

Promoting Female Empowerment through Reusable Sanitary Pad Project in Namanga, Kenya

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Abstract

Globally, gender disparities manifest in a variety of ways including forced marriages, reproductive health concerns, lower educational achievement, and restricted sense of agency. In an effort to address gender-based health, educational, and human rights disparities, a group of students from the University of Alabama at Birmingham, in collaboration with With My Own Two Hands (WMO2H), initiated a qualitative study involving the implementation of a reusable sanitary pad project in conjunction with menstrual health management (MHM) education in Namanga, Kenya. The study was conducted at a primary school in rural Kenya with a goal of empowering school-aged girls to continue their education and to promote girls' sense of agency. The study was developed through community-based participatory research including formation of an informal community advisory board and collaboration with community partners. Sustainability of the project was guaranteed through adoption of the project by a community collaborator in Kenya who continued to create reusable sanitary pads and provide MHM education at neighboring schools following the conclusion of this case study. Follow-up reports on the project indicate an overwhelming attitude of positivity and gratitude for the MHM resources among the students, teachers, and family members noting the increased opportunity for continued education for the young women and financial relief for families. The study successfully met its three primary objectives: (1) increasing girls' access to MHM materials; (2) facilitating conversations about menstruation in an effort to reduce stigma, challenge misbeliefs, and educate on MHM topics; and (3) empowering girls to continue their education and not see menstruation as a barrier to school attendance. Additionally, the reusable sanitary pad project addressed global human rights issues surrounding gender equality, equal educational opportunities, and access to sanitation and MHM resources through the implementation of basic public health interventions to better the future of the girl child.

Key Words: Menstrual Hygiene Management, Gender Equity, Education

1. Introduction

Being born female innately predisposes individuals to a myriad of adverse health outcomes merely on the basis of sex. These conditions include both increased risk of as well as unique susceptibility to various noncommunicable diseases, such as anxiety and depression and cervical cancer respectively, in addition to communicable diseases, including but not limited to harmful sexual and reproductive health (SRH) conditions like sexually transmitted infections (STIs) and HIV.^{1,2} Further manifestations of gender-based health inequities arise as a result of unwanted pregnancies, unsafe abortions, and gender-based violence (GBV), such as early or forced marriage and female genital mutilation (FGM), and lead to long-term physical, psychological, and social repercussions.^{3,4} Females living in low- and middle-income countries (LMICs) are disproportionately impacted by these health and human rights violations due to a lack of

adequate resources and limited access to quality and affordable health care in conjunction with a high prevalence of political, social, and economic inequity and patriarchal societies in which female autonomy is largely undermined.^{2,5} Women living in the World Health Organization's (WHO) Africa world region face a higher burden of years of life lost (YLL) due to premature mortality in comparison to their male counterparts as a result of STIs excluding HIV (56.4% of total YLL among men and women), maternal conditions (100%), breast cancer (99.8%), cervical/uterine cancer (100%), ovarian cancer (100%), and endocrine, blood, and immune disorders (61.4%).⁶ Females in their reproductive years, between puberty and menopause, are at increased risk of ill-health relating to SRH concerns and face high rates of morbidity and mortality as a result.⁷ More than 60% of women's deaths in sub-Saharan Africa are a result of communicable, maternal, perinatal and nutritional conditions.⁷ According to the WHO, the burden of disease and disability in women of reproductive age is highest in Africa due in part to socioeconomic and cultural factors that often inhibit adolescent girls from accessing information, education, resources, and health care at the onset of puberty when they are most at-risk of exploitation and future health harms.⁷

Topics pertaining to female health and rights, especially for adolescent girls, have come to the forefront of conversations in recent years within the fields of global public health and international development. Discussions regarding educational and economic disparities between genders have led to an increase in academic research and humanitarian work looking at the challenges facing young girls living in LMICs. Following the global movement to reduce the gender gap for educational achievement in the early 2000s, the biological process of menstruation emerged as a significant barrier to education for young girls in the developing world.⁸ Billions of females around the world face menstruation as a monthly challenge raising concerns over both physical management due to lack of resources as well as social factors including stigma, isolation, cultural implications, and role shifts.⁹ In an attempt to address this issue, both academia and international development agencies have begun to research and develop programs promoting MHM as a way to decrease social stigma, fear, and taboos surrounding menstruation and increase access to knowledge and resources for women and girls in LMICs relating to the physiology of maturation and menstruation. MHM is defined as “the practice of using clean materials to absorb menstrual blood that can be changed privately, safely, hygienically, and as often as needed for the duration of the menstrual cycle” as well as having access to “soap and water for washing” and “safe and convenient facilities to dispose of used menstrual management materials.”^{10,11} Using this definition for the purpose of program implementation, MHM has been displayed as a Venn diagram (Figure 1) depicting the convergence of three necessary elements: education, resources (i.e. menstrual products), and sanitation facilities.^{9,12,13} A combination of access to all three areas of MHM is necessary to further progress for female health and human rights in resource-limited settings. 5494659

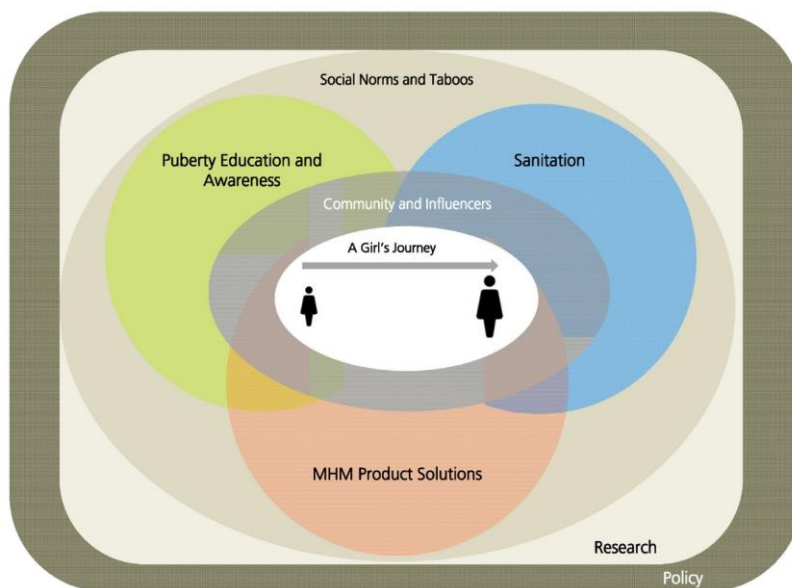


Figure 1. Three core components of MHM. This study focused on education and product solutions.⁹

Various development groups including academic institutions, United Nations agencies, nongovernmental organizations (NGOs), private corporations, and grassroots organizations are working to address the various components of MHM through providing increased access to education, resources, and improved facilities to better the lives of girls in LMICs and challenge social norms regarding menstrual health.^{8,12} Access to clean water and proper

sanitation is a precondition that must be met to ensure good MHM practices.¹¹ However, approximately 47% of schools in the World Bank's region of sub-Saharan Africa (SSA) have either limited or no sanitation facilities. As a result, millions of children across SSA lack access to a functional or private toilet while at school. In addition, only 21% of schools in SSA have basic hygiene services that provide students access to handwashing facilities equipped with soap and water.¹⁴ To combat this issue, WMO2H was developed with a goal of providing water projects to help fund education and bolster self-reliance within communities.¹⁵ WMO2H is a nonprofit organization based in Laguna Beach, California, that works with an African Program Director in Kenya to establish partnerships with schools and communities and develop solutions to increase access to clean water and sanitation facilities across the country.¹⁵ In 2017, WMO2H partnered with UAB to develop a joint undergraduate- and graduate-level international service learning opportunity by integrating a week-long study abroad experience into a semester long course on Women's Rights and Health in Kenya. Through this partnership between WMO2H and UAB, students and faculty conducted research, developed curricula, and gathered resources to address MHM for school-aged girls in rural Kenya. This article provides a qualitative analysis of a small-scale case study regarding MHM and the development and implementation of a reusable sanitary pad project at a WMO2H partner school in Namanga, Kenya.

2. Methods

2.1. Geographic Profile

The Republic of Kenya lies on the equator and is located in East Africa sharing land boundaries with five other East African countries (Ethiopia, Somalia, Sudan, Tanzania, and Uganda) as well as a coastal boundary along the Indian Ocean. Kenya has a population of 52.21 million people,¹⁶ and the country's total area equals 582,650 square kilometers boasting a vast array of topographical features including coastal plains, plateaus, grasslands, and mountainous regions.¹⁷ The interior of the country faces an arid climate with intermittent droughts impacting the majority of the country.¹⁷ Kenya is currently experiencing a water crisis as a result of ongoing drought conditions that have been present since 2014.¹⁸ The Kenyan government declared a national drought emergency in February 2017,¹⁸ and approximately 19 million Kenyans currently lack access to safe water.¹⁹ Water, sanitation, and hygiene (WASH) challenges are particularly prominent in rural areas and urban slums.¹⁹

This study took place in Namanga, a rural town divided by the Kenya-Tanzania border and located within Kajiado County, Kenya. Kajiado County has a semi-arid landscape and a population of 978,930 individuals.²⁰ According to the Kenya National Bureau of Statistics' 2015 Kajiado County Statistical Abstract (CSA), approximately 50% of the county's total population is female with 53.8% being of reproductive age (15-49 years).²¹ Of the 42 ethnic groups present in Kenya, the population of Kajiado County is comprised primarily of members of the Maasai ethnic group. Gender roles in the Maasai community are deeply rooted in cultural tradition. Maasai men are traditionally pastoralists and Maasai women are tasked with performing domestic chores such as fetching water, preparing food, and taking care of children.²² The role of a Maasai child was often tied to assisting with household tasks or looking after livestock, and only in recent years have children in this community been encouraged to attend school to completion.²²

2.2. Education System

In addition to cultural traditions and beliefs, cost, distance, and other factors have served as barriers to education.²³⁻²⁶ Since 1985, Kenya's national education system has followed an 8-4-4 model of schooling whereby students are offered 8 years of primary education followed by 4 years of secondary education followed by 4 years of undergraduate study.²⁷ Adhering to the universal right to education established by the United Nations Convention on the Rights of the Child, Kenya instituted free primary education in 2003 and free secondary education in 2008. Access to free basic education is currently guaranteed to all children in Kenya under national law. According to the 2010 Constitution of Kenya, "every child has the right to free and compulsory education" (Article 53.1.b).²⁸ In 2013, The Basic Education Act ensured "the implementation of the right to free and compulsory basic education" and prohibited tuition fees.²⁸ However, barriers to education remain and create great regional differences in enrollment rates. Educational disparities exist primarily in rural areas and regions with low economic development.²³ This is due to a variety of reasons including hidden costs of education (i.e. learning materials, uniforms, and meals); perceived economic losses from children not performing income earning work; malnutrition, illness, and disease; distances to school; family demands (i.e. domestic, pastoral, or agricultural responsibilities); lack of parental support as to the importance of

education; and gender-based discrimination (i.e. GBV, forced childhood marriage, corporal punishment, and abuse).²³⁻
²⁶ At the national level, the net enrollment rate for males is higher than females at 90.0% and 86.4% respectively. In Kajiado County, however, enrollment rates are 75.2% and 74.8% respectively, markedly lower than the national percentiles. Primary enrollment for girls declines dramatically from Class 4 to Class 8 with nearly 4,000 less females enrolled in Class 8 than Class 4. In addition to the decline in enrollment throughout primary school, the decline in educational enrollment is evident by low secondary school enrollment rates. National rates are 49.6% for males and 45.2% for females, and regional statistics show 27.2% for males and 25.4% for females in Kajiado County. Therefore, only one quarter of females complete primary education and continue into secondary education despite national requirements mandating free tuition at both levels.²⁹

2.3. Preparation

In an attempt to develop a project that would be beneficial to both the student recipients in Kenya and the university students participating in the study abroad experience through UAB, extensive research, planning, and preparation took place prior to travel and program implementation. Eight undergraduate students and three graduate students from multiple disciplines enrolled in the course under the instruction of Professor Stacy Moak from the Department of Social Work within UAB's College of Arts and Sciences. In the weeks prior to the study abroad experience, students participated in a variety of activities both within and outside of the classroom to prepare for the trip. Students were required to read two novels discussing life in Kenya with emphasis on the Maasai ethnic group as well as the plight of female youth in SSA and the practice of FGM. Additionally, students had the opportunity to engage with Kenyan students and professors on campus, one of whom spoke with the class about her experience as a young girl in the Kenyan education system and shared insight regarding cultural beliefs, traditions, and taboos widely held in her native country. The class met once a week for two and a half hours during which students were educated on the history of Kenya, barriers to education in Kenya and across SSA, national and international legalities protecting the rights of women and children, responsible approaches for international service learning, and research skills. In addition to the material taught in the large-group setting, students were divided into multidisciplinary small-groups to conduct research on potential lesson topics and ideas for service projects. By performing extensive research and literature reviews of academic work on global development, girls' education, and women's rights, students became equipped with a foundation of knowledge upon which to develop ideas for lessons plans and projects. The final topics were then decided on by an informal community advisory board that included Professor Moak, the two founders of WMO2H, WMO2H's African Program Director, a Kenyan woman involved with national girls' rights advocacy, and a representative from the primary school at which the lessons would be taught. Before pursuing any project further, all relevant stakeholders were informed of the project and their support was confirmed. Receiving input from both partner organizations as well as Kenyan nationals was vital to ensuring that all topics were age- and culturally-appropriate as well as beneficial for the Kenyan students.

Understanding MHM as a barrier to education, a reusable sanitary pad project was developed by students and advisors that could be implemented short-term while UAB students were in Kenya and sustained long-term through continued partnerships with established stakeholders. Using a template developed by an external source, the class set a goal of creating 100 reusable sanitary pads out of washable materials to bring to Kenya. Each pad contains four layers: an absorbent layer on top, two narrow layers of absorbent material in the middle, and a waterproof material on the bottom. Fleece was used for the absorbent material and PUL (Polyurethane Laminate) fabric was used for the waterproof lining. Each pad was also fashioned with a snap, button, or Velcro to hold the pad in place during use. Through partnering with Bibb and Tucker Sew-Op, students, UAB faculty members, and volunteer sew-op members sewed over 100 pads for distribution in Kenya. Bibb and Tucker Sew-Op also donated sewing supplies and materials. In addition to community partnerships, the reusable sanitary pad project involved cross-campus collaboration. Various student organizations at UAB participated in cutting out fabric for the sanitary pads. Student groups on campus also hosted a screening of a WMO2H documentary film to bring awareness to the project and the study abroad opportunity. Each of the activities both in class and outside of class helped the students gain knowledge, improve cultural competency, build necessary partnerships, and strengthen teambuilding skills by working across disciplines and preparing to work in an international setting.

2.4. Implementation

The MHM lesson plan, in conjunction with the distribution of the reusable sanitary pads, was intended to be delivered to young girls around the age of menarche who were enrolled in school. As a result, the project was conducted at

Tumaini Savanah View Academy, a WMO2H partner school in rural Namanga, Kenya. The headmaster at this primary school divided the students by gender and had the female students ages 12 and above meet at the girls' dormitory on the school's property. Only female students and teachers were present when the lesson was conducted in order to facilitate open conversation and decrease feelings of shame or embarrassment. The lesson was taught by UAB students in English and translated into Swahili by Eunice Wanjiru, a staff member at Tumaini, to ensure complete understanding of material by the students. In addition to the students from Tumaini, girls from a nearby primary school also attended the lesson. The lesson began with the UAB students introducing themselves to build rapport with the girls and asking general questions to gauge the Kenyan students' level of prior knowledge. Topics covered in the lesson included discussing the physiological aspects of menstruation, challenging false beliefs about maturation and menstruation, emphasizing the importance of sanitation and hygiene, building self-esteem, and promoting female empowerment. In an effort to foster open dialogue, students were encouraged to ask questions throughout the lesson in addition to the question and answer session at the end of the lesson that was aimed at facilitating conversation and decreasing stigma surrounding the topic of menstruation. Students also participated in hands-on learning activities and made menstrual cycle bracelets that assist with tracking one's menstrual cycle. To do this, each student received a piece of string and 28 beads representing the length of their cycle with seven beads of one color representing the week of their period. At the completion of the lesson, each student received two reusable sanitary pads. Prior to distribution of the pads, UAB students demonstrated how to use and clean each pad stating that it must be washed with soap and water and left in the sun to dry completely between each use. While sanitary pads are significantly more advantageous for reducing health harms and infections versus unhygienic materials used like leaves or mattress pieces, each pad must be cleaned with soap or detergent and placed in the sun to be dried and sterilized between each use in order to inhibit bacterial growth and infectious agents. MHM education, distribution of physical materials, and WASH are therefore all necessary for proper MHM. The goal of this project was to provide each female student access to knowledge about as well as physical materials for MHM in order to reduce the number of school days missed due to menstruation.

Following the lesson activities and distribution of sanitary pads, a physical copy of the MHM lesson plan was shared with Wanjiru and the head mistress of the visiting school along with a binder of resources. The resources included the template for creating the reusable sanitary pads, academic information on MHM as well as women's rights, and an informational booklet on MHM written in Swahili. These resources were distributed to encourage further discussion about MHM amongst students, parents, and teachers as well as the delivery of MHM lessons to other schools in Namanga and Kajiado County. In addition to the paper resources, a sewing machine, sewing materials, and fabric were donated to Tumaini, and Wanjiru was trained on how to operate the machine and sew the sanitary pads. Having been given all the materials necessary to continue promoting MHM and the reusable sanitary pad project, Wanjiru was encouraged to continue this project in the surrounding area and she committed to doing so.

3. Results

The study discussed in this article looked exclusively at qualitative data in the form of feedback from the Kenyan students and teachers involved in the project. Results indicated positive experiences with both the MHM lesson and the reusable sanitary pads that were distributed. Faculty feedback is summarized in Table 1 below.

Table 1. Feedback received from primary school administrators upon completion of the MHM lesson and sanitary pad distribution

NO.	FEEDBACK
1	“Their self-esteem has improved and this gives them the strength to face the challenges ahead.”
2	“The pads are easy to wash and to dry and this makes them easy to use.”
3	“The girls contributed on how they think it [menstruation] happens, what they have learnt from class and [it] was a very interactive lesson.”
4	“The girls were so appreciative because those pads have laid off the [financial] burden from their parents. Some girls said their parents are also so appreciative.”
5	“The pads are comfortable to wear since they don’t itch or burn them even when it’s too hot unlike the normal sanitary pads.”
6	“The smile on the girls faces is encouraging and shows how appreciative they are. They smiled because they know their lives have changed and attending school during their menstrual period days will not be a problem. The girls are all using the sanitary towels we gave them very comfortably.”
7	“They are so excited since they don’t have to miss school during their menstrual cycle days.”
8	“[The] sanitary pads have helped them gain confidence and boosted their self-esteem and now they are courageous to face the world and other people even during their menstrual cycle days.”
9	“Their level of absenteeism has reduced immensely and this has enabled them improve in their school performance.”
10	“They are also comfortable walking around others since they know they are safe with the sanitary pads”

The feedback received for this project indicates overall satisfaction with the MHM products as well as increased knowledge and comfort discussing MHM and SRH topics. It also indicates a positive trend for reducing school absenteeism as was expected based on similar research studies conducted in other locations. These studies are further explored in the discussion section that follows.

4. Discussion

This study had three objectives: (1) increasing girls’ access to MHM materials; (2) facilitating conversations about menstruation in an effort to reduce stigma, challenge misbeliefs, and educate on MHM topics; and (3) empowering girls to continue their education and not see menstruation as a barrier to school attendance. Broadly, this case study was aimed at reducing rates of school absenteeism as a result of menstruation through the provision of MHM education and resources. This project sought to address all major components of MHM and provide adequate access to MHM resources in order to fully equip female students in Kenya with the knowledge and tools necessary to be confident, stay healthy, and attend school throughout their menstrual cycle. As discussed previously, MHM can be broken down into three main categories: education, resources, and facilities. How this study addressed each of these categories is as follows.

4.1. MHM Education

The topic of menstruation is often considered taboo and is enshrouded in a culture of silence. Around the world, menstruating is often considered unclean or dirty and cause for social isolation. Misconceptions surrounding menstruation cause cultures to place restrictions on menstruating females limiting their mobility, social interactions, and daily behaviors.^{30,31} In Kenya, eating certain foods, engaging in mixed gender interactions, and tending to livestock are several activities prohibited for menstruating women and girls from various cultural groups for fear of sickness or contamination.³¹ These negative social constructs also expose young girls to humiliation and increased

susceptibility to GBV and exploitation.³⁰ Education and awareness surrounding MHM is crucial for challenging harmful beliefs and taboos and increasing understanding of menstruation as a natural and universal aspect of women's health. The Ministry of Education has introduced reproductive health as a topic taught in primary and secondary schools in Kenya under the subject of Social Studies and Ethics.²⁴ However, a recent study stated that "32.5% of girls report no knowledge of menstruation before their first period" indicating that girls are not receiving adequate SRH information including education on MHM.³¹ Teachers are expected to be trained to teach SRH topics, however social norms and cultural taboo often hinder the discussion of such topics within the classroom.³² SRH and MHM is also reportedly not tested on thereby removing accountability for teaching these subjects and placing priority on other mandatory subjects.³² Through the lesson plan delivered in this study, female students at two primary schools in Namanga received information on both the physical aspects as well as the psycho-social elements of menstruation and MHM. Delivering complete and inclusive MHM education provides students with knowledge about anatomy and biological processes; builds emotional awareness, self-confidence, self-efficacy, and empathy for fellow schoolgirls; and decreases stigma and misconceptions.

4.2. MHM Materials

A study sponsored by the Bill and Melinda Gates Foundation found that 65% of females in Kenya are not able to afford sanitary pads.³² A report from the State Department for Gender Affairs noted frequent use of unhygienic materials including old rags or cloth, sponge, animal skin, and leaves for the management of menses.³³ Use of such materials can lead to significant physical health implications and infections in addition to psychological distress from stigma, anxiety, and shame.³³ To girls from low-income homes, commercially available, disposable sanitary pads are viewed as aspirational products signifying freedom of mobility and self-efficacy.³² However, due to unaffordable prices of disposable sanitary pads, which often cost 80 shillings or more per pack, females often rely on homemade alternatives for management materials. Knowledge of products, social acceptability of desired product, product cost, and access to products for purchase are all barriers to using and obtaining MHM products.³² With the rise of global awareness to MHM as a barrier to education, distribution of MHM materials is becoming more common. The Ministry of Public Service, Youth, and Gender Affairs is responsible for distributing sanitary pads to public primary school students across the country, but this is a large investment and its sustainability and implementation is uncertain.³³ Other NGOs, like WMO2H, have also conducted sanitary pad projects in Kenya and have seen promising qualitative and quantitative results, including as a 95% reduction of school absenteeism reported by Huru International as a result of their MHM campaign.³² Participants in the study abroad experience brought approximately 100 reusable sanitary pads to Kenya and 100% of the pads were distributed to female students from two primary schools in Namanga, Kenya, during the educational program at Tumaini. Each student received two reusable pads with the exception of 23 students who initially only received one but were provided a second by Wanjiru after the UAB team had left.

4.3. WASH Facilities

Access to quality WASH facilities is imperative for good MHM. However, WASH facilities and toilets at schools are often poorly maintained or lack necessary features to adequately support female students. A study found that only 27.1% of schools properly maintained their latrines.³⁴ Another study found that 77% of toilets did not have locks thereby compromising the privacy of users.³² In addition, only 19% of schools met WHO's standard for student to toilet ratio (25:1 for girls).³⁴ Despite being a common form and often preferred type of sanitation facilities, pit latrines pose a threat to sanitation in regards to disposal of MHM materials as products disposed of in latrines frequently cause blockages. Because this study was conducted at a WMO2H partner school, the school was known prior to the trip to have access to clean water, sanitation facilities, and hygiene stations established through previous projects. As a result, students were ensured a place to change pads privately and as necessary throughout the school day. Because students were given washable and reusable pads, disposal of menstrual products was not a prominent concern. Students from the neighboring school who received pads requested detergent and a designated area for washing the pads and allowing them to dry in the sun during the day. During the MHM program, students were taught about the importance of menstrual hygiene, washing their pads with soap and water and allowing them to dry completely between use. Students were also taught basic WASH practices and principles emphasizing the threat of germs and infection if not followed as instructed.

4.4. Future Implications

Through providing school faculty with the lesson plan as well as further resources and by involving them in the lesson conducted by UAB students, the women faculty members at the primary schools visited in Namanga, Kenya will be able to continue conducting this lesson on MHM at other schools in the area and to their future classes. By training the teachers, new leaders were equipped to carry out MHM lessons, continue the conversation, and help reduce stigma and create positive understanding of menstruation and SRH within their communities. Wanjiru, a faculty member trained at Tumaini, expressed dedication to the cause, and following the lesson performed by UAB students in Kenya, she has taught the lesson to an addition group of female students at a nearby school in Kajiado County, and she continues to make reusable sanitary pads. Once the donated materials were sewn into pads and distributed, similar absorbent and waterproof fabrics were sourced from a larger city in Kenya to continue the production of the reusable sanitary pads and ensure sustainability of the project by utilizing local resources. Attendance is also being tracked at Tumaini Academy for future research as to the impact of MHM education and reusable pad distribution on primary school completion, retention, and absenteeism rates. The results of this study were largely positive and helpful for informing future research projects and studies regarding MHM education. Access to greater resources and distribution of additional pads would be advantageous in similar studies as challenges arose when washing and drying the pads during the rainy season in Kenya. In addition to collecting more quantitative data, this research would benefit from a large-scale study as well as additional case studies conducted in various regions throughout the country to verify efficacy of MHM education in conjunction with distribution of MHM materials for the reduction of school absenteeism. While this study involved girls-only education, further research could include educating male students on MHM in an effort to increase knowledge and reduce cultural stigma and harmful taboos. Research involving parent involvement in an educational program prior to the lesson taught to students and the distribution of the pads may also provide useful insight on the role of family members in normalizing the topic of menstruation and changing cultural beliefs through educating the older generation who may lack an academic understanding of menstruation as a physiological process. While this study provided insight on the qualitative impact of providing comprehensive MHM education and distribution of reusable sanitary pads, greater research must be done on the subject of addressing MHM with the goal of increasing female students' school attendance and completion rates in order to further establish significance of MHM programming and establish policy guidelines for implementing MHM in schools.

5. Conclusion

Through an established partnership between WMO2H and UAB, students participated in a week long study abroad experience in Kenya during which they implemented a reusable sanitary pad project. Approximately 100 sanitary pads were created and distributed to female students enrolled in two primary schools in Namanga, Kenya. To accompany the distribution of the sanitary pads, students delivered a lesson on MHM that covered the topics of biological maturation and menstruation, WASH, self-esteem, and female empowerment. Project objectives included (1) increasing girls' access to MHM materials; (2) facilitating conversations about menstruation in an effort to reduce stigma, challenge misbeliefs, and educate on MHM topics; and (3) empowering girls to continue their education and not see menstruation as a barrier to school attendance. Additionally, this research project had an overarching goal of reducing school absenteeism as a result of limited access to MHM materials. Project results were positive and feedback from school administrators noted increased self-esteem amongst students, appreciation for financial relief for student's families, and a notable decrease in school absences since the implementation of the MHM project. This project was possible as a result of international collaboration and has proven to be sustainable by the uptake of reusable sanitary pad production and continued MHM education by Wanjiru throughout Kajiado County, Kenya.

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