Investigating the Perceptions and Barriers to Menstrual Hygiene Management (MHM) in Zambia

Report to World Vision Zambia's Water, Sanitation, and Hygiene (WASH) Program
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Abstract

Aims
Menstrual hygiene management (MHM) is a major issue affecting the health and educational achievement of women and girls of reproductive age. This exploratory study sought to understand the barriers and perceptions of MHM throughout Zambia, in order to address the health and sanitation needs of women and girls. The findings of this study will be applied to World Vision Zambia's (WV Zambia's) inclusion of MHM in future WASH activities.

Methods
Interviews and focus groups were conducted in Southern (Choma), Northern (Kasama), and Central (Chongwe) regions in Zambia. Female students (older than age 12 who have reached puberty), male students (grades eight and nine), teachers, and sanitation, hygiene, and nutrition (SHN) coordinators were interviewed, as well as parents and community hygiene promoters (CHPs). A qualitative analysis identified key themes related to knowledge, practices, beliefs, and challenges related to MHM, and WV ZWASH program activities were reviewed.

Results/Conclusions
A total of 305 persons were interviewed. Findings demonstrated a need for resources, including emergency supplies for management of menstruation, improved facilities in schools, and an overall desire to educate girls and women in the community about MHM. Initial findings identified a discrepancy between the knowledge base of girls and the information reportedly taught in schools by teachers. The lack of knowledge about MHM, community support, and supplies contribute to school absenteeism, unhealthy MHM practices, and feelings of discomfort among schoolgirls.

Background:

Menstrual Hygiene Management (MHM) – A History of Neglect

Menstrual hygiene management (MHM) is a major health issue affecting women and girls of reproductive age worldwide. MHM is an important issue because 52% of the female population (26% of the world's population) is of reproductive age at any one time (WaterAid, 2012), and each month they are experiencing their menstrual cycle for up to 52 days per year (McMahon, Winch, & Caruso, 2011). Menstruation is a natural process that signifies physiological development of an adolescent girl. In many cultures, it represents not only the ability to have a child, but also the transition into adulthood. The transition for some girls is often experienced with anxiety and fear due to a lack of knowledge about menstruation and a lack of

resources to properly manage their physical pains and changes occurring in their bodies (WaterAid, 2012). The physical changes, along with cultural restrictions and connotations involving menstruation can make it difficult for young girls and women to manage their menstrual cycles well.

As a woman experiences her monthly menstrual cycle, there are specific needs that should be met in order for her to manage her menstrual cycle with dignity and well-being. Many women throughout the world, especially those in developing countries, do not have the resources, knowledge, or ability to handle their monthly cycles. Not providing women and girls with an opportunity to manage their menstrual cycle well has been shown to negatively affect their educational attainment and health, in addition to their overall well-being (WaterAid, 2012).

Although the link between school absenteeism for school girls and the inability to manage one's menstrual cycle has not been definitively demonstrated with quantitative research, according to a review by Sumpter & Torondel, numerous qualitative studies identify a lack of MHM as a culprit for missed school days and demonstrated that some improvement in MHM and knowledge may be based on educational interventions which may in turn improve school attendance (2013). A research study conducted in Ghana identified increased puberty education and the provision of sanitary pads as a way to improve school attendance (Montgomery, Ryus, & Dolan, et al, 2012). Another study conducted in Kenya found that schoolgirls provided with reusable sanitary towels experienced either an increase or no change in school attendance rates versus either a decrease or no change for schoolgirls who were not provided supplies (Wilson, Reeve, & Pitt, et al., 2012).

Although some studies have identified ways in which to improve girls' school attendance rates or access to sanitary supplies, there is still a need for comprehensive action in order to

allow women and girls the ability to manage their menstrual cycles without a lack of resources and without fear of not being able to handle their monthly menstrual bleeding. According to UNICEF, in order to improve the MHM agenda, the following recommendations need to be considered: 1) Documenting MHM practices and barriers in developing countries; 2) Developing guidelines on how to integrate at least a minimal focus on MHM into school water, sanitation, and hygiene (WASH) programs; and 3) Engaging with national governments to ensure initial buy-in for MHM programs (2012).

World Vision Zambia's WASH (WV ZWASH) Program

The ability of women and girls to have access to MHM has not been an integral part of WASH programs worldwide for many reasons, ranging from a cultural and religious environment where female health issues are not discussed due to issues of stigma to menstrual blood and menstrual hygiene (EEPA, 2007). Often menstruation has been equated with being unclean or "polluting," for example, in Hindu or in many African cultures, a used sanitary napkin seen by others is thought to be used to make someone infertile (Garg, Goyal, & Gupta, 2012; WaterAid, 2012). Another reason that MHM has been neglected and left out of WASH efforts in many countries is that the high ranking policymakers have not historically included persons in positions of power who have been moved to focus in this area of health need.

WVZ has a rich history of working in poor, rural areas to bring access to clean water, improved sanitation, and hygiene education. Over the past 27 years, with a budget reaching over $90 million per year, the WASH program has been working in 27 countries to combat health problems and social issues such as preventable child deaths, chronic malnutrition, and absenteeism from school for girls (World Vision, 2013). The goal of the WV ZWASH program, which started in October 2008, is "to contribute to the improved health, nutrition, education, and

well-being of 300,000 people, including 100,000 children, living in 16 community development areas through improved access to safe, sustainable supplies of potable water, adequate sanitation, and hygiene by 2015" (World Vision, 2011). Some of the WASH program activities include digging wells, building latrines, and most importantly, using a community-driven model to teach communities how to maintain their clean water supply and to educate persons in the community on hygiene issues. WV's ZWASH program has invested in these efforts in order to increase access to water supplies, improve sanitation, increase knowledge about hygiene, and to empower communities to take ownership and facilitate their own interventions.

One focus of the WASH program is to address the Millennium Development Goals (MDGs), while also addressing the needs of local children. MDG #3 is to promote gender equality and empower women and the first target is to eliminate gender disparity in primary and secondary education, preferably by 2015, and in all levels of education no later than 2015 (EEPA, 2007). In order to create a sustainable program, WVZ has invested in the community and is always working to improve its impact on the people it serves. WVZ continuously monitors successes in the communities it serves, and works with community development workers and other community leaders to ensure that program efforts to expand access and education are not only bringing aid to communities, but also empowering them. Like most WASH programs worldwide, MHM issues have not been addressed specifically as part of WV's ZWASH activities; however, in order to improve future WASH programming and to sustain the efforts invested in communities, WVZ is planning to include activities involving MHM in its WASH portfolio.

To explore and identify the perceptions and barriers/challenges to MHM faced by women and girls in communities throughout Zambia; this project was conducted in the northern, central,

and southern regions of the country. For this project, MHM was defined as the ability to have control over one's menstrual cycle including privacy, clean supplies, water access, disposal facilities, and knowledge of hygienic practices. The project goal was to investigate perceptions and barriers to MHM in Zambia, and there were seven objectives under three themes of 1) changing knowledge, attitudes, and practice of the community; 2) informing the practice of World Vision WASH programs; and 3) influencing government policy. The objectives are to:

I. determine the perception of MHM among men and women in Zambia.

II. determine the knowledge level of men and women related to MHM.

III. determine the common practices of MHM among women and young girls in Zambia.

IV. determine the barriers for women and young girls to practice safe MHM in Zambia.

V. determine what are the economic, social, educational, and health impacts of poor MHM on young girls and women?

VI. identify potential areas where WASH programs can incorporate MHM into their activities in Zambia.

VII. identify potential areas for policymakers to improve MHM access and decrease barriers for women and young girls to practice safe MHM.

Methods

An extensive literature review was conducted on MHM and its incorporation into WASH programs. A review of WV's ZWASH program activities was conducted along with a review of health behavior models that might inform the investigation. The health belief model (Champion & Skinner, 2008) and the hygiene improvement framework (WaterAid, 2012) were used to direct some of the interview questions. Six interview guides were created for focus groups and interviews with schoolchildren, school officials, and community members in each Area Development Program (ADP). The focus groups and interviews were conducted to gain further understanding of the areas in which improvements can be made for women and girls to practice

successful MHM. The main interview topics included questions about beliefs, cultural traditions, knowledge, challenges, impact, facilities, and community and family support. Prior to interviewing in communities, some of the individual interview questions were pilot tested with adolescent girls in Chongwe and with a parental figure. Revisions were made to interview questions based on review from WVZ staff, as well as feedback from the participants in the pilot interviews.

Interviews and focus groups were conducted in three areas of Zambia including the Southern (Hamaundu ADP (Choma)), Northern (Mwamba ADP (Kasama)), and Central (Kapuluwe ADP (Chongwe)) regions. The following persons were interviewed in schools: female students (greater than 12 years old, who have experienced menstruation) male students (grades eight and nine), female teachers, male teachers, and sanitation, hygiene, and nutrition (SHN) Coordinators (Hygiene Resource Persons). The following persons were interviewed in the communities: parents of girls who are old enough to have experienced menstruation (mothers and fathers) and CHPs.

Interviews and focus groups were conducted for three days in Choma and four days in Kasama as comparison interviews to those conducted in Chongwe for ten days. 78 interviews were conducted in Choma including the following: 30 schoolgirls (27 in focus groups, three individuals), 28 schoolboys, 12 parents and CHPs (three were men interviewed separately), and eight female teachers (one was a SHN Coordinator). 88 interviews were conducted in Kasama including the following: 35 schoolgirls (28 in focus groups, 7 individuals), 14 schoolboys, 27 parents and CHPs (4 were men interviewed separately), and 12 teachers (three were SHN Coordinators and one male teacher and one male SHN teacher were interviewed separately). 139 interviews were conducted in Chongwe including the following: 60 schoolgirls (46 in focus

groups, 14 individuals), 0 schoolboys, 58 parents and CHPs (7 were men interviewed separately), and 21 teachers (7 were SHN Coordinators and three male SHN Coordinators were interviewed separately). Interviews were conducted at schools and in the surrounding communities. The number of persons interviewed and the composition of groups chosen for interviews varied based on location and the need to include a variety of perspectives on MHM. For example, if multiple groups had been conducted with mothers and female community hygiene promoters (CHPs), then subsequent interviews with fathers and male CHPs were desired.

Focus groups were conducted with teachers, female students, and male students. Each group lasted for approximately 30-45 minutes, was gender-specific, and included ten or fewer participants. Interviews were recorded with verbal permission of interviewees and interpreted by a translator who knew the local language, when needed. One to three female students at each school who were not part of the focus group participated in a more in-depth interview, as did the SHN Coordinator. These interviews lasted for approximately 25-30 minutes. Community focus groups were also separated by gender and lasted approximately 30-45 minutes. Arrangements were made under the direction of school staff so as to not disrupt classroom instruction time for students, and interviews were planned for afternoons with community members so as to not disrupt harvest time. Interviews with schoolboys and men were added after the first week of interviews. They were included in the study to obtain male perceptions on MHM and their ideas for improvements, in part because males serve as heads of households/providers, fathers, husbands, and schoolmates, and they are in a supportive role to women and girls.

In Choma, schools were chosen randomly for interviews based on which ones were most likely to have older children attending, as required for the interviews. The community interviews

were conducted in areas surrounding the schools to capture parents and CHPs working in the same communities. A total of three schools and communities were chosen for interviews in Choma. In Kasama, the schools were chosen based on student eligibility and to include schools where WVZ has a large presence and where it does not. The community interviews were conducted in a nearby location. In Kasama, interviews were conducted in three schools and one community. In Chongwe, the schools were chosen with the recommendations of the Ministry of Education and interviews were conducted in five schools and four communities.

Table I: Demographics of Persons Interviewed

Interview Types	Choma (Hamaundu ADP)	Kasama (Mwamba ADP)	Chongwe (Kapululwe ADP)
Schoolgirls	30 (27 in groups, 3 individuals)	35 (28 in groups, 7 individuals)	60 (46 in groups, 14 individuals)
Schoolboys	28	14	0*
Parents, CHPs	12 (3 men)	27 (4 men)	58 (7 men)
Teachers	8 (1 SHN Coordinator)	12 (3 SHN Coordinators, 2 men)	21 (7 SHN Coordinators, 3 men)
Total Interviewed	78	88	139

*The decision to interview schoolboys was made after all interviews had been conducted in Chongwe, so no schoolboys were interviewed in Chongwe.

All interview responses were reviewed and summarized. A large sampling of interviews and focus groups (covering 169 persons) was transcribed based on location where interviews were conducted and who was interviewed. A qualitative analysis identified key themes related to knowledge, practices, beliefs, and challenges related to MHM. Initial findings were disseminated through a community presentation in Chongwe where parents, schoolgirls, teachers, and CHPs were invited. An overview of the project was shared that included results and conclusions. Attendees were provided with scenarios where girls were dealing with MHM issues and had to work in groups to identify ways in which to support the character of the story as a friend, parent,

teacher, or community member. Groups were instructed to use either drama or talking points to respond to the scenario and discussion questions, which were eventually open to the entire group for input.

Initial findings were also disseminated through a presentation for district partners where attendees included representatives from a local Ministry of Education, the Commissioner's Office, parents, school officials, National WVZ staff, and persons from local WVZ offices where the study had been conducted. An overview of the project was shared along with findings and recommendations in PowerPoint format. Following the presentation, the floor was open for discussion and groups convened to respond to questions and then shared with the larger audience.

Findings from this research have been disseminated through presentations for WV's WASH Community of Practice webinar, the Water and Health Conference at the University of North Carolina at Chapel Hill, the Virtual MHM in WASH in Schools Conference, and the 2014 International WASH conference in Brisbane, Australia.

Results

A total of 125 schoolgirls were interviewed; 24 of them were interviewed individually, and the rest of them participated in focus groups. The focus groups consisted of girls in grades seven to nine who were 13-18 years old. The individual interviews included girls who were in grades five to nine who were 12-17 years old.

Knowledge and Beliefs

Many cultural beliefs were identified as well as general beliefs about menstruation. The majority of girls shared sentiments that they were scared when they first experienced menstruation because they had never heard of it before. Others were excited because it meant

that they were a "grown up/woman" now. One participant said, "I was scared when it first happened because I had never heard of it before." Another responded, "I don't know why it [menstruation] occurs." There was a lack of knowledge surrounding menstruation, which caused them to fear the changes in their bodies. Another common response was that menstruation occurred "to clean our bodies". Consistently participants reiterated that menstruation is a "secret" that no one is supposed to talk about. Alternatively, some girls had heard about it before from older sisters or friends and were excited to now experience their menstrual cycle.

Despite most not knowing reasons behind some traditions, many girls discussed the restrictions placed on them during their monthly cycle. These included not cooking, not adding salt to food, and not eating food with salt added. As one participant shared, "I miss out on the cooking and adding salt to food." When asked about restrictions, another participant said, "They can't sleep with a guy and they don't put salt in food. They also don't hold breastfeeding babies because it will make the babies dirty." The beliefs related to restrictions on cooking and adding salt were common in all communities, but the reasons behind the restrictions were often unknown.

Practices

There was immense variation among respondents regarding their experience the first time they had their menstrual cycles. Some were able to ask an elder family member for assistance, some participated in a traditional ceremony, while others hid and did not tell anyone. Traditions and ceremonies ranged from being provided with chicken with traditional herbs, bathing with herbs, and being kept in the house for a specified time with elders. One interviewee described how she was "taken to the bush" for one day and taught how to "keep herself," and then she was kept in the house for one week. Another young lady was taught that she was "coming of age" by

her sister-in-law, and she was provided traditional medicines to take and to bathe in and told not to "play with boys". There were a variety of experiences described where some girls were supported with traditions and resources, but others managed their menstrual cycles in secret and with a lack of knowledge, support, and supplies.

Challenges and Impact

Schoolgirls described many challenges faced in managing their menstrual cycles, especially at school. Some of the challenges included a code of silence that did not allow them to feel comfortable asking teachers for assistance, especially in the company of schoolboys. Schoolgirls described not feeling comfortable using toilet facilities and not having sanitary supplies to use throughout the school day. They identified a lack of soap, clean toilets, clean water, privacy, and sanitary supplies as the main challenges at school. Often, they would tell their friends to tell the teacher "my friend is sick" and then they would be sent home or they would remain quiet and sit in class until everyone had left, often enduring painful menstruation cramps.

Being uncomfortable at school caused some girls to miss class every month. As described by one young lady, "[I miss] one or two days when it's heavy. Usually the first day." She discussed missing her schoolwork, "In other subjects besides math you can copy notes, but with math, you just fall behind." When asked about their classmates, schoolgirls said, "They don't come to school. They fear that maybe boys will laugh at them when they make their uniform, dirty so they just remain at home."

At home, schoolgirls seemed to feel more comfortable using the toilet facilities, but some discussed the challenges of using cloths due to a lack of funds for sanitary pads. Many of them also discussed following traditions and not cooking or playing with boys, but they did continue

with other household chores. Many girls did not know how their classmates handled their menstrual cycles at school because it was not something that was openly discussed, but they did share some of the same concerns of privacy, cleanliness, and access to supplies.

What Is Needed

When asked what they felt was needed to improve the situation for women and girls to allow them to manage their menstrual cycles better, schoolgirls said that there is a need for emergency supplies at school, especially for girls experiencing menstruation for the first time. They also identified a need for women and schoolgirls to have increased access to sanitary supplies throughout the community. At schools, they suggested improvements in facilities and supplies, including an increase in private, clean toilets, private bathing rooms with buckets/dishes, clean water, and soap for washing. One interviewee said, "We need help with supplies at school because it's embarrassing in front of boys. Usually girls just go home with no supplies." They also expressed a desire to learn more about biology and what is happening to their bodies as they mature in addition to personal hygiene related to MHM, and how to use sanitary pads properly.

The parents/CHPs, teachers/SHN Coordinators, and schoolboys echoed some of the same sentiments as the schoolgirls regarding issues surrounding MHM. Parents and CHPs discussed their concern with the ability of young girls to attend school without the challenges of managing their menstrual cycle. One mother expressed, "Younger children don't come to school – they fear boys will notice and laugh. We still encourage the old women to teach the traditional system so they know what to do before they grow up." Other parents discussed the desire to increase the knowledge of young girls and women in the community as she stated, "We want the community to be sensitized about the girl child when she reaches menstruation. We want to have a group of

women or teachers to teach the girls." The parents want the best for their young girls and were very concerned that girls did not have proper sanitary supplies and that some of them were missing class because they weren't able to manage their menstrual cycles at school. Many of them thought that some traditions were necessary to continue to teach young ladies how to "keep themselves," respect their elders, how to dress, and what to do when they get married, but others thought that some traditions, such as restrictions on cooking, needed to be changed. They described a large spectrum of what is taught to young girls, but most agreed that more supplies are needed at school and more open discussion is needed in this topic area to make improvements for both women and schoolgirls.

Teachers/SHN Coordinators described an atmosphere where young girls do not feel comfortable coming to them to ask for assistance. As one teacher stated, "They feel shy. They are not free to ask us. They say they have a headache when they have their menses." They also expressed a desire for supplies and improved facilities to be made available at school and more discussions with schoolgirls about how to manage their menstrual cycles in addition to what is going on with their bodies.

Common Findings

Overall, findings from interviews described common issues of low resources, a lack of knowledge related to MHM, and low support due to secrecy leading to some negative outcomes, such as school absenteeism and discomfort among schoolgirls. Regarding knowledge and beliefs about MHM, there was a common practice of referring to menstruation as a taboo topic that no one talks about, which sometimes led to a disadvantage of girls not being able to ask for help at school. Knowledge of menstruation and MHM varied because schoolgirls learn basic biology at school and some learn MHM practices at home. Although, there was a disconnect between the

knowledge of students, specifically girls, and what teachers described as being taught on this subject. Regarding practice and challenges, many interviewees described restrictions for girls and a lack of supplies during their menstrual cycles causing them to have to manage their cycles in secret and with great difficulty. Regarding what is needed, all interviewees advocated for increasing cleaner, more private facilities at school, and for more access to sanitary supplies at school and at home. A clear connection emerged between the effect of a lack of knowledge, facilities, supplies, and the burden of managing menstruation on a monthly basis.

Table II: Key Findings from Focus Groups and One-On-One Interviews

	Knowledge/Beliefs	Practices	Challenges/ Impact	What Is Needed
Schoolgirls	• Lack of knowledge about why menstruation occurs • Menstruation is a secret • Girls should not "play with boys" when they get their menstrual cycle	• Restrictions on cooking and participating in some activities • Observations of traditional ceremonies and customs • Some ask and elder woman for help	• Lack of money for supplies • Lack of comfortable toilet facilities at school • Fear of embarrassment among boys	• Emergency supplies at school • Increased access to supplies throughout the community • Clean toilets with soap, water, and privacy doors
Parents/CHPs	• Traditions should continue (girls learn, parents are more aware) vs. they should stop (religious beliefs, times change) • Menstruation is a secret	• There are traditional foods and medicines provided to girls during their first menstrual cycle	• Girls may feel neglected without proper supplies • Girls become very shy and reserved • Some girls attend school regularly and others miss during their menstrual cycles	• Supplies at school • Supplies throughout the community • Open discussion with women and girls
Teachers/SHN Coordinators	• Menstruation is a secret, but we should talk about it	• Some girls do not feel comfortable asking a teacher for help	• Lack of money for supplies • Fear of embarrassment among classmates • Some girls leave school during menstruation • Girls participate less in class during their menstrual cycles	• Emergency supplies at school • Bathing rooms at school • Sensitization of parents

Schoolboys*				• Bathing rooms at school • Supplies at school • Sensitize the community

*Please note, the schoolboys were not asked many of the questions pertaining to MHM asked of persons in other groups.

Recommendations/Discussion

By listening to the concerns of the community and seeing first-hand the challenges women and schoolgirls are facing in managing their menstrual cycles, WV's ZWASH program can develop and implement programs and facilities that are more conducive to community needs by focusing on the themes of culture and beliefs, resources, and practices. To improve the ability of women and girls to practice safe and sanitary MHM, it is recommended that WV's ZWASH activities include sensitizing community women on MHM, increasing gender-specific discussions within schools, and creating mentoring groups for school girls to ensure that MHM skills and accurate knowledge are being taught. Emergency supplies should be made available to schoolgirls and constructing secure, private bathing facilities near or attached to toilets should allow for safe, hygienic MHM practices while at school.

CHPs should be trained through meetings with WVZ staff and afterwards perform community outreach with women on MHM to provide a more relaxed atmosphere in which to discuss these issues. It is also recommended that additional sessions be held within schools solely for schoolgirls with female teachers and/or counselors. Prefects (school captains) may be a great resource for disseminating information to other classmates. Working within the community and within schools, a group mentoring system is recommended where knowledge can be shared about basic biology, traditions/reasons for menstruation to decrease the burden felt by schoolgirls and to combat some of the secrecy that is causing them to feel shameful and to not ask for help.

Community women also have a desire to learn and by reaching the women, one can then reach schoolgirls.

It is also recommended that sanitary supplies, at least for emergencies be made available in schools. In addition to the supplies, a female teacher or staff member who is willing and able to assist girls at school should be identified. Having supplies available is a first step, but knowing they are available and knowing who to ask is also necessary. Increasing the conversation about MHM is necessary for schoolgirls, but a general inclusion of more information surrounding menstruation should be added to the school curriculum. Male teachers and schoolboys should be more informed regarding MHM as well, but providing a safe, comfortable space for girls to learn about their bodies is of the utmost importance.

It is recommended that toilet-cleaning schedules be changed so that they are not used as a source of punishment, but as a source of pride in the school where everyone can participate. It seems that students would be more careful to keep the facilities cleaner if it was a shared responsibility and not something with a negative connotation. It is also suggested that the gender-specific toilets be designated for upper and lower grades so that older girls are not as fearful of younger children disturbing their privacy while using the toilet facilities. Following discussions with schoolgirls and community members, it is also suggested that bathing facilities be looked into as an option for students, although it is recommended that they be built in private areas and include washing containers, water, and soap.

Table III: Proposed Interventions by Location

Community Interventions	**School Interventions**
Education and Mentoring	
1. Train CHPs to sensitize women in the community on the basic biology of the menstrual cycle and the importance of MHM in order to prevent misperceptions 2. Create mentoring groups between community women and schoolgirls so the knowledge is passed on after sensitization of women by CHPs	1. Provide opportunities for schoolgirls to meet with female teachers and counselors to discuss questions/concerns about MHM a. Share information on biology, traditions, significance of menstruation, and the practice of hygienic MHM 2. Create mentoring groups with prefects (school captains) so older girls can be an example to younger girls and dispel shyness and discomfort with menstruation 3. Increase focus on menstruation in general biology curriculum
Resources	
1. Provide sustainable supplies to women in the community (future)	1. Provide emergency supplies at school 2. Identify a focal point person (female teacher or counselor) and let students know she is available to assist with MHM needs including emergency supplies 3. Start discussion on bathing facilities at school (e.g. Attached to/nearby toilets for female students including washing containers, soap, and water)
Practices	
	1. Create toilet-cleaning schedules that promote school pride and not punishment 2. Segregate gender-specific toilets for upper and lower grades to increase privacy for older schoolgirls

Conclusions and Moving Forward

This formative research project was conducted to improve conditions regarding MHM for schoolgirls and community women, as there was no previous work by WV's ZWASH program specifically in the area of MHM. The goal was to conduct exploratory research to learn from the community and to challenge them to think about their concerns and issues related to MHM practices, not to direct or educate them. This project was an opportunity to use direct observations, focus groups, and in-depth interviews to learn about first-hand barriers and perceptions to MHM in order to improve ZWASH programming and create a sustained impact on communities by addressing the needs of women/girls to improve their ability to manage MHM issues.

The project was also conducted to challenge government officials to look at policy implications related to MHM and to encourage WVZ staff to enhance their practice by incorporating MHM into their activities. As evidenced by the support of government and school officials throughout the project, and their attendance at the final presentation of study findings/workshop, there is an overall desire to improve conditions and practices, an overall desire to learn, and the availability of many partners willing to act regarding MHM. Discussions have already begun after the workshop that was conducted with school and government officials. In response to discussion questions below, some of the following topics were brought to the table during the workshop session.

Question #1: What are some more recommendations we can do after hearing these findings?

- Construct 2-sided toilets/double VIP pit latrines (toilet and bathing shelter) equipped with a water tank so schoolchildren do not have to draw water in another location before using it. Supply liquid soap.
- Incorporate MHM into the school-led sanitation community (SLTS and CLTS).
- Decrease the stigma and appreciate that menstruation is normal.

- SHN Coordinators can take on a more active role. Perhaps bathing at school can become more normalized for general hygiene practices.

Question #2: What are we doing now in our organizations to support women and girls with MHM?/What can we do?

- There is a need for a lot of advocacy in organizations and schools.
- Sensitize school children through drama and talks. Education should be inclusive and integrated.
- Redesign sanitation facilities. Currently no wash facilities are included.
- Research supplies in schools and whether this is a sustainable practice if they don't have pads at home.

Question #3: What are some barriers to pursuing MHM in the past and how can we overcome them?

- Traditional beliefs and knowledge can be barriers to MHM. Impart knowledge through sensitization of community leaders through drama.
- Include males for support.
- Improve communication. Think about how we can remove the secrecy surrounding menstruation. Use community meetings and SHN Coordinators in schools.

Question #4: What can each of us do after leaving this meeting to ensure MHM is a priority issue and to partner with World Vision's ZWASH program in their efforts?

- Make this program a priority. We must start in our homes.
- Partner with teachers at school. Ensure they are sensitized and understand the importance of this issue.
- Talk to the community members. For example, use the PTA or committees in charge of the school who have representation from the communities and then involve traditional leaders.
- Partner with WV and lobby for funds for the bathing shelters.
- Ensure information spreads to the people.
- Work with the Ministry of Education.
- Work on the design of bathing shelters. Revise the design to put them in one shelter to improve the usage by the pupils.

Further conversation ensued regarding the bathing shelters at school and whether students would use them. They also discussed that the topic of MHM is about respect, and that it should not be presented as a taboo subject because this practice may be alarming children and making

them shy. Meeting participants discussed at length the cultural constraints that cause a gender gap between men and women and generational gaps where girls do not feel comfortable discussing MHM with anyone. Participants asked, "Are we passing on generational fear? Can we demystify this situation? Can we break this culture?" The meeting concluded with newfound eagerness to "start at home" in order to break the cycle of discomfort surrounding this topic.

Action items identified by participants included creating a standard curriculum for teaching the community, revamping the reproductive health curriculum in schools, breaking the sensitivity with the community, and conducting similar research on education levels and traditions to identify the reasons behind them. Participants acknowledged that the entry point into a community is through traditional leaders, and that the Ministry of Education should be involved in order to mandate any curriculum changes. They also said that since MHM is part of sanitation, perhaps the focus on MHM could be streamlined into the work being done by CLTS/UNICEF as a way to "break the ice". They also suggested using the news media to run advertisements and subsequently, following this workshop, there was a short segment aired on Zambian TV News on August 1, 2013. In addition, the charge was given by Dr. Emmanuel Opong to representatives in Chongwe and Choma to lead the efforts related to MHM.

The conversation has been started, but the work must continue to include government partners, schools, and communities in making MHM easier for women and girls. This project like all studies had a few limitations or areas for improvement including initial discomfort of interviewees with an outsider and the use of different interpreters. Alternatively, interpreters were chosen who were familiar with the community, well-versed in the local language, and of the same gender as the interviewees. Having an interviewer who was not a member of the community may actually have made the interviewees more at ease to respond to questions about

such a sensitive topic after initial introductions. Although no interviews were conducted in the Western and Eastern provinces and the results are not generalizable, the findings are specific to the areas in which WVZ will be doing work. One unique component of this project was the ability to go back to at least one community within which interviews were conducted to share initial study findings and to solicit additional information regarding MHM challenges.

Despite limits in conducting the project, researchers were able to glean a lot of information from the community regarding perceptions and barriers to MHM in Zambia. These findings and recommendations may be used to influence some work in this area by WV's ZWASH program activities related to MHM.

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Appendices

Please see the appendices for the following attachments:

- Six interview guides
- Interview summary sheets (matrices)
- District partners' powerpoint presentation with discussion questions
- Literature review table on MHM
- Health Belief Model and Hygiene Improvement Framework