they are deliberately letting various organizations explore various facets since the area is new so that guidelines do not come in when various options are not yet explored.

"*when later the research is done on various options, recommendations will be done which will feed into the guidelines*", he added.

When the Chief School Health Nutrition and HIV AIDS Officer was asked the same question, he had this to say "*We don't have a standalone policy for MHM but have a couple of policies and strategies that have some components on MHM for example National Girls Strategy (NGES), Integrated School Health and Nutrition strategy (ISHN) and readmission policy. We also have a mother group manual that is used as a guide in training mother groups who support adolescent girls on how to manage their menses"*. When asked if these training manuals are available in all schools, he said that they are supposed to be there but he was not sure if every school has them. Regarding availability of MHM facility infrastructure designs, he said that, as a ministry, these are not available and currently different organizations have their own designs.

3.1.2. Desk review results

Following the interviews, the education governing documents that were highlighted by interviewees as having MHM information were desk reviewed categorized in three themes i.e. strategies, policy and guidelines.

3.1.2.1. Strategies

a) National Girls Education Strategy (NGES)

This is a strategy that was designed to promote girls' education by addressing barriers that prevent girls from accessing and participating in education effectively as boys do. It recognizes poor sanitation as one of the obstacles in girls education; specifically unhygienic

toilets, unavailability of change rooms as well as sanitary materials. As a strategy to address this, it suggests improving school sanitation facilities. Suggested specific activities includes; construct toilets with change rooms in primary schools, Procure and distribute sanitary pads in schools for adolescent girls and Print and distribute booklets on menstrual hygiene management to all adolescent girls(33).

b) Integrated School Health and Nutrition strategy (ISHN)

The strategy is aimed at ensuring that all school-aged children (2 to 18 years) enjoy good health and eating balanced, nutritious diets. The strategy recognizes provision of safe water and sanitation facilities as a way to improve health and nutrition of school aged children(34) which includes MHM facilities. However ISHN guidelines are not explicit on how MHM issues will be addressed.

c) National Strategy for Adolescent Girls and Young Women 2018 – 2022

The strategy's goal is "ensuring that Adolescent Girls and Young Women in Malawi are safe and protected and have equal opportunities to realize their rights and achieve their full potential through unlimited access to quality integrated education, health, employment and social protection services that are provided through a sustainable, coordinated governance framework and a comprehensive referral and linkage system contributing to the prosperity and stability of Malawi". In this strategy it only acknowledges lack of adequate sanitation facilities that affects girls education during menstruation.

3.1.2.2. Policy

Readmission Policy

This is the only policy that was highlighted by one of the interviewees that contains MHM issues. This is a policy whose purpose is to provide guidance to all stakeholders on readmission of learners into schools with the aim of improving access, retention and completion of education cycle. Despite that this was highlighted as one of the documents that encompasses MHM issues, MHM was mentioned only once as one of the reasons for girls school drop outs and it said "*for mature girls menstrual hygiene has been another cause for high rates of absenteeism during menstruation, as schools do not have appropriate sanitary facilities for them"*.

MHM Guidelines

The study found one guideline on MHM which is MHM training manual and MHM booklet which is given to girls after MHM training. The training manual acts as a guide on what needs to be covered on MHM education. The topics covered include; what are periods? What changes does a girl experience when she starts experiencing monthly periods? Why do they experience periods? It also covers menstrual cycle so that girls are able to know their own cycle and also tackles some myths around menses like "*it is not bad luck to talk to boys when a girl is in periods, it is not abnormal if a girl doesn't start periods by age 13, it is not true that period pains will stop if a girl has sexual intercourse during periods*" among others.

3.2.0. Mapping out of MHM interventions in Malawi

The research found that there is a total of 56 organizations (annex A) working on MHM interventions in Malawi. Each of these organizations is working in at least two or more districts. The interventions are either on MHM absorbent materials or MHM infrastructure or MHM education while others are working on two or all the types of interventions.

All the 56 organizations are working on absorbents MHM intervention. Only 12 organizations have MHM infrastructure interventions on either washrooms, incinerator or/and MHM handwashing facility.

3.2.1 Existing Menstrual Hygiene Management absorbent interventions in Malawi.

3.2.1.1 Absorbent interventions

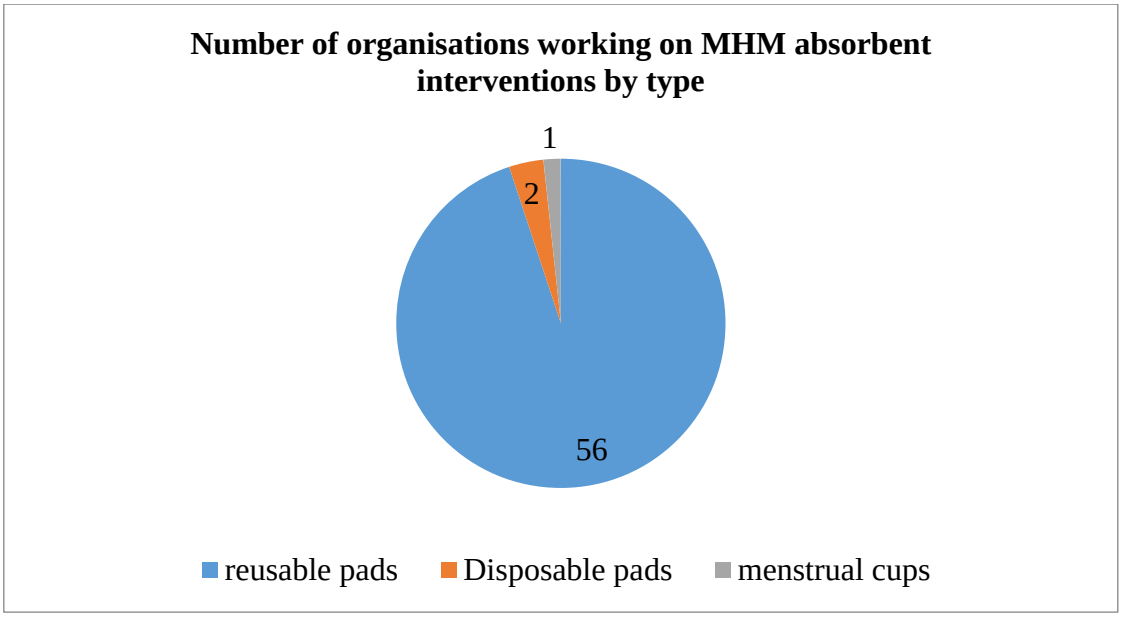

Figure 1: Number of organizations with MHM absorbent interventions in Malawi

All the 56 organizations reported providing reusable pads to adolescent girls or building capacity through provision of technical skills on how to make them to adolescent girls and mother groups plus or minus provision of materials for making them. However, Campaign for Female Education (CAMFED) and action aid provide disposable pads only. In addition, Malawi Girl Guide Association (MAGGA) is the only organization promoting menstrual cups with funding from United Nations Population Fund (UNFPA). These menstrual cups are being given out for free to women and young leaders aged from 20 years above as a pilot in the districts of Dedza, Mchinji, Chiradzulu, Lilongwe and Mulanje. Furthermore, all absorbent materials are locally made except for reusable pads by AFRIpads and menstrual cups which are imported from Uganda and United Kingdom respectively.

On the other hand, all the reusable pads' outer cover are made out either of cotton or flannel with a flexaform as an inner absorbent material while plastic paper or umbrella cloth is used as an inner barrier. Each pad cost about MK150.00 (0.20 US dollars) to MK250.00 (0.33 US dollars) to produce and are sold at a price range of MK200.00 to MK400.00 for NGOs supported production. These are produced by either adolescent girls or/and mother groups and sold to adolescent girls. However, for the private sector, production price is around MK950.00 whilst selling price ranges from MK1, 000.00 to MK1, 150.00. These are produced by employed young women and are sold to adolescent girls and women of reproductive age groups in communities.

Geographical location of schools with MHM interventions

GPS Coordinates were collected to locate and map out schools that have MHM programs in the three regions of Malawi. The figures 1 to 3 below, shows some of the schools in Northern, Central and Southern Regions that have MHM programs currently running.

Figure 2: map of school with MHM intervention that were visited in the northern region of Malawi

Figure 3: Map of schools with MHM interventions that were visited in the central region of Malawi

Figure 4: Map of schools with MHM interventions that were visited in the southern region of Malawi

3.3.0. WASH infrastructure interventions related to MHM in schools

The research looked at available MHM infrastructure in schools because of its supporting role to MHM absorbent materials for example presence of a washroom enabling cleaning of reusable pads and presence of a handwashing facility enabling washing of hands after changing sanitary wear.

3.3.1. Characteristics of schools

Data was collected from 118 schools across the country, 81% were Primary Schools and 19% Secondary Schools. In terms of Region distribution; 8% of the schools were from the Northern Region, 46% from Central Region and 46% from Southern Region.

Eighty six percent (86%) of the schools were from rural areas while 14% were from urban areas.

3.3.2 MHM programs in schools

Findings show that 108 (92%) schools are supported by different organizations while 106 (90%) schools have MHM programs currently running where running means that the intervention project has not yet phased out.

In schools with MHM programs currently being implemented, it was found out that all the schools had at least a toilet for girls and a toilet for boys. In total, the visited schools had 1595 toilets (53% for girls and 47% for boys) with a median of 7 and 6 respectively per school. In terms of security the findings show that only 47% (n=744) toilets were lockable (57% for girls and 43% for boys). Almost all the toilets (86%) had walls for privacy. 84% of the 106 schools that have MHM interventions running, had hand washing stations. These schools had 1034 hand washing stations (51% for girls and 49% for boys) which are either permanent or movable (use of pails) for handwashing after toilet use.

Research findings show that only 42% of the 106 schools with MHM intervention programs had either incinerator (with a range of 1-5 per school) or disposal pit for disposing of sanitary wear. The results also show that 44% of the 106 schools with MHM

programs currently running had a washing area for reusable sanitary wear which usually includes hand washing area.

3.3.3 MHM education activities

3.3.3.1 Health Education Materials in Schools

It was observed that all schools visited, (100%) had puberty education curriculums in their syllabus as part of health education. Additionally, they had life skills text books as their main MHM education material. However, only 18% of the visited schools had additional MHM health education materials like Charts, pamphlets, story books, booklets, magazines, cards, posters and flip charts.

3.3.3.2 Hygiene Clubs

On Hygiene clubs, results showed that 79% (n=93) of the schools had hygiene clubs and only 47% (n=55) of the school surrounding communities support these schools through Mother Groups. The clubs conduct various MHM activities both at school and community. The following are common MHM activities that are conducted in schools and communities:

Hygiene clubs led activities

- Conducting health education on sanitation and hygiene to fellow students under supervision of teachers. This is done through songs, drama and health talks.
- Ensuring that toilets, classrooms and school surroundings are clean.
- Sawing pads and distributing them and training other students on how to sew them.
- Make sure water and soap are available for hand washing at the toilets.

- Conducting sensitization meetings on how students (adolescent girls) can keep themselves clean
- Facilitate sharing of general knowledge on sanitation as well as growth and development.
- Conducting fundraising games to buy sanitary materials and for construction of sanitary facilities.
- Locking and unlocking the changing room (MHM facility) and ensuring that there's cleanliness and safety.

Mother group led activities

- Sensitization to adolescent girls on MHM which is done by health workers (Health Surveillance Assistant), teachers and other community members especially mother groups.
- Provide chlorine to schools used to clean toilets
- Help cleaning of the school toilets, classrooms and all surroundings.
- Orient students on sexual reproductive health services.
- Guide girls on what happens during menstrual period and advising on how to take care of themselves.
- Through mother support groups, students and communities are taught on how to make pads and keep themselves clean.
- Distribution of sanitary pads to girls
- Training students on MHM.

CHAPTER FOUR DISCUSION

4.1. Menstrual hygiene management policy, guidelines and advocacy efforts

The research found that Malawi has no standalone MHM policy and lacks guidelines/standards for MHM materials and infrastructure. However Malawi has integrated MHM issues in some education governing documents.

“In order to create a supporting environment for MHM, an MHM program should have the following elements; available, hygienic and affordable sanitary protection materials; safe, discrete and hygienic disposal of sanitary protection materials; knowledge and information on menses and good menstrual hygiene practices; creating positive social norms, breaking down myths, sensitization of leaders, women, girls, men and boys; advocacy, communication, policies, strategies and guidelines integrate menstrual hygiene; accessible water supply, sanitation and hygiene facilities, private place to change. It also highlights the following key professionals (health, education, WASH, protection, gender, community development) for a successful MHM program”(35). Since MHM is only a part of other policies, MHM issues are not comprehensively tackled and its importance is not emphasized. For example in all the documents reviewed, recommended/standard absorbent materials and MHM infrastructure, costing and how to create a good environment for MHM in schools was not addressed among others. Availability of MHM policy would help addressing all MHM elements above to detail which would in the end contribute to more effective MHM programs.

4.2. MHM absorbent interventions in Malawi

There are a number of MHM organisations in Malawi but there is no database that shows which organisation is working on what kind of MHM intervention. As a result, in one district will end up receiving more MHM interventions leaving others underserved. Despite that there are many organisations both Non-profit and profit organisations producing different kind of MHM absorbent materials, there are no standards that Malawi government has to govern them. Efforts have been made by incorporating MHM in various policies including encouraging distribution of sanitary pads(33), however standards on what makes an effective sanitary pad is not stipulated. Hence some materials may be profit driven as opposed to effectiveness. This means that some people may not access these absorbents due to cost(2).

Materials used for MHM materials vary from organisation to organisation. The differences will have different comfortability and durability. For example some use cotton or flannel as outer covering for reusable pads. The latter is more comfortable because is softer and gentle to touch. Malawi's Human Development Index (HDI) in 2017 was at 0.477 which is lower than the sub-Saharan average of 0.523(36). Considering the average price of sanitary pads at which they are sold; i.e. 0.272$ to 0.544$ (MK200.00 to MK400.00) for NGOs and 1.361$ to 3.067$ (MK1, 000.00 to MK1, 150.00) for profit making organization, the sanitary pads seems to be on the higher side. The unaffordability will force girls to use unreliable materials which may be unhygienic and in the end will make them uncomfortable to participate in various activities including attending school(2). Unhygienic

menstrual practices can also affect the health by increasing vulnerability to reproductive tract infections and pelvic inflammatory diseases and other complications(37).

4.3. MHM infrastructure

Less than 50% of the schools with MHM interventions have either incinerator or disposal site for used MHM napkins. This leaves more than 50% of the schools with MHM interventions with no means of how to dispose of used MHM napkins. It also found that only 44% of the schools that have MHM interventions, had MHM washing area. This challenge of MHM facilities concurs with other studies where majority of schools do not have adequate facilities for girls to manage their menses(38). Lack of proper MHM disposal sites will lead to improper MHM waste disposal(39). For example a study in Dar es Salaam, Tanzania, found that there was an average of 150 sewer blockages per month costing the Dar es Salaam Water and Sewerage Corporation US$25,000 of which menstrual waste was the common cause for this(39).

Lack of proper MHM infrastructure in schools also has implications on school girls' attendance. Evidence also shows that adequate sanitary facilities allow menstruating girls to attend school(40) and this includes disposal site for MHM used napkins.

RECOMMENDATION AND CONCLUSION

Despite the existence of efforts made in Malawi by integrating MHM issues in other policies and other documents, Malawi should consider developing a clear policy to help in governing MHM interventions, stipulating standards of pads, designs of MHM facilities among others. The policy will act as a guide in implementing MHM interventions, hence making them more effective. MHM policy could include subsidizing the costs of sanitary napkins for economically deprived groups and removing or reducing taxes on menstrual absorbents so that the price is reduced, standards on MHM materials and infrastructure. The policy could also include safe disposal of the MHM materials. The lack of standards on MHM infrastructure brings lack of uniformity in the available MHM materials and infrastructure constructed. As a result some may not effectively serve the purpose.

Despite that the study established which organizations are doing what on MHM interventions, Malawi should have a live database that should be updated from time to time when a new MHM intervention comes. The database should include what kind of MHM intervention an organization is working on. This will help new MHM partners to know where interventions are and existing gaps.

WASH infrastructure enhances hygiene for MHM in schools. Considering that the study found that a good number of schools lacked MHM facilities, Malawi should consider promoting construction of MHM facilities when constructing sanitary facilities in schools. The study found that there is no MHM facility design, hence an MHM facility should be

considered to set as a standard, stipulating all elements required to make an effective MHM facility. This should include a good disposal site for used MHM napkins.

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APPENDICES

Appendix 1: Questionnaire for development partners working on MHM (NGOs and Agencies)

Introduction

As Malawian women and girls struggle with menstruation hygiene due to lack and/or insufficient absorbent materials- they must also deal with the incalculable psychosocial effects of embarrassment, shyness, anxiety, shame and, stigmatization. Consequently, menstruation has had a significant impact on the social and family life, education, work, and general well being. The long-term effects of these factors on adolescent schoolgirls are dropping out from school. This may therefore lead to economic stagnation or decline as the girls may grow into unskilled workers. Several non-governmental organizations have responded to these challenges by employing a multi-faceted approach addressing issues such as WASH, education and assisting with MHM absorbent materials. Consequently, there is a proliferation of MHM absorbent materials in Malawi. Currently, there is no comprehensive documentation of what interventions on menstruation products are available nationwide and which of them have been successful. This tool has been developed to guide the compilation of existing absorbent interventions on MHM in a detailed and coherent manner.

SECTION A: ABOUT THE ORGANISATION

1. Date: _____

2. Region: _____ District: _____

3. Researcher: _____ Organization: _____

4. Catchment area: _____ Target population: _____

5. Number of beneficiaries?

6. NGO or commercial operation?

7. Contact information (*Record physical address, contact person, email and phone number below*):

   _____

   _____

8. Program duration (*start date – end date*):_____

9. Principal Donor (s) (*Record who is sponsoring MHM in the organization – record all if there is more than one*)_____

10. Goal (*describe the main goal of the organization*)

    _____

    _____

SECTION B: Menstruation Hygiene Project

A. Goal (*desired goal of the MHM Project*): _____

B. Main MHM interventions *(e.g. absorbents, WASH , MHM education*)

_____

_____

C. MHM target population (*e.g. school girls only, adolescents, women in the community only, girls/women*)

_____

D. Brief description of the MHM nonabsorbent intervention (if any)

_____

_____

E. Description of MHM absorbent product (s)

1. Name of the product:_____
2. Type (pad, cup, other): _____
3. Locally or commercially produced:_____
4. Produced by who?_____
5. Imported by who (if appropriate)_____
6. Materials made of;
    a. Outer cover _____
    b. Inner absorbent material _____

c. Inner material for barrier: _____

7. Texture (*feel it with hands):*_____

8. Cost to make/import:

9. Cost to buy (write free if given out for nothing) :_____

10. What is provided for the cost/ in each pack? (How many pads, pants, etc.):

    _____

11. Infection risk (*i.e. moisture barrier?*):_____

12. Ease of use (ask some of the users):_____

13. Disposable or reusable:_____

14. If disposable, describe the disposal methods:_____

15. If reusable, describe how the process works:

---

16. Are underwear also provided to the beneficiaries when pads are provided? □Yes □No

17. If yes, how many per person? _____

18. Have they had any issues with them? Please describe briefly what these were and how they were resolved if appropriate

---

19. Lessons learnt (*ask for documentation of the lessons, if any*)

_____

_____

20. Best practice example (*if there is a publication on this- ask for a copy*)

_____

_____

_____

_____

21. Challenges

_____

_____

_____

22. Is MHM integrated with improvement of WASH facilities? *(e.g. in schools)*

□Yes □No

23. If yes describe your intervention on WASH facilities.

_____

_____

_____

_____

DISTRICT LEVEL DATA COLLECTION TOOL – To be filled by district health office/district education office

1. Date: _____
2. Region: _____ District: _____
3. Researcher: _____
4. **District summary of MHM interventions**

This checklist will be provided to district health office and/or district education office to be completed by the officer responsible for MHM interventions in the district.

#	Organization	Program duration	Target population	Traditional Authorities covered (TAs)	Names of schools or communities benefitting from the intervention	MHM absorbent Intervention	Is the intervention integrated with WASH facilities or not?

Appendix 2: Key informant questionnaire on Policy/guidelines

Is MHM policy framework guiding MHM operations?

□Yes □No

a. Describe the policy framework if available: (get a copy)

_____

_____

_____

b. How was the MHM policy formulated:

_____

_____

c. When was the MHM policy formulated:_____

d. Highlight main issues and action points in the policy:

_____

_____

_____

1. Lessons learnt (*ask for documentation of the lessons, if any*)

_____

_____

_____

_____

2. Best practice example (*if there is a publication on this- ask for a copy*)

_____

_____

_____

3. Implications for future programs (*future plans***)**

_____

_____

_____

How many and which development partners are working on MHM in Malawi? (ask for a list if they have)

_____

_____

4. Are there any MHM recommended facility infrastructure designs available?

_____

_____

5. What are the key features that it should contain?

_____

_____

Appendix 3: Questionnaire for collecting information MHM infrastructure

1. For institutions benefitting from MHM programs where the program in integrated with WASH facilities, *(i.e. WASH related to MHM*), complete the information below :

a. Are toilets available? □Yes □No

b. Number of toilets?

i. Women/girls:_____

ii. Males/boys: _____

c. Toilets lockable? □Yes □No

d. How many toilets are lockable?

iii. Women/girls:_____

iv. Males/boys: _____

e. High walls for privacy and security? □Yes □No

f. Hand washing station (s) □Yes □No

g. How many hand washing stations?

v. Women/girls:_____

vi. Males/boys: _____

h. In-unit incinerator or disposal pit? □Yes □No

i. How many incinerators or disposal pits? _____

j. Washing area or facilities for non disposable pads?

k. How should they dry them?

2. Description of health education activities (if any) on MHM

l. School curriculum includes puberty education? (if school) □Yes □No

m. Outline the MHM topics if curriculum includes puberty educations

n. What educational or information materials (e.g. book s& pamphlets) are available (*at school or community*)?-

_____

_____

o. Are hygiene clubs available *(at school or community)*? □Yes □No

p. If hygiene clubs are available, please outline the activities below:_____

_____

_____

3. How many teachers/ students/community members are trained on puberty educations or menstruation education? _____

4. If personnel are trained, describe their roles and responsibilities

_____

_____

_____

Appendix 4: Consent form

General things you should know about studies

You are being asked to join in a study and to join is voluntary. You may refuse to join, or withdraw your consent to be in the study.

Research studies are done to obtain knowledge which may help in future like designing programs, informing policies.

Please understand the details of the study below so that you make an informed choice in taking part or not.

Purpose of the study

Menstruation has had a significant impact on the social and family life, education, work, and general wellbeing. The long-term effects of these factors on adolescent schoolgirls are dropping out from school. This may therefore lead to economic stagnation or decline as the girls may grow into unskilled workers.

Anecdote evidence in Malawi shows that women and girls face challenges on menstrual hygiene management. In response, there is a blooming of several non-governmental organizations responding to these challenges through assisting with MHM absorbent materials. Consequently, there is a proliferation of MHM absorbent materials in Malawi. Currently, there is no comprehensive documentation of what interventions on menstruation products are available nationwide and which of them have been successful.

This study is trying to establish the status of absorbent materials in the country.

You are being asked to take part in this study because you are implementing/supporting MHM programs in Malawi or you are benefiting from MHM interventions in Malawi.

What will happen if you take part in the study?

I will ask you some questions regarding your MHM intervention/your benefit from MHM intervention. We will ask these questions in a private place. The interview will be recorded and you can choose not to participate if you don't wish to be recorded.

How long will it take to finish your part of the study?

The interview/discussion will happen one time and will last about 30 to 60 minutes.

Possible benefits

Note that the study is designed to benefit society by gaining new knowledge and not direct benefit. Your participation may contribute towards designing better MHM programs, improving MHM policies.

Possible risks

No significant risks associated with this study are anticipated. However, there is a possibility that your information shared could be disclosed unintentionally. All efforts will be made to protect your privacy and confidentiality and your information will not be identified by names. Recorded information will be stored securely.

Sponsorship

This study is being sponsored by WASHTED.

Who to Contact

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact through the following contact: USAID ONSE health, Management Sciences for Health, P/Bag 398, Lilongwe or cell phone number: +265884677985.

This proposal has been reviewed and approved by COMREC, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the COMREC, contact: College of medicine, P/Bag 360, Chichiri, Blantyre 3. Phone number: +265 1871911/ +265 1874107.

(*Do you know that you do not have to take part in this study if you do not wish to? You can say No if you wish to? Do you know that you can ask me questions later, if you wish to? Do you know that I have given the contact details of the person who can give you more information about the study?)*

Participant's Agreement:

If you have read this informed consent or have had it read and explained to you and understand the information, and you voluntarily agree to participate in this research study, please sign your name or make your mark in the signature area at the bottom of this page.

LITERATE PARTICIPANT

Participant is literate: □

_____ _____ _____

Participant name Participant signature Date

_____ _____ _____

Study stuff conducting consent discussion(print) signature

Date

Appendix 5: List of MHM organizations in Malawi

Organizations with MHM interventions	MHM intervention	MHM infrastructure
Action Aid	Disposable pads	No
Afripads	Reusable pads	No
AGE Africa	Reusable pads	No
Assemblies of God cares	Reusable pads	Yes
CADECOM	Reusable pads	No
CAMFED	Disposable pads	No
Catholic Relief Services	Reusable pads	No
CAVWOC Ox- fam	Reusable pads	No
Chikulamayembe	Reusable pads	No
Children's fund Malawi	Reusable pads	No
CRECOM	Reusable pads	No
DAPP	Reusable pads	Yes
Days for girls	Reusable pads	No
Dreams project	Reusable pads	No
European Union	Reusable pads	Yes
FHI 360	Reusable pads	No
Fishermans	Reusable pads	No
FLOGA foundation	Reusable pads	No
Genet	Reusable pads	No
Girl goal	Reusable pads	No
GIZ	Reusable pads	Yes
Goal Malawi	Reusable pads	Yes
Good hope	Reusable pads	No
Grace pads	Reusable pads	No
Green malate	Reusable pads	No
Habitat for humanity	Reusable pads	yes
Hygiene village	Reusable pads	yes
Jacaranda	Reusable pads	No
Joshua orphan care community support group	Reusable pads	No
Life concern		No
KGIS	Reusable pads	Yes
LISAP	Reusable pads	No
Livingstonia synod	Reusable pads	No
MAGGA	Reusable pads and menstrual cups	No

Mary meals	Reusable pads	No
MESIP	Reusable pads	No
Nkhotakota youth organization	Reusable pads	No
Plan International	Reusable pads	
PDI	Reusable pads	No
Red cross	Disposable pads	No
Save the children	Reusable pads	Yes
SRHR Africa Trust - Malawi (SAT Malawi)	Reusable pads	No
SIP	Disposable pads	Yes
Supreme sanitary pads	Reusable pads	No
Tayo	Reusable pads	No
Tina pads	Reusable pads	No
Tiyamike	Reusable pads	No
UK Volunteers	Disposable pads	No
Ulinji	Reusable pads	No
UNFPA	menstrual cups	No
UNICEF	Reusable pads	Yes
United purpose	Reusable pads	No
Wateraid	Reusable pads	Yes
We care foundation	Reusable pads	No
Welt hunger Herthe	Reusable pads	No
World vision	Reusable pads	Yes

Appendix 6: Certificate of ethical approval

CERTIFICATE OF ETHICS APPROVAL

This is to certify that the College of Medicine Research and Ethics Committee (COMREC) has reviewed and approved a study entitled:

P.04/18/2380 - Investigating the status of menstrual hygiene management absorbent interventions: A situation analysis in communities and schools of Malawi by Anna Slyvia Masanda

On 23-Jun-18

As you proceed with the implementation of your study, we would like you to adhere to international ethical guidelines, national guidelines and all requirements by COMREC as indicated on the next page

Dr. YB. Mlombe - Chairperson (COMREC)

23-Jun-18

Date