WoMena Uganda

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MENSTRUAL HEALTH IN RHINO CAMP REFUGEE SETTLEMENT
WEST NILE, UGANDA

PILOT INTERVENTION REPORT

ABOUT WOMENA:

WoMena is an NGO working with implementation of innovative, evidence-based reproductive health solutions in low-resource settings. We develop and implement strategic plans for increasing the use of selected solutions in partnership with local and international Implementing partners and technical experts (www.womena.dk).

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ANNEX OVERVIEW

Four separate annex documents contain the following:

Annex 1: Baseline Tools

Annex 2: Monitoring Tools

Annex 3: Endline Tools

Annex 4: Poster Presentation: The potential of menstrual cups and reusable pads as menstrual health innovations in humanitarian programming. Preliminary findings from a programmatic pilot study in Rhino Refugee Settlement, Uganda. Presented by WoMena at the Society for Menstrual Cycle Research, 22-24 June 2017.

ACRONYMS

DHO	District Health Office
FGD	Focus Group Discussions
MHM	Menstrual Health Management
M&E	Monitoring and Evaluation
MC	Menstrual cup
NGO	Non-Governmental Organisation
OPM	Office of the Prime Minister
SRHR	Sexual Reproductive Health and Rights
SWT	Senior Woman Teacher
TMM	Teach Me More
UNHCR	United Nations High Commissioner for Refugees
VHT	Village Health Team
WASH	Water, Sanitation and Hygiene

EXECUTIVE SUMMARY

In Uganda approximately 86% of South Sudanese refugee arrivals are women and children (UNHCR, 2017a). Globally, girls and women often lack the ability to manage their menstruation with dignity due to lack of adequate and private facilities, safe, acceptable and accessible menstrual health products and knowledge, which can be further exasperated during conflict and displacement. Menstrual Health Management (MHM) is, however, often an overlooked component in acute and protracted emergency situations, as it is not considered life threatening. There is also a general lack of Monitoring & Evaluation (M&E) data on MHM implementation models in refugee settings. Although menstrual health products are distributed within refugee settlements and a number of interventions have included reusable pads, no evidence on the introduction of menstrual cups in humanitarian programming is available. With support from WoMena Uganda, ZOA implemented a MHM pilot intervention in Rhino Camp Refugee Settlement to assess the acceptability of introducing menstrual cups and reusable pads as part of their Teach Me More school-based programme. The pilot also aimed to assess the feasibility of following guidelines for safe use and care of the reusable products.

The pilot intervention was carried out over a period of six months, with a four-month product use period. The intervention consisted of an on-site assessment aimed at modifying WoMena's implementation model to the refugee settlement context, stakeholder engagement and community sensitisation activities, training of support persons, schoolgirls and mother/guardians on MHM and safe use and care of menstrual cups and reusable pads, as well as monthly support meetings. WoMena carried out evaluation activities at baseline, mid-line and endline.

Results from the baseline indicated that girls and women lacked the essentials to manage their menstruation safely and with dignity. They lacked access to menstrual management products, soap, underwear, and menstrual pain relief. Although respondents reported having access to water and handwashing facilities close to latrines, 58% reported not having access to a basin to wash MH products or having facilities in which to dry them. A number of other projects including MHM product and knowledge distribution have taken place in the communities, however respondents reported the supply of products to be inadequate and unreliable. Despite reported cultural restrictions on discussing menstruation (particularly for men) and reported restrictions on mobility and daily activities during menstruation, participants and their surrounding communities expressed an openness to talking about menstruation and were welcoming towards the intervention. The realities of living in a refugee settlement also seemed to allow for deviation from the set cultural rules around menstruation, and can provide a dynamic context within which to enact change in normative understandings of menstruation.

Acceptability of reusable menstrual products

Despite initial concerns about the menstrual cup (and to some extent the reusable pads), product uptake among intervention participants was high, 61% for menstrual cups and 100% for reusable pads (based on reported use during the last menstrual cycle). It is expected that girls and women may take between two to six months to become accustomed to menstrual cup use, and user uptake is expected to further increase with time. Product users reported high levels of satisfaction, with the menstrual cup scoring slightly higher in terms of user satisfaction. The reported challenges related to

AFRIpads are mostly related to availability of infrastructure and facilities, while the challenges related to menstrual cup usage revolve around experiences directly related to personal use. Respondents who either chose their product or got both were most satisfied with both reusable pads and menstrual cups, and the participants who received both products reported using the products interchangeably, depending on personal preference (for example level of menstrual flow) and water availability for washing. This allowed girls and women to adapt to the contextual challenges within the refugee settlement context for a more comfortable period.

Feasibility of following hygiene guidelines

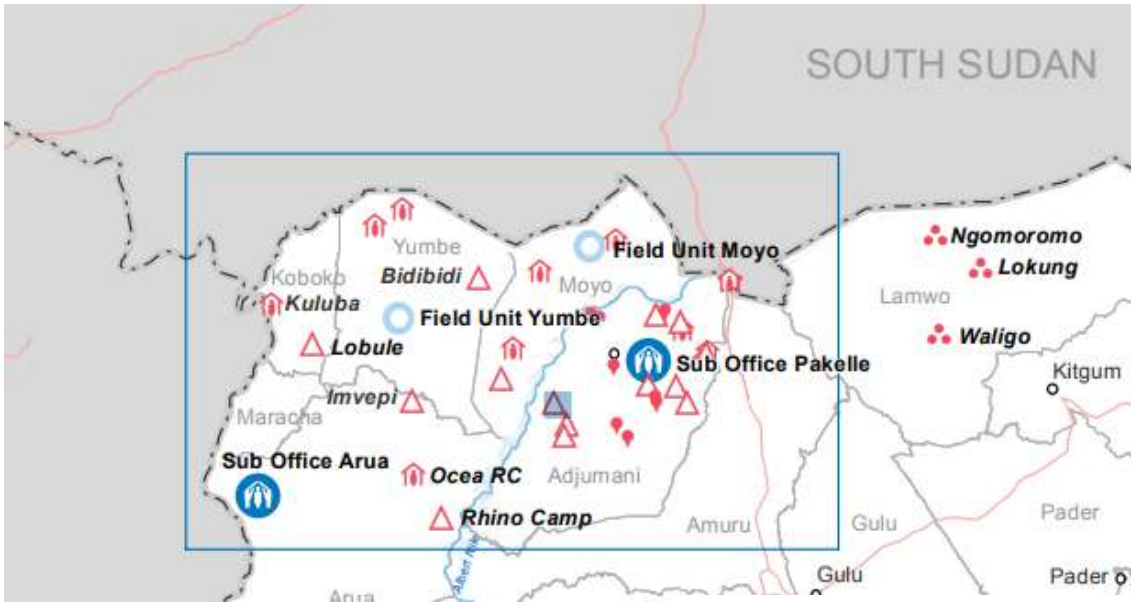
Self-reported adherence to safe care and user guidelines was high among participants, with correct cleaning, handwashing and storage procedures reported. Observations from the mid-line follow-up visit also confirmed that participants knew and understood the guidelines for both products. However participants also reported disruptions to availability of soap for washing both hands and reusable pads, and lack of access to underwear and washing basins. This indicates that despite participants knowing the safe use practices, they may not always be able to follow them.

In order to boost adherence to safe product use and care guidelines, provision of both products is the optimal solution, as this allows girls and women to adapt to shortages in water, soap and facilities. When introducing reusable pads, it is important to ensure that users have adequate access to soap and basins, which may require the provision of a kit rather than just the reusable pads. For the menstrual cup, it may be sufficient to provide the menstrual cup alone, however there is a need to invest in continued support to ensure product uptake and access to handwashing facilities.

INTRODUCTION AND BACKGROUND

- In Uganda approximately 86% of South Sudanese arrivals are women and children (UNHCR, 2017a).
- Globally girls and women often lack the ability to manage their menstruation with dignity due to lack of adequate and private facilities, safe, acceptable and accessible menstrual health products and knowledge, which can be further exasperated during conflict and displacement.
- Menstrual Health Management (MHM) is an often overlooked component in acute and protracted emergency situations, as it is not considered life threatening
- There is a general lack of Monitoring & Evaluation (M&E) data on MHM implementation models in refugee settings.
- Although menstrual health products are distributed within refugee settlements and a number of interventions have included reusable pads, no evidence on the introduction of menstrual cups in humanitarian programming is available.

On the 1st of July 2017, the UNHCR registered a total refugee and asylum seeker population of 1,309,698 in Uganda (UNHCR, 2017a). The influx of South Sudanese refugees is currently placing significant strain on both refugee and host populations living in Uganda. In August 2017 the UNHCR recorded a total of 1,006,779 South Sudanese refugees in Uganda of which 344,341 were new arrivals since the start of 2017 (UNHCR, 2017b). Over the last year, six new refugee settlements have been opened and one expanded (Rhino Refugee Settlement). ZOA, a Dutch-based international relief and development organization has been working in Uganda since 1997. Their programme in the West Nile includes basic education, Water, Sanitation and Hygiene (WASH) and agribusiness interventions. ZOA's WASH interventions include the construction of latrines, rehabilitation and construction of boreholes, protection of clean water sources, training of Village Health Teams (VHTs), promotion of community-led hygiene and sanitation, creation of ideal homesteads, promotion of locally-produced solutions for hygienic hand washing ('Tippy Tap'), as well as MHM for girls in primary schools as a part of the "Teach Me More" (TMM) education programme. The current estimated refugee population of Rhino Refugee Settlement is 86,770 (UNHCR, 2017a).



Map Source: UGANDA UNHCR Presence and refugee locations, July 2017 (UNHCR, 2017c)

MHM in Sub-Saharan Africa

In Sub-Saharan Africa, many women and girls do not have access to appropriate MHM methods, that is methods that are effective, comfortable, affordable and safe to use. They resort to using poor-quality methods available, for example, strips of cloth, tissue paper, school exercise books, sanitary napkins, pieces of sponge torn from mattresses, bark, cloth and others (Acharya et al., 2006; APHRC, 2010; Khanna et al., 2005; Mason et al., 2013; Tellier et al., 2012). A new study from Uganda indicates that the vast majority (90.5%) of primary school girls have inadequate MHM (Hennegan & Montgomery, 2016).

MHM in Refugee Settings

Humanitarian minimum standards such as the Sphere Standards have increasingly recognized the importance of MHM (Sphere, 2004 & 2011). However, MHM issues are not considered to be life-threatening and, until recently, have received little attention (Sommer, 2012). As MHM gains more attention globally, there is also growing attention on the need to focus on MHM in refugee settings. Girls and women globally lack the necessary means to manage their menstruation hygienically, with privacy and dignity (House et al., 2012; Sumpter & Torondel, 2013). The far-reaching implications of inadequate MHM for physical, social and mental well-being of women and girls also apply to refugee settings, where women may have few coping mechanisms, access to usual menstrual management methods may be disrupted, and private facilities for changing, bathing and washing, drying and disposing of products may not be available (House et al., 2012).

Studies have found that the main MHM-related challenges in refugee contexts are **poor availability of facilities that allow for safe and private MHM, including adequate water and soap for washing reusable products, as well as lack of underwear** (IFRC, 2016; Parker et al., 2014). Additionally, underwear and reusable pads are often perceived as something 'private' that should not to be exposed to others making them difficult to wash and dry.

Definition of adequate MHM in an emergency context:

"The provision of safe, private, and hygienic water and sanitation facilities for changing menstrual materials and bathing, easy access to water inside or near toilets, supplies (e.g. laundry soap, separate basin) for washing and drying menstrual materials discreetly, disposal systems through waste management, and access to practical information on MHM, for adolescent girls in particular."

(Sommer et al., 2016)

As part of this increased MHM focus, reusable pads have been introduced into refugee MHM interventions, with the potential to be a more cost-effective, sustainable and appropriate solution compared to disposable pads in contexts with limited waste management. AFRIpads have been distributed widely in refugee settlement contexts in several African countries, including Mungula refugee camp (Adjumani District) and Rhino Refugee Settlement (Arua District) in Uganda. A study was carried out by the International Federation of the Red Cross and Red Crescent Societies in 2014, supported by the Humanitarian Innovation Fund and British Red Cross, which compared experiences of using disposable and reusable pads (IFRC, 2016). The results from the study showed that reusable pads were preferred overall compared to disposable pads.

According to WoMena's knowledge, menstrual cups have been introduced in a refugee setting in Nigeria in 2016 (GoGetFunding 2017) and in a Refugee Camp in Malawi in 2017 (Reid, 2017). The menstrual cup has several potential advantages compared to disposable and reusable pads in refugee settings. These include being reusable for up to ten years with very limited waste management needed, only requiring small amounts of water for boiling between each period and not requiring space or privacy for drying. There have been no comparative studies exploring the introduction of both menstrual cups and reusable pads in a refugee settlement context. This project piloted the introduction of menstrual cups alongside reusable pads as part of ZOA's refugee MHM and WASH component of their TMM programme in West Nile, Uganda.

The reusable pads (AFRIpads) and menstrual cups (Ruby Cups) donated towards this pilot project are part of a wider collaboration between ZOA, WoMena, AFRIpads and Ruby Life to provide a sustainable MHM method to girls and women within the Ugandan settlements that ZOA works in. The pilot intervention was tailored to fit into ZOA's broader project design and implementation modalities to synergize on existing ZOA activities and resources.

The goal

of this pilot intervention is that the suitability and advantages of the menstrual cup and reusable pads reported in both high and low-income settings can be replicable to a humanitarian setting.

Community Sensitisation meeting at Rhino Camp Refugee Settlement, January 2017

PROJECT GOAL AND OBJECTIVES

Intervention goals

Assess the acceptability and feasibility and potential health and social impact of introducing menstrual cups and reusable pads as MHM methods to girls and women in a refugee settlement context in Uganda.

Intervention objectives

1. Comparatively assess the cultural and social acceptability of menstrual cups and reusable pads among the targeted population;
2. Comparatively assess the feasibility of following the menstrual cups and reusable pad hygiene protocol in the refugee settlement context by the targeted population;
3. Adapt the menstrual cup and reusable pad training and distribution approach to the targeted refugee settlement context;
4. Adapt the monitoring and evaluation framework to the menstrual cup and reusable pad refugee settlement interventions;
5. Provide recommendations for potential menstrual cup and/or reusable pads scale up in ZOA's refugee MHM and WASH programming.

Intervention Target Groups

Primary target group 1: Primary school going girls (grades P4 - P7) in four TMM Schools.

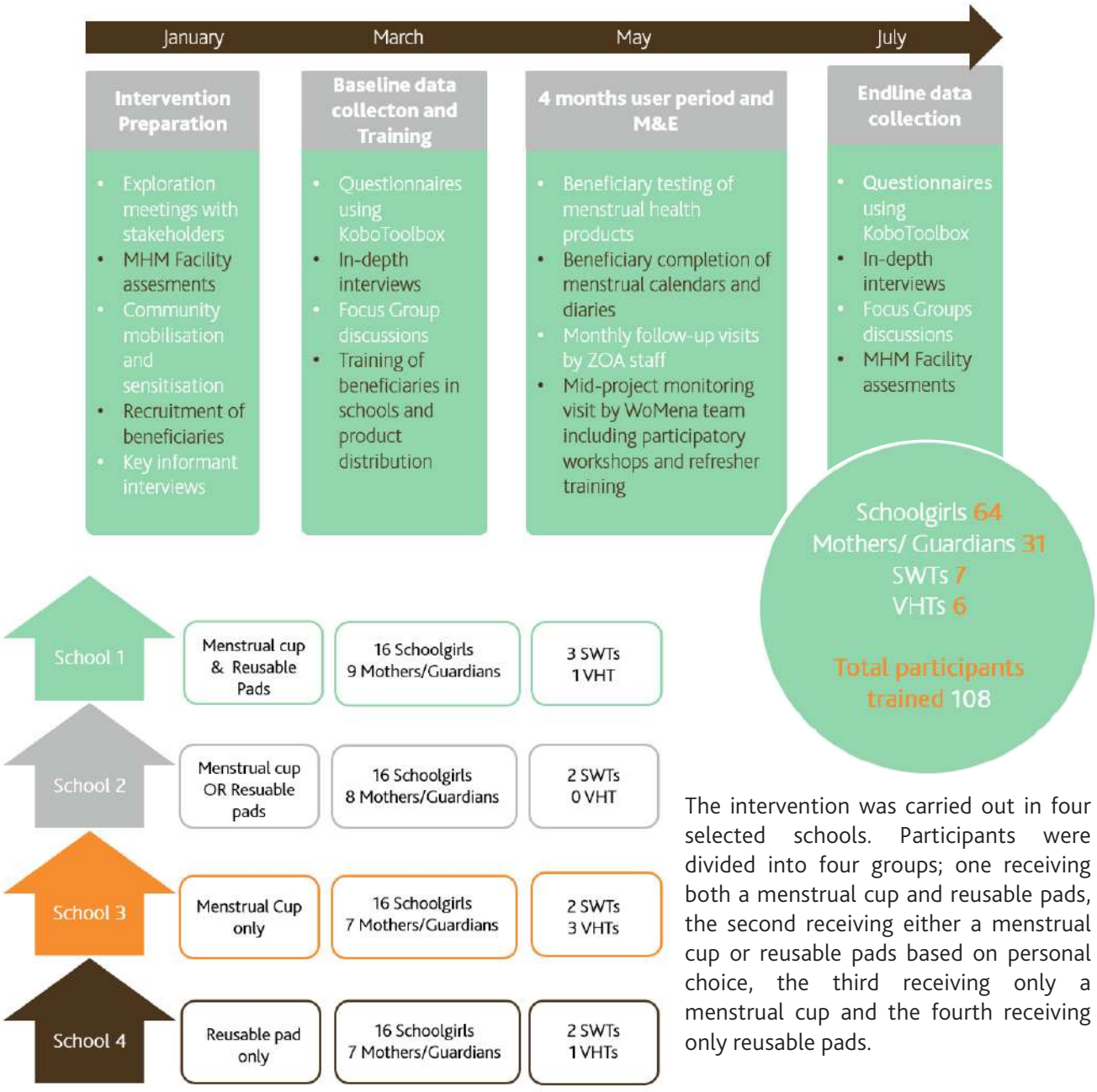
Primary target group 2: Mothers and adult guardians of primary school girls.

Support persons: Relevant supporting persons identified as ZOA Staff, Senior Women Teachers and VHTs.

Secondary target group: Other peers, including boys as well as fathers, mothers, family members, spouses/partners who were targeted in information meetings and selected training sessions.

INTERVENTION DESIGN AND METHODOLOGY

Currently ZOA West Nile implements the TMM Programme in 12 primary schools within the Rhino Camp Refugee Settlement, improving quality, accessibility and availability of primary education. In collaboration with ZOA, WoMena supported the design and implementation of a menstrual health pilot intervention in four primary schools among school girls, a sub-set of their mothers or guardians (95 primary participants in total) and selected support persons (in total 13 Senior Women Teachers (SWT) and Village Health Team (VHT) members) to test the feasibility of introducing menstrual cups and reusable pads in a refugee context. Product distribution was accompanied by training on menstruation, MHM and safe care and use of menstrual cups and reusable pads. The intervention also included stakeholder engagement and community sensitisation, including engaging with boys and men. ZOA staff also conducted monthly follow ups with participants to provide support and collect data. Data collection for an intervention evaluation was carried out at baseline, midline and end line by the WoMena team.



The intervention was carried out in four selected schools. Participants were divided into four groups; one receiving both a menstrual cup and reusable pads, the second receiving either a menstrual cup or reusable pads based on personal choice, the third receiving only a menstrual cup and the fourth receiving only reusable pads.

MHM Product Solutions

Reusable Menstrual Pads

Reusable menstrual pads are made from cloth designed to function as a menstrual pad, which can be washed, dried and reused. There is an increasing number of models and brands being produced and sold worldwide. Reusable pads are similar to using cloths, which many girls and women, who cannot afford or access disposable menstrual products, resort to using. However, compared to cloth, many of the new reusable menstrual pad brands are designed to provide high quality menstrual protection and comfort.

AFRIpads is a reusable pads brand produced in Uganda and made from high-performance textiles. AFRIpads dry faster than cotton and have a waterproof layer. AFRIpads provide effective protection for 12+ months of use and have been provided to more than 1.5 million girls and women globally, making it one of the world's most widely used reusable pads brands. AFRIpads Deluxe kits include 3 Maxi pads that can be worn for 6-8 hours, a Super Maxi pad that can be worn for 8-10 hours and a washable storage bag.

Menstrual cups

The menstrual cup is increasingly being introduced as a more sustainable way to improve the MHM of women and girls in low-income contexts. The menstrual cup is a bell-shaped cup made of medical-grade silicone and is worn inside the vagina during menstruation to collect menstrual fluid. A menstrual cup can collect three times as much fluid as a tampon can absorb, possesses less risk of leakage than certain other methods and can be used comfortably once the user is familiar with its use. It can be washed and reused for up to ten years.

Menstrual cups are a more cost-effective menstrual health solution than disposable pads if used for more than a year, as menstrual cups are a one-time procurement and can last throughout a girl's education (ten years). Menstrual cup interventions have been introduced with success in several African countries, including Uganda, Kenya, and South Africa, (Beksinska et al., 2015; Mason et al., 2015; Tellier et al., 2012; APHRC, 2010, Juma et al., 2017).

Implementation Overview

The project was broadly implemented in three phases: 1) Preparation and exploratory phase: 2) Training and product distribution and 3) 4-month trial period and monthly monitoring. The pilot intervention was carried out over a period of seven months from January to July 2017.

Phase 1: Preparation and Exploratory Phase (January 2017)

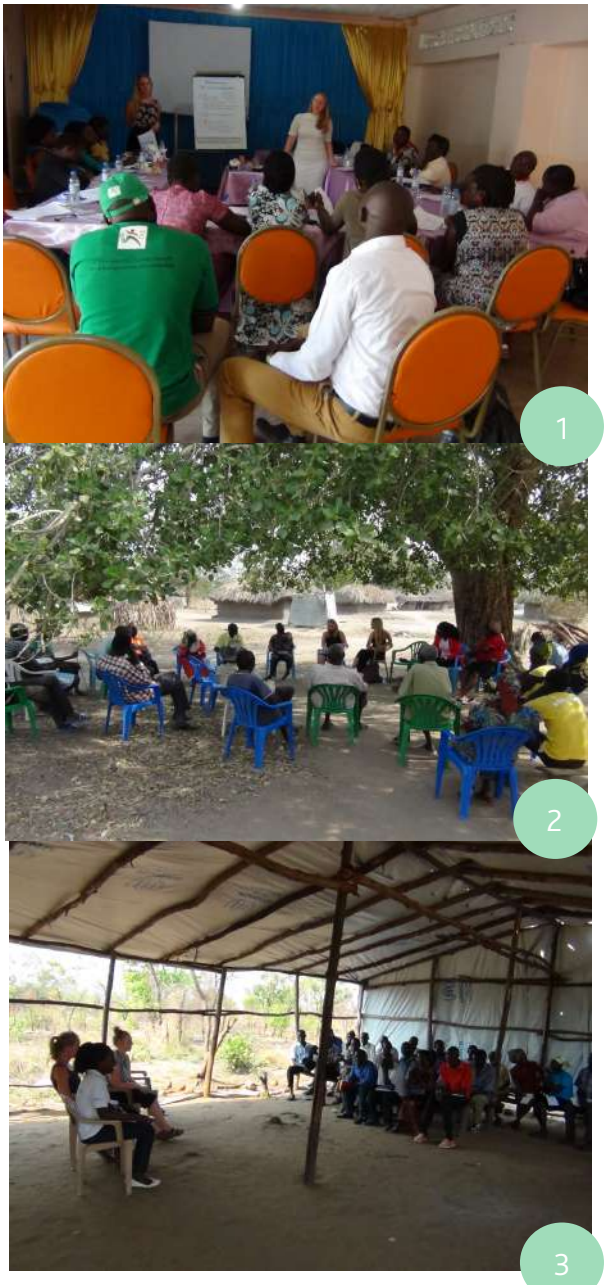
The following activities were carried out during the preparation and exploratory phase. Exploration meetings (both remotely and onsite) were held to define the intervention objectives and goals, explore existing ZOA TMM programme design and implementation modalities, context-specific cultural aspects important for design, tailor monitoring and evaluation tools and identify suitable support structures.

Stakeholder Engagement

- Introduction of the project to the camp commander of the Rhino Camp Refugee Settlement at the base camp in the Rhino Refugee Settlement;
- ZOA has on-going communication with the Local Council Chairman and the Deputy Health Officer (DHO) and had already discussed the project with local authorities.

Social Mobilisation and Sensitisation

- Mobilisation and sensitisation activities were carried out within seven communities to meet local leaders, chairpersons, VHTs and other community members where ZOA are carrying out project activities. ZOA Project & Field Officers presented the pilot intervention with assistance from local translators chosen on site;
- Community meetings aimed to reach secondary target groups, particularly men. These meetings aimed to provide information about the project and specifically to gauge community reactions to the menstrual cup as an unfamiliar technology;
- WoMena staff provided an introduction to the menstrual cup and reusable pads and answered the questions that people had;
- Furthermore, a few participants were asked to participate in key informant interviews to assess the perceptions of menstruation in the communities and the level of knowledge among the local leaders and VHTs (*results presented in Findings section*).



1. Training for high-level stakeholders
2,3 Community sensitisation meetings

Pre-intervention Training

Pre-intervention training was conducted with ZOA staff and representatives from the UNHCR, Office of the Prime Minister (OPM), Danish Refugee Council (DRC) and other actors within Rhino Camp Refugee Settlement to ensure thorough understanding of the menstrual cup and reusable pads, as well as challenges and opportunities related to their introduction to support the pilot intervention. Participants received a menstrual cup and reusable pads to serve as an effective referral point for health questions during the pilot period.

MHM Facility Assessments

MHM facility assessments were carried out in seven schools prior to selection of schools using WoMena's MHM Facility Assessment Tool, in order to assess conditions for safe/private use of menstrual cups and reusable pads, tailor training accordingly and determine school selection. WoMena staff, with assistance from the teachers available, completed the facility assessments at seven of ZOA's priority primary schools. The exploratory visit took place during the schools' Christmas holiday period, and there were only a few teachers available at each school. Due to the holidays, a majority of the latrines were locked, and it was also not possible to observe the general cleanliness of the latrines *(results from the MHM Facility assessments are presented in the Findings section).*

Selection of Intervention Participants

Based on findings from the exploratory meetings, primary school girls (P4-P7) and mothers/guardians were selected as the primary target group.

The four implementation schools were selected based on visits to schools, meetings with community members, MHM facility assessments and discussions with ZOA staff based on the following criteria:

- Most adequate reliable water supply, including during the dry season;
- Lowest possible pit latrine ratio per girl to ensure the girls have enough privacy and time for managing their MH product. Other private spaces were also considered;
- Structured cleaning and maintenance of MHM facilities;
- Permanent (or long term) female teachers available for support structure;
- Mix of communities with well-established long-term refugees and areas with a high influx of newly arrived refugees;
- Balanced number of different nationalities and tribes represented in school;
- Support and interest shown in the local communities.

Schoolgirls were selected based on the criteria below to avoid sharing of product, jealousy and reduce the risk of stigmatization. This is particularly an issue in a context where many different ethnicities are living in a challenging setting within close proximity. Participants were selected on the following criteria:

- Have experienced menarche;
- Not pregnant;
- Considered extremely vulnerable/disadvantaged;
- Take part in existing school club structure;
- Balanced selection between nationalities, tribes and local villages to avoid jealousy.

Amendments to Training Curriculum and M&E Tools

Following the exploratory visit, both the standard training curriculum and M&E tools were amended in line with findings. This included developing pictorial tools due to the expected diversity of language groups and varying levels of literacy. The training plan was also amended to limit the disruption to standard school activities.

Examples of curriculum amendments:

- Advice on finding privacy;
- Adaptations to water availability, for example, encouragement of bringing a bottle of boiled water to school to aid with handwashing;
- Using empty food cans to disinfect the menstrual cup between periods;
- Particular emphasis on importance of not sharing menstrual health products and ensuring products are dry and clean before usage.

Key points from exploratory visits

- Community members displayed a high level of interest in the intervention and were welcoming to the introduction of the menstrual cup after having their concerns addressed. One community was particularly adverse to the introduction of menstrual cups and it was thus deemed not suitable to include this community in the intervention;
- The pre-intervention training was well attended by stakeholders, and particularly male participants showed a high level of engagement and interest in MHM in general and the proposed MH products;
- Originally it was planned to carry out interviews with schoolgirls and women during the exploratory visit to further inform the intervention design, but this was not possible in the time allocated as the exploratory visit took place during the school holidays.

Phase 2: Training and Product Distribution (March 2017)

In March 2017, WoMena carried out eight trainings at the four selected schools with mothers, guardians, senior women teachers (STWs), village health team (VHT) members and school-going girls from P4-P7. A total of 108 beneficiaries received training and as part of the pilot project 71 beneficiaries received menstrual cups and 63 beneficiaries received AFRIpads. All menstrual cup recipients were given a choice in cup size (Small or Regular). All mothers/guardians chose regular cups, and all schoolgirls apart from two selected small menstrual cups. The two schoolgirls who selected regular menstrual cups had given birth. The trainings were concluded with simple, illustrative tests on the menstrual management products.

The trainings were carried out in English with Arabic and Lugbara translation where necessary. The training tools primarily comprised of the WoMena demonstration bag and illustrative flip charts, and the trainings were kept as participatory and interactive as possible within the available time. Training for schoolgirls and mothers/guardians were held separately. SWTs and VHTs took part in the adult training with mothers/guardians. Each training session lasted approximately three hours.

All participants were also provided with a menstrual calendar and trained on how to track their periods, as well as a menstrual diary to fill out during/after each ended period.

Table 1: Distribution of MHM Products

Product Type	Sch 1	Sch 2	Sch 3	Sch 4	Total
Small MC	14	6	16	0	36
Regular MC	13	11	11	0	35
AFRIpads	16	10	0	16	42

71 menstrual cups and 63 AFRIpads Deluxe Kits distributed

MC Training carried out by WoMena trainer, March 2017
Photo: Muyingo Siraj

Phase 3: 4 Month user period and M&E (March - June 2017)

Monthly Follow-up visits

For a period of four months, the primary target groups had the opportunity to use the products they received. During this period, the four school-based groups met on a monthly basis led by ZOA staff to discuss personal experiences and ask questions. These meetings were conducted at the selected schools for primary schoolgirls and within the community for mothers. Three follow-up visits were originally planned, however only two reports were received from April and early July 2017.

Mid project monitoring visit

A mid-project monitoring visit was carried out by WoMena in May 2017 to assess progress, follow up on issues identified and conduct participatory group-based activities to enable a more observational assessment of experiences among participants. Refresher training was also carried out in all four school groups.

- **Body mapping exercises**: This included volunteers lying down on pieces of flipcharts while the other participants draw around the girl. Participants were then asked to write their feelings and experiences related to the use of their menstrual cups. Experiences related to menstrual cramps and pain were written/drawn on the body where it occurs and experiences related to activities such as going to school were put on the hands and feet indicating movement. Experiences related to feelings and thoughts were to be put near the head, etc.
- **Learning by doing demonstration points**: Three demonstration points were set up in the class room, manned by a WoMena or ZOA staff member, for reusable pads, menstrual cups and cramp management and menstrual hygiene. Participants were asked to demonstrate different learnt skills and behaviours such as inserting and removing the menstrual cup, washing AFRIpads, handwashing methods and managing menstrual pain with different methods such as stretching. This allowed WoMena to directly observe knowledge retention.
- **Role play**: Participants did small role plays to demonstrate product use, addressing issues related to MHM and how to talk about the products and their use to peers and family members. This exercise worked very well among participants.

Midline participatory activities, May 2017

Evaluation Methodology and Process

Study Design

The evaluation of the pilot intervention is intended to:

1. Comparatively assess the cultural and social acceptability of menstrual cups and reusable pads among the targeted population
2. Comparatively assess the feasibility of following the menstrual cups and reusable pad hygiene protocol among the selected schoolgirls and women in a refugee settlement context in Uganda.

The evaluation has been conducted through a triangulation of data collected during exploratory visits, baseline, midline and endline consisting of MHM Facility Assessments, Key Informant interviews, questionnaires using electronic data collection (KoboToolbox) and semi-structured interviews with schoolgirls and mothers/guardians, focus group discussions (FGDs) with schoolgirls, schoolboys and mothers, fathers and guardians. Endline interviews and FGDs also included SWTs. As an exploratory pilot project, we have not sought to collect extensive quantitative data. As one of the aims of this project has also been to pilot the data collection tools, only a small subset of participants participated in quantitative questionnaires. Monitoring data collected throughout the project has been analysed alongside evaluation data to validate data and tools.

Table 2: Data collection modalities

Tool	Participant type	No	Description and purpose	Sampling and collection
MHM Facility Assessments	Schools	7	Assess facility conditions for safe/private use of the menstrual cups and reusable pads	Direct observations and conversation with school staff and students.
Pre-intervention key informant interviews	SWTs, Male and Female VHTs, community/ religious leaders	24	Build initial understanding of MHM related challenges and opportunities, understand the role of VHTs in community and openness to discussing MHM as potential support persons.	Interviewees selected based on ZOA recommendations and availability.
Baseline questionnaires	Schoolgirls (16) and mothers/ guardians (8)	24	Piloting questionnaire tool and capture data on menstrual experiences/ practices, menstrual knowledge, method preference and contextual challenges.	Participants were convenience sampled. Electronic data collection using KoboToolbox. Conducted by WoMena staff in English, or with a Lugbara translator.
Baseline interviews	Schoolgirls (4) and mothers/ guardians (4)	8	In-depth understanding of personal experiences of menstruation, MHM method availability, acceptability, and preferences, current hygiene practices and school attendance.	Participants were convenience sampled. Conducted by trained ZOA staff in English, Lugbara, or with an Arabic translator. The interviews were digitally recorded.
Baseline FGDs	Schoolgirls (5) Schoolboys (5) Mothers (4) Fathers (6)	4	Access communal perceptions of menstruation, and contextual challenges across different populations segments.	Participants were convenience sampled. Moderated by WoMena with a Lugbara translator or in English. The FGDs were digitally recorded.
Training Tests	Training participants	83	Measure knowledge retention post training	Short pictorial paper evaluation form completed by all trainees at the end of the training sessions.
Menstrual diaries	Training participants	135	Capture changes in menstrual and product use experienced throughout the project	Provided to participants at the end of training and collected at endline.

Tool	Participant type	No	Description and purpose	Sampling and collection
Menstrual calendars	Training participants	38	Measure average menstrual cycle length and regularity of menstruation and validate self-reported menstrual regularity	Provided to participants at the end of training and collected at endline.
End-line questionnaires	Schoolgirls and mothers	55	Measure experiences of using menstrual cups and reusable pads, self-reported adherence to hygiene guidelines and changes in menstrual attitudes and knowledge	All participants who attended end line activities were included in the sample. Data collection as with baseline questionnaires.
Endline FGDs	Mothers and SWTs	3	Capture experiences of using the menstrual cup and reusable pads and changes in menstrual attitudes and knowledge	All available mothers and SWT recruited to participate in FGDs.
Endline interviews	Schoolgirls and SWTs	7	Understand experiences of using the menstrual cup and reusable pads, including changes to their level of ability to carry out daily activities.	As with baseline interviews.

Study Procedures

Consent Process: All participants were provided with information on the pilot intervention and evaluation activities and asked for their consent/ assent. Schoolgirls who were under the age of 18 at the start of the project were asked to provide parental consent. The consent process was carried out by ZOA staff.

Data collection: ZOA staff that conducted data collection activities received a short training on the data collection tools and conducting semi-structured interviews, FGDs and questionnaires. Translators during data collection activities were mainly selected ZOA staff, but on occasion it was necessary to engage trusted community members for Arabic translation. It was not possible to train these translators as they were often recruited on the day of data collection activities.

Data analysis:

- Questionnaires were conducted using KoBoToolbox via mobile devices, where it was stored securely and downloaded daily to a virtual server. The data was analysed by the WoMena team for descriptive data utilising SPSS and Excel.
- Data from the MHM facility assessments, exploratory key informant interviews and training tests were manually entered into an Excel databases for analysis. Menstrual diaries and calendars were manually entered into a KoBoToolbox database.
- Interview and FGD recordings were transcribed from the digital recordings by ZOA staff and an independent transcriber/translator. Transcriptions were checked by WoMena staff. Transcriptions were analysed using Qualitative Content Analysis as described by Graneheim and Lundman (2014) with findings arranged into condensed meaning units, codes, sub-categories and categories.

Limitations of the evaluation

As a pilot, the aim of the project was also to test and refine methodologies and implementation design. Whilst the evaluation provides an exploratory glance into participant's experiences of using menstrual cups and reusable pads as well as menstrual experiences and practices within a refugee settlement context, the limited scope can only offer insight into the perceptions of acceptance and feasibility of implementation. This evaluation has a number of limitations:

1. Limited quantitative sample size: The main aim of conducting the questionnaires was to pilot the tools and only a subset of participants took part in baseline questionnaires. Questionnaires were conducted among 24 participants at baseline and 55 participants at end line using convenience sampling. As such, the quantitative data set is too limited to make any inferences, however findings provide a general overview of participant characteristics and useful insight into participant experiences of the intervention that complement the more extensive qualitative results.

2. Selection bias: All selection for data collection activities was through convenience sampling. There were some issues related to the mobilisation of participants, for example not all recruited mothers were guardians of the selected schoolgirls. Additionally there was selection bias for the selection of fathers taking part in an FGD. Four out of six participants were teachers at the selected school.

3. Inadequate interaction with mothers/guardians: The study design did not take into consideration adult women's working schedules. At end line many mothers/guardians only had time to participate in some of the endline data collection activities, meaning that the end line quantitative data is skewed towards schoolgirls.

4. Short timescale: Based on WoMena's experience working with menstrual cups it may take between two to six months before girls and women become comfortable with using a menstrual cup, this is particularly relevant for younger users who may be experiencing irregular periods.

5. Data collection for certain M&E tools not managed adequately: The purpose of the pilot evaluation was to test and establish effective tools for evaluating menstrual cup and reusable pad uptake and use and menstrual experiences. The menstrual diaries and calendars were utilised to provide cumulative data on product update, user experience and menstrual patterns. It is difficult to assess the appropriateness of using menstrual diaries and calendars to better understand participants' menstrual cycles and the linkages to MH product update due to the inconsistency in completed diaries and tools. There is a need to better administer and monitor participants' use of the tools.

FINDINGS

This chapter presents the findings from the project evaluation. Section 1 provides an overview of perceived challenges and opportunities related to MHM. Section 2 reviews that status of sanitation facilities at the intervention schools. Section 3 presents participants' characteristics. Section 4 provides an overview of menstrual patterns among participants. Section 5 presents data on existing MHM practices and access to MHM Products in Rhino Camp Refugee Settlement. Section 6 and 7 present menstrual knowledge, product update and product use experiences comparatively across the intervention groups at endline.

1. Pre-intervention key informant interviews

Pre-intervention key informant interviews carried out with community members (both male and female), community leaders and VHTs highlight a number of challenges faced by girls and women in relation to MHM, as well as opportunities for engagement. These findings informed intervention design and the quantitative and qualitative data collection tools.

Challenges: There was a general consensus that girls and women do not have the support that they need in order to manage menstruation well in Rhino Camp Refugee settlement. The main challenges discussed were a lack of products (sanitary pads, underwear, and soap), lack of knowledge and pain management methods, lack of sufficient access to water, shame and fear of being in public spaces during menstruation and teasing from boys.

Talking about menstruation: Several informants share their experiences about menstruation with female family members and friends, however, a number of informants did not feel comfortable talking about menstruation. One SWT from School 1 explained that "*people are shy and consider it a personal issue*". Community leaders and members were of the opinion that the best persons for girls and women to talk to about menstruation are female family members and friends, SWTs and VHTs. Despite having discussed menstruation at some point with community or family members, VHTs expressed mixed feelings about talking about menstruation. Several VHTs said that they felt good, comfortable and proud, however, three VHTs described feeling shy, ashamed and bad when talking about menstruation. One male VHT explained that he feels shy to discuss MHM because some words are not to be mentioned in their culture.

Men's role: Male informants commonly mentioned that their role is to provide financial support, give advice and spread knowledge of menstruation and build a supportive environment where girls and women feel free to speak about menstruation and are given time to manage their menstruation. However, one male key informant stated "*men do not play any role in menstruation … this is because of the culture and cultural setting*".

The role of VHTs: According to the VHTs interviewed, their role in the communities is to teach people about health and hygiene, identify challenges and refer the sick to health centres, mobilise community members and transfer information from the community to health organisations/government. Eight of 12 VHTs had received some type of training related to hygiene and/or MHM. There was a general consensus that the strengths of the VHTs are their ability to give advice about health-related issues, they are selected by community members, and are able to make home visits. The VHTs stated that they would like to receive more training on MHM.

2. WASH Infrastructure

Over-congested sanitation facilities in schools

All schools were well below the Ugandan national guidelines for latrine ratios, which recommend a minimum latrine to pupil ratio of 1:40 (Ministry of Water and Environment, 2016). In schools 1, 2 and 4, the number of pupils ranged from 1500 to 2000 pupils, of which between 600 and 1200 were girls. School 3 had the highest number of pupils with 4086 in January, of which 2946 were girls, while the number of pupils had dropped by 1000 pupils at the end line facility assessment. All toilets at all four schools were pit latrines. The number of in use (unlocked) latrines ranged from 8 to 32.

School 1 Decrease in pupil – latrine ratio from 1: 78 to 1:196, 8 latrines of 20 were reported to be available at endline.

School 2 Improvement in latrine-pupil ratio from 1:294 to 1:64, 32 working latrines at endline.

School 3 Decrease in latrine to pupil ratio from 1:55 to 1:66.

School 4 Improvement in latrine-girl ratio from 1:327 to 1:22. However there was a reduction in available latrines (15 to 8), ratio reduction due to reduction in student population.

The latrine-pupil ratios at endline varied greatly between schools, the lowest being 1:55 and the highest being 1:196. Only School 2 improved their latrine pupil ratio significantly, while two got worse, likely due to decreased availability of latrines and influx of new students.

Stance VIP latrine at School 2, February 2017

General lack of access to water and cleanliness of school toilets

Water was not available inside the toilet blocks in any school, however was found outside the toilets, accessible from portable water dispensers. Water continued to be available for hand washing from baseline facility assessments in January, through to endline in July in three out of four schools.

Soap was rarely available for hand washing in both baseline and endline facility assessments. In one school, it was not available during either assessment. In two schools, soap was only available during one facility assessment. In School 2, soap was added into the water dispenser for special occasions, for example when there were visitors. In School 3, ash was at times used as soap.

Toilets were all gender-segregated and separate for students and teachers throughout the pilot intervention. In all schools, toilets were reported lockable in the facility assessments, and closed off from others to see inside. However observations and information from participants, at endline interviews was contrary to this. In one school toilet paper was reported to be available in the facility assessment, but only for girls. No schools had a light source other than natural light in the latrines, which was stated to be insufficient to see the pit and clothes.

According to the assessments, girls use private washrooms that were sometimes available. Interview responses also confirmed that schoolgirls have the option to go to a private washroom for menstrual emergencies. The washroom sometimes has a basin for washing and soap, depending on school resources. These facilities are normally locked, and the girls had to ask their SWT for the key. Teachers mentioned that sometimes girls do not bath from home before going to school during their period, but then they could do it at school.

The school toilet facilities were found to vary in cleanliness, according to teachers and observations. For example, toilets were often clean on one visit but not on another. Toilets were observed to be clean on both inspections only in one school.

Latrine inside 5 stance VIP latrine at School 2, February 2017

Management of school toilets

All school toilets were reportedly cleaned at least once per week, at times daily, depending on availability of detergent. In all schools, students were responsible for cleaning toilets based on being a member of a health club or by random assignment. The health teacher or SWT in all schools was responsible for checking the cleanliness daily. In most schools, school management was responsible for repairing latrines depending on funding.

Old latrines at School 3 School, February 2017

"Today I went and pick it [the key] and I wanted to get some girls and we go and wash it, when they left it open, a child went and defecated just at the door, so I want to also go and clean it, so it can be clean".

Schoolgirl, School 1, endline interview

3. Overview of participant characteristics

The mix of refugees and Ugandan nationals selected for this pilot was 70% refugees and 30% nationals. Up to 20 different tribes were represented within the sample and 68% of participants were South Sudanese refugees.

The mean age of schoolgirls and mothers resepectively was 16 and 29.5 years of age. Due to challenges in mobilisation, some of the participants in the mothers/guardians group were not actually mothers of the schoolgirls and some were younger guardians. 14% of the girls are in P5, 40% in P6 and 46% in P7.

43% of the schoolgirls answered that one of their parents was their guardian, while more than 50% of the girls had other relatives or non-relatives as guardians. This information is important to take into account when carrying out an intervention with minors, as ascertaining gaurdianship can be difficult, which could affect the ability of schoolgirls to take part in any study related activities.

The average number of household members consist of 8,1 person.

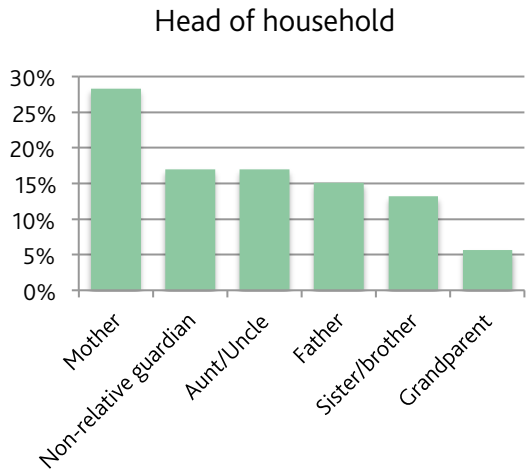
80% of respondents live under the poverty line of $1.25 a day (58%-92% probability), based on calculations of data from the baseline questionnaire. According to national statistics, the West Nile region has 42% of people living under the national poverty line (UBOS, 2014). The population of Rhino Camp Refugee Settlement is expected to be among the lowest income segment of the West Nile Region, and therefore the 80% can be interpreted as fitting into the overall poverty status of the region.

> *"We need to help each other in life, like now here in this village, actually people are poor, when you have something your friend does not have, it's a problem, and you need to help".*
>
> Schoolgirl, School 1, endline interview

Table 3: Identified guardians of the schoolgirls – data from endline questionnaire.

Guardians of the schoolgirls	
Parents	43%
Other relatives	43%
Non-relative guardian	11%
None	2%

Figure 1: Data from endline questionnaire.



4. Menstrual patterns among participants

Self-reported menstrual patterns at baseline

- The median age of menarche (first menstruation) among the participants was 14 years
- More than 80% of respondents report to have a mostly regular menstruation
- More than 80% of respondents have a heavy flow for 1 - 2 days
- 83% of respondents mentioned that they bathe and change their menstrual product more than two times per day during their menstrual period

Figure 2: Data from menstrual calendars.

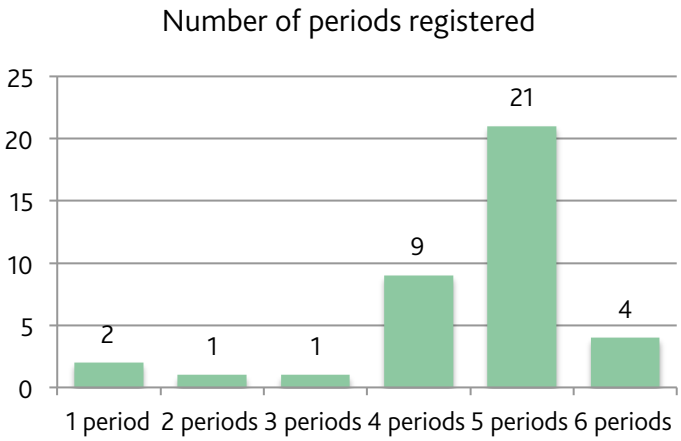
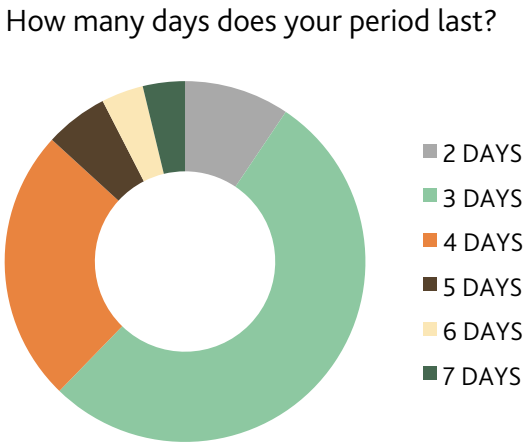


Figure 3: Data from endline questionnaire.



Deviation of cycle length	
Number of days	% of participants
<10 days	42%
10-20 days	16%
20-30 days	18%
30-40 days	11%
>40 days	5%

Average number of days	3,5
Average cycle length	29,7

Table 4 (above): Data from menstrual calendars.

Table 5 (left): Deviation of cycle length calculated based on data from menstrual calendars.

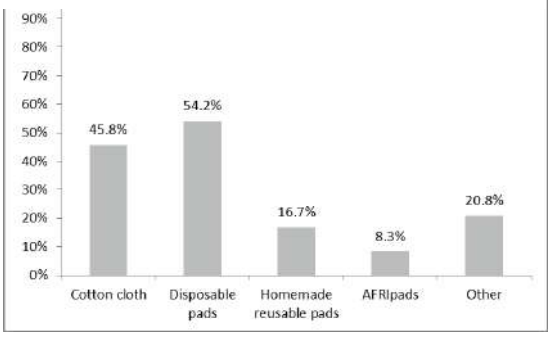
Only 8% of girls and women report to have no period pain, 33% says mild pain, 13% experiences moderate pain, while 46% report to have severe menstrual pain. Of the 92% of respondents who experience pain, 88% report to get abdominal pains/cramps, 21% experience a headache, and 38% reports to go through back pain during their period.

Although at baseline only 20% of participants self-reported menstrual irregularities, data from the menstrual calendars shows a high level of variance in cycle duration and missed periods. As the table above shows more than 50% of menstrual diaries showed a variance in the duration of menstrual cycles of over 10 days.

5. Existing MHM practices, perceptions and access to MHM Products

The main challenges for managing menstruation noted by participants were the lack of access to menstrual management products, soap, underwear, and menstrual pain relief. Participants often used cloth as a menstrual management product, but preferred to use disposable pads if or when they could afford it. One schoolgirl stated that she at one point had to cut up her veil and used it to manage her menstruation because she did not have any money for pads. Some women state that they at times have nothing, and have to wear their underwear without any menstrual product. Some schoolgirls had previously received reusable pads, or learnt to make their own reusable pads. Although 87% respondents reported having access to water and handwashing facilities close to latrines, 58% reported not having access to a basin to wash products or having facilities in which to dry them. Although not frequently mentioned, participants did express that managing menstruation in the refugee settlement was more difficult and most participants noted having previously used disposable pads, but now not having access on a continued basis.

Figure 4: Menstrual Management Methods from baseline questionnaire



"I use the pads that were given to us from school, I also make them from pieces of cloth and I know how to mend them since we were taught from school how to make them and use them".

Schoolgirl, School 1, baseline interview

The participants report that organisations working in Rhino Camp Refugee Settlement including Malteser, DRC, Windle Trust, International Aid Services, ZOA, UPE, Norwegian Refugee Council and PAG (Pentacostal Assemblies of God) have donated disposable and reusable pads (AFRIpads, Eco-pads) soap, underwear, provided WASH education and taught girls how to make homemade reusable pads, as well as built WASH infrastructure in the communities. In baseline interviews some girls noted having received re-usable pads and continuing to use them. It was however noted across all four communities that the supply of donated MHM products is unreliable, and that the recipients have to use cloths or buy disposable pads during gaps in donations. Disposable pads were at times available to schoolgirls from the SWTs, depending on the schools' stock. However teachers felt that the donations were often not sufficient for the number of students asking for emergency pads, and that they also lack basins for washing, soap, underwear and Vaseline for after bathing.

Teachers stated that girls miss school due to fear of leaking, drop out of school because of lack of menstrual products, and that some girls end up getting married because they think that when they conceive they will be relieved of periods and its related expenses. At baseline, 38% of girls stated that they had missed school due to menstruation in the last year. In interviews some schoolgirls reported occasionally staying at home during their periods due to lack of MHM products and menstrual pain. At baseline 75% of participants stated that they do not have enough information about menstruation. 44% of respondents did not know what menstruation is, and 25% described menstruation as caused by God and interviewees and FGD respondents (women, boys and men) described menstruation as a disease.

"The most challenging issues to me, is that when a girl is not well educated about menstruation … a girl may think that it's just little blood (and wears her pad for too long) …and it can cause her private to get maybe some diseases…The girls lack it so much especially those who are at home not at school, they don't get the information and then those that are at home and not in school, sometimes if they don't have money to buy these disposable pads, they wear clothes without pads and the blood will be seen and therefore the girl will be shamed. Those are the challenges that the girls are facing.

Schoolgirl, School 4, baseline interview

Menstruation is a women's issue

Menstruation was generally perceived as a women's issue, and men attributed negative qualities such as being unintelligent or careless to girls or women who could not manage their menstruation privately. Men and boys expressed a lack of knowledge leading to a lack of action or support for girls. Menstruation was not to be discussed with or by men and women tended to discuss menstruation only with female friends and relatives. Girls were said to learn about menstruation form sisters and friends, but also rely on information from mothers, whilst boy often learn through experience of seeing girls with leakages. Despite mothers being considered the most appropriate source of information and support, many girls did not have parents and had to rely on alternative sources.

Although sex during menstruation was thought of as polluting, some participants stated that women are more likely to conceive during their periods and that women had an obligation to advise their husbands or partners of their menstrual status.

"*Only women discuss menstruation, not men. Women who are mature and married have to tell the husband, otherwise she can even be raped by her husband, if she only says no I am not ready*".

Father, School 4, baseline FGD

Despite menstruation being perceived as something to conceal and not be discussed openly, some of the fathers participating in the FGD did state that in certain South Sudanese tribes menarche is openly celebrated and a source of pride. This was linked to menstruation being a sign of maturity and fertility and that the girl is becoming ready for marriage.

"*If I don't know when my wife is menstruating, we cannot plan. If I don't know, my wife will become pregnant, because I have not put it into my head that she can become pregnant. If she becomes pregnant, I can even think she has gone elsewhere. It can bring conflict*"

Father, School 4, baseline FGD

Taboos vs. Necessity

Different tribes were reported to have different beliefs and practices, however both restrictions on mobility and activities, such as milking cows or working in fields with specific crops (G-nuts, simsim, beans) and the need to keep menstruation a secret were repeated across most participants. Restrictions related to milking cows, drinking milk, planting and cooking were seen as common. Despite the prevalence of these perceived restrictions, necessity often trumped taboo and the restrictions could be overlooked due to practical necessity and participants expressed a degree of difference in the weight of restrictions between their current situation and "back home".

"So if a person is in her menstruation she has the order to cook, if you are alone at home and you have a child, menstruating and you decide not to cook, who will cook for your child? That means it's not a disease because if she doesn't, then who will cook for her child?"

Schoolboy, School 1, baseline FGD

6. Learning to better manage menstruation and product perceptions

At endline participants gave different references to the content of the training they had received in February. Some mentioned that they had now learned about the menstrual cycle, and that the ovaries produce an egg each month. Safe and non-safe days were of interest to adult participants, while schoolgirls mentioned that they had now learned how to manage their own bodies and keeping themselves healthy and clean during their periods. Some of the schoolgirls talked about people who had never tried to touch their own blood, but now after the training, it was okay to touch your own blood, and that you can save money when using reusable products.

> *"…it is your own blood, you can touch. It is what God has given to us as girls. To come and know, that thing saves a lot of money, the money which you may use every month for buying pads, like 3.500 – 4000 UGX, they are expensive. That money here can even buy food for the whole family."*
>
> Schoolgirl, school 1, endline interview

The majority of respondents described that they know their menstruation is about to start when they feel it in their body or stomach (92% of respondents). None reported using the menstrual calendar provided to predict the start of their next period.

During menstruation, stomach pain, back pain and/or headache were still reported experiences by almost all participants. Using a hot water bottle, painkillers, exercises, stretches, drink something warm, massage were mentioned by the girls and women as methods to manage their period pain. At the same time, the majority of girls and women explain that menstrual cramps and pains were not a problem for them when using their new menstrual products.

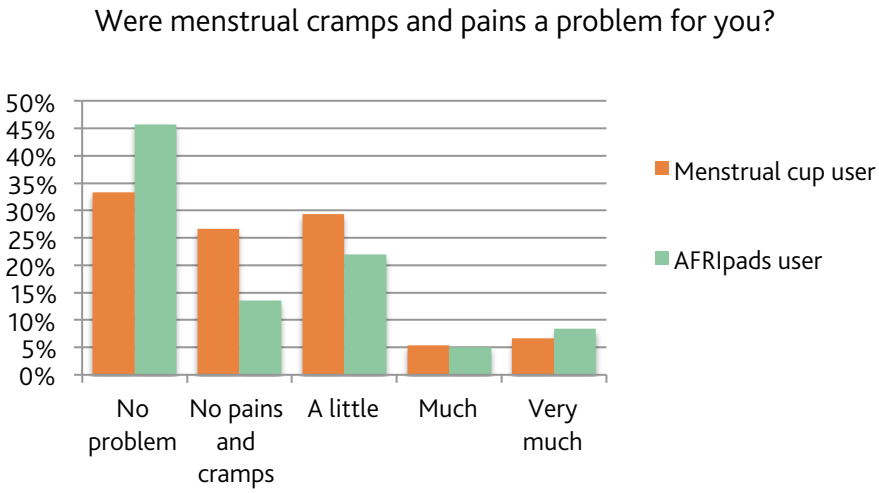


Figure 5: Data from menstrual diaries

School attendance

At baseline 38% of respondents answered yes to having stayed away from school from school during menstruation in the last year. The reasons given were lack of MHM products (50%) and being afraid of teasing (17%) or leaking (33%). At endline, participants were asked if they had missed any school due to menstruation since receiving the MHM training and products. Only one participant reported having missed school due to menstrual pain. This correlates with teachers' reports of a reduction in menstruation related absences since the start of the project.

7. Comparative experiences of using menstrual cups and Reusable pads

Initial product perceptions

A higher number of initial doubts related to the menstrual cup than to reusable pads were reported. This is in line with WoMena's previous experience. None of the participants had heard of menstrual cup prior to the intervention, whereas AFRIpads and other types of reusable pads had been distributed in the communities before and most participants were familiar with the product.

Reusable pads

- Expectation of leakage
- Washing of the AFRIpads was expected to be challenging
- That blood would stay on AFRIpads after washing
- Thought they were to be thrown out after use;
- Pads will change colour after use
- Afraid of getting a rash from the AFRIpads as with disposable pads
- Fear of AFRIpads falling out of underwear like regular cloths.

Menstrual cups

- Fear of the cup size / that the cup could will stretch the vagina or too big and hard/stiff to fit
- Fear of leaking/inserting the cup wrong
- Fear of side-effects or diseases from the cup
- Worry about virginity;
- Wondering how to move around and sit with the cup inside or fall out
- More fear about the cup than pads;
- Did not believe it could stay for 12 hours.

Overall participants expressed openness to trying new menstrual management methods, the disruption and breakdown of normal social structures seemed to provide opportunities to discuss menstruation in new ways and build support structures.

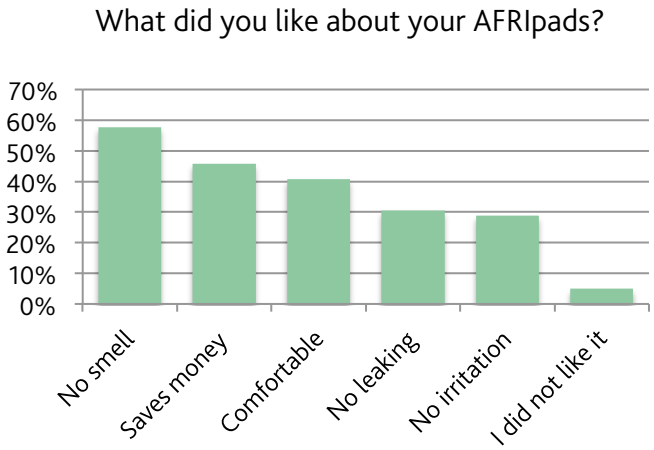
Perceived benefits and challenges of reusable pads and menstrual cups

Benefits

Participants reported a number of benefits of using reusable pads compared to their usual methods of menstrual management. These included no itching or leaking, comfort and freedom to play, saving money, being easy to wash and not smelling when washed with soap.

The Menstrual diary for reusable pads differed slightly from the Menstrual diary for Menstrual cups with no question on "What did you like about your Menstrual cup?", and

Figure 6: Data from Menstrual diary.



therefore no comparable figure.

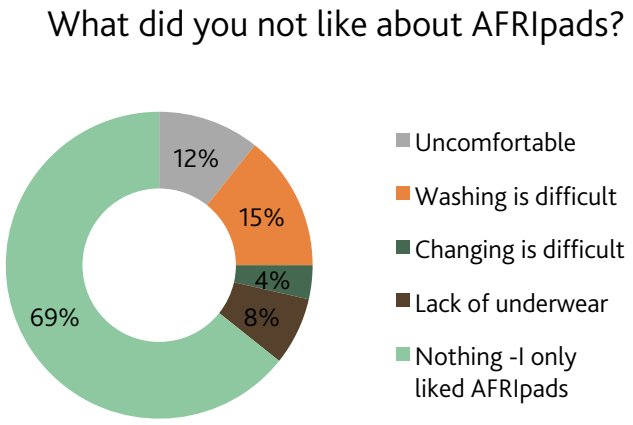
Benefits of menstrual cups compared to usual methods of menstrual management included being easier to wash and disinfect compared to clothes, using less soap for cleaning, ease of emptying the menstrual cup everywhere and no leaking or need to wear underwear. Users reported the menstrual cup being comfortable to wear and being able to *"jump and sit the way I want to"*, work freely durable and long-lasting and because of this cost saving. An additional reported benefit was that "*no one will know that you are on your period"*.

> *"There is change after she started using the cup. Those days she was only wearing panties without pads so she would stain herself but now after she started using the cup she doesn't stain herself and she is freely doing work well."*
>
> Mother, School 3, endline interview

Challenges

69% of reusable pad users reported that there was nothing that they did not like about their reusable pads and 34% of users reported having no difficulties using their pads. 12% of respondents stated that the reusable pads were uncomfortable, this was linked to pads not staying in place and pads being inconvenient to carry around. During monthly follow-ups some schoolgirls stated that the pad was too big or the pad was moving around, which is normally due to the fit of the underwear. Washing and changing the pads was reported to be difficult, mentioned issues were the pads smelling in the storage bag, lacking a basin (81% did not have a separate washing basin) and soap for washing.

Figure 7: data from endline questionnaire.



Seasonal availability of water came up as a barrier to reusable pad usage. During one visit the schoolgirls said that during the rainy season the reusable pads were easy to wash but hard to dry. Schoolgirls and women commented that washing the pads took a lot of time and that a general lack of privacy at home would make washing the pad difficult.

Figure 8: Data from Menstrual diary.

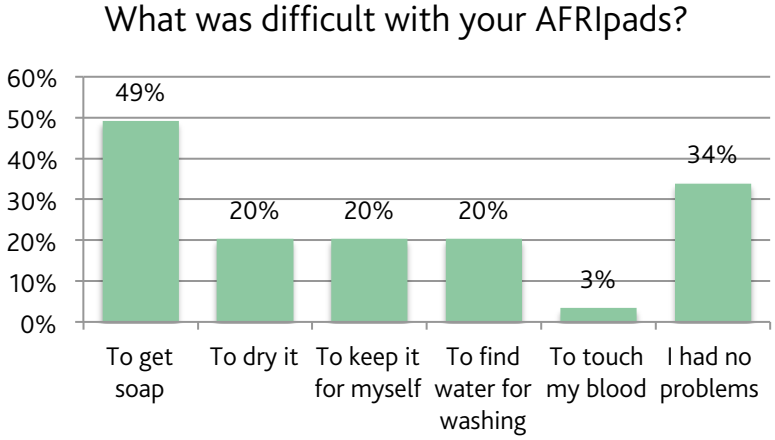


Figure 9: Data from endline questionnaire.

81% of menstrual users reported nothing that they did not like about their menstrual cups. 11% of respondents however continued to find insertion and removal difficult and some had difficulties with cleaning their cups. Other reported difficulties were finding a container to disinfect the menstrual cup and fear of meeting other people while emptying the menstrual cup.

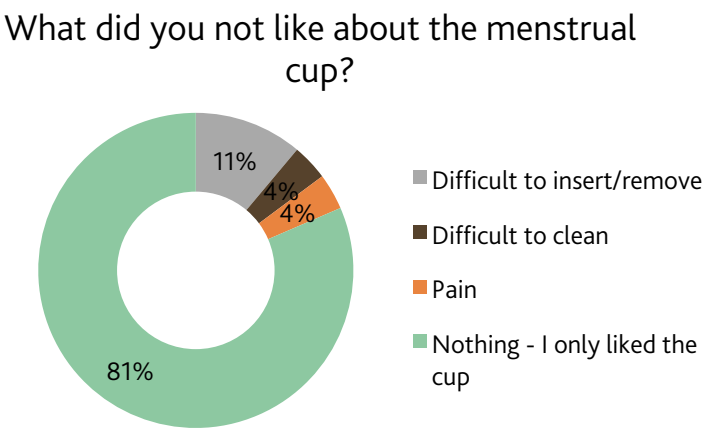
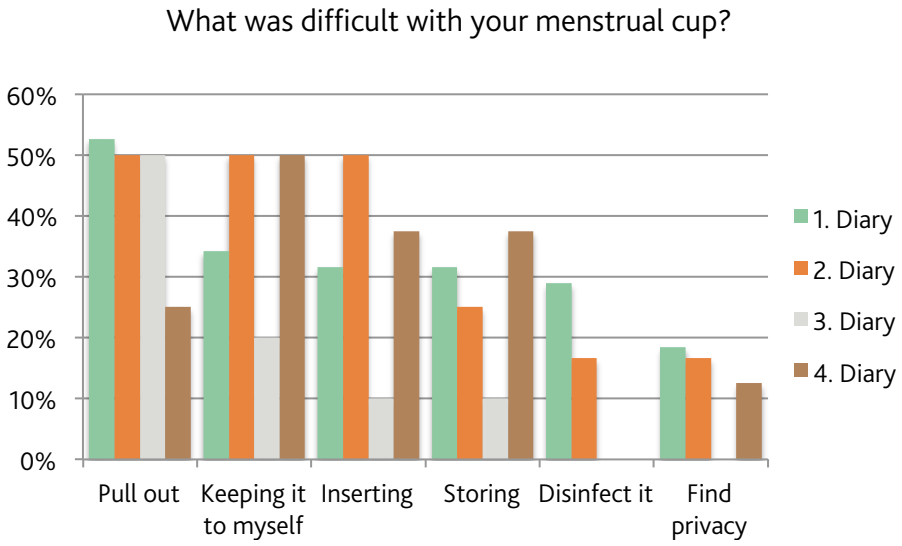


Figure 10: Data from Menstrual diary.



A majority of participants reported initial challenges with trying out the cup, including pain, but after trying the menstrual a few times, reports of pain reduces. Menstrual diaries show that around 50% of the girls and women who filled out the diary at some point had challenges with pulling the cup out, while between 20-50% had experienced challenges with keeping the cup to themselves, and inserting. Comfort with menstrual cup use increased over time and at endline, only 5 menstrual cup recipients reported continued challenges with inserting and removing the cup. Some used warm water to soften it for insertion to avoid pain. When the cup is worn inside the vagina, most participants did not feel anything, experienced no leaking, and did not need to change underwear after each bath. Disinfecting the cup, which is most directly related to the facilities available was not reported to be a challenge, nor was finding privacy.

Satisfaction and continued use of products

Product Uptake

To measure product update, participants were asked whether or not they had used the provided menstrual health products during their last period.

- 100% of endline respondents who received **reusable pads** only used the product during their last period and did not use any other products.
- 61% of endline respondents who received menstrual cups used it during their last period. 29% used reusable pads and 9% used disposable pads. Of those who did not use their menstrual cup during their last period, one had lost her cup, one stated she only uses her cup where she does not have soap to wash her reusable pads, and two only used their menstrual cups where they have heavy flow.

Despite challenges with both menstrual cups and reusable pads being raised, respondents reported high levels of satisfaction with the products. According to questionnaire data, participants found the menstrual cup more comfortable whilst wearing. Both menstrual cup and reusable pad users were least satisfied with managing menstruation in a school environment.

Table 6: Level of satisfaction with products – data from endline questionnaire.

Respondents answering "very satisfied"						
Product type	Comfort whilst wearing	Being able to do normal activities	Smell	Changing product from home	Changing product from school	Ease of cleaning
AFRIpads	57%	68%	77%	96%	53%	65%
Menstrual cups	81%	88%	88%	92%	48%	77%

Importance of follow-up and support for menstrual cup adaption

During the mid-project follow-up visit, many participants who had received their menstrual cups noted that they had not started routinely using their menstrual cups and some had not yet tried the cup at all. By endline, 61% of participants were using their menstrual cups. At the midline visit, schoolgirls and women performed role-plays under the facilitation of WoMena. Some of the mothers groups performed it in their local languages, and one of these groups included both Lugbara and Arabic to their role-play as the participants did not speak the same language. Despite this, the point was clearly presented to the joy of the audience, and there was no problem in that the mothers did the role-play in their local languages. The groups that did role-plays had all understood the hygiene guidelines of using menstrual cups and AFRIpads, and they demonstrated how they would go about it and explain their use and benefits to other people from the community. The exercise also gave participants the opportunity to share their experiences of trying and using the menstrual cup, providing reassurance and encouraging participants to use their cups.

Continuous sensitisation:

"*The first time you came to ask them about the use, many of them were saying I am fearing, I've not started using it. Now when you continue sensitising them it has an effect, you just continue using them, insert it properly, now from there on they are enjoying using it because of the continuous sensitisation you gave. If you were only to do it once, they could not cope, they could just keep it there, and they would not use it. Like the other woman before, first she was refusing; she said she didn't want to use the cup because she fears that it will cause some pain in her vagina. But now she is speaking that when she tried using continuously, it is now okay.*"

Senior Woman Teacher, School 1, endline interview

Product preference among recipients of both Menstrual Cups and Reusable pads

The reported challenges related to reusable pads are mostly related to availability of infrastructure and facilities, while menstrual cup challenges revolve around experiences directly related to wearing the cup. Based on data from the menstrual diaries there is a gradual increase in comfort with the menstrual cup with each menstrual cycle experienced whilst comfort with using the reusable pads was more fixed. This correlates with WoMena's experience of menstrual cup users going through a learning curve that can take between 4 to 6 months for new menstrual cup users.

Figure 11: data from menstrual diary.

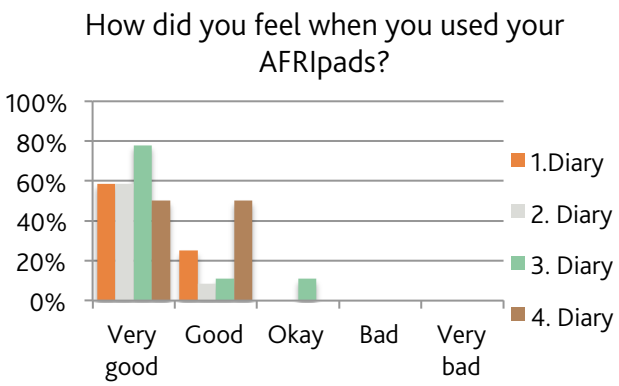
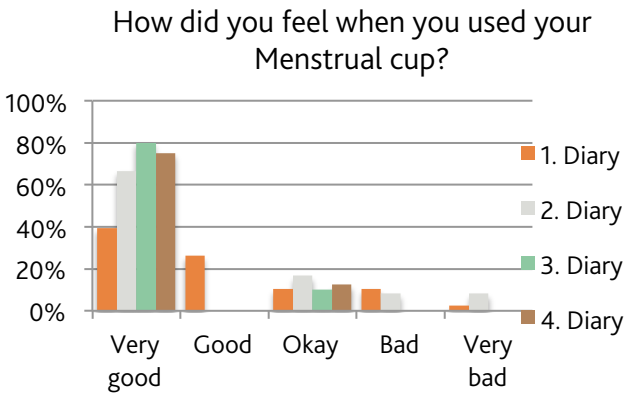


Figure 12: data from menstrual diary.



Overall participants who received both products related menstrual cup preference to convenience in terms of time used for cleaning and drying the products, time taken between changing/emptying the product, and overall potential duration of use.

"*That you have to wash your hands before inserting the cup is not a problem compared to the problems with washing AFRIpads; the cup helps because you do not need to change it as often as AFRIpads.*"

Schoolgirl, School 2, endline interview

"Why I like the cup, for example when you're going for a long journey, this journey you may not reach there in one day, you will reach in two days. You cannot use AFRIpads because it is a long journey, you will remove for washing or tie into this thing [plastic bag]… But with the cup, when you go for a long journey, at the place of you stop over you can wash it, you will re-insert it until the place you are going to reach. I prefer the cup."

Mother, School 1, endline FGD

"*When the period starts, I just put the menstrual cup and I use, and I don't spend much soap, there is no difficulties that I face compared to these other AFRIpads, it's just very simple, you enjoy, you move normal and you relax, no one will not know that you're in your periods that's the good thing, it's cheap you don't waste a lot of materials there is no much expense to be carried when you're in your period.*"

Mother, School 2, endline FGD

Of the participants who received both products, 52% answered that they use their menstrual cup the most, while the remaining 48% said AFRIpads, highlighting that there is a fairly equal distribution of product preference. Participants also expressed using the products interchangeably according to personal preference.

"*Okay maybe I would use the cup from the beginning and the second day because it is coming many, then at the last day I will now use the pad*".

Schoolgirl, School 2, endline interview

"In the dry season you can use the cup because the cup does not need a lot of water. Like the AFRIpad, people will be using it when there is enough water and they can wash it, then that is why we are saying if the idea of giving two AFRIpads and a menstrual cup is there, it can work. Then when you find that you can access water you can use the AFRIpads, when there is no water you use the cup because it does not use a lot of water, so that is the advantage of having at least two, then during dry season someone can just use the cup where there is no enough water.

Mother, School 2, endline FGD

The data also suggest that participants who received both menstrual cups and reusable pads were overall more satisfied with the products received. 11% of the participants who received only reusable pads (School 4) found them uncomfortable to wear, while none of the participants who received both products mentioned this.

When comparing patterns of product use across the four groups, the data suggests that most participants used a combination of products rather than a single product. Participants who received only reusable pads (School 4) used the provided product exclusively during their last period compared to 74% of participants who received only menstrual cups. 21% of these participants also reported using reusable pads (possibly from the concurring AFRIpads distributions ZOA has done across 12 schools in Rhino Camp Refugee Settlement) and disposable pads.

Adherence to safe use and care guidelines

After four months of product use, participants displayed a high level of self-reported adherence to use and care guidelines.

Reusable Pads

The respondents reported that they change their reusable pads 2-3 times per day, and up to 4 times during heavy flow. They wash their pads at home and less frequently at school. They normally wash them during bathing in a bathing shelter, so no one can see them. The girls, who wear their pads in school store used pads in the bag provided and wash them at home immediately after school. All but one respondent reported washing their reusable pads with cold water and soap and few report that they wash them with ash. This however contradicts participant accounts during qualitative interviews, where many reported not having sufficient access to soap to wash their pads. This may be due to response bias where by participants are reporting learnt knowledge rather than actual behaviour. The participants hang their reusable pads outside and cover them with a piece of fabric, and at times they are hung in a private place inside. If it rains, the pads are often put inside the house, and the rain can cause it to take two days for the pads to dry.

Menstrual cup

Questionnaire respondents reported, following the correct handwashing guidelines, washing their hands, with soap when available before insertion and removal on the menstrual. If water was available at the toilet facility, the cup was rinsed before reinserting. 67% of the schoolgirls stated that the always washed their hands before emptying their menstrual cup, whilst 19% stated "most of the time", 4% stated "half of the time" and 11% said they never washed their hands. Some respondents noted that NGOs had provided their communities with different types of water taps, including solar, and some also mentioned that they had a water drum at home. Some participants complained that their water access was not good, due to boreholes not working. During dry season, many reported problems with water availability, which may have impacted the level of hand washing. Although a majority reported washing their hands before removing and reinserting the cup, there is a need to reinforce handwashing messages and to ensure water access at school.

Figure 13: Data from menstrual diary.

63% of the questionnaire respondents who used their menstrual cup had tried to change their cup at school. Out of these girls, 76% had changed it in school latrines, while the 29% had done it at the school's washrooms. The reasons stated by the girls for not having changed the cup at school were that the facilities were not clean enough, not private enough, no soap available, no water available, and that there was no need to change their cup during school hours.

When **disinfecting** the menstrual cup between periods, some poured boiling water over the cup 3 times, while others boil the cup for 5 minutes in a container. Some wash the cup with soap before boiling it. After disinfecting the cup, most stored the cup in the provided cotton bag, then in a hard container or plastic bottle, and finally kept among their personal belongings and clothes in a bag or suitcase at home.

Sign at School 1

8. Talking about MHM, products and related support structures

The intervention aimed to encourage a supportive environment for girls and women. Baseline data indicated that schoolgirls, women and community members did not discuss menstruation. 19% of the girls and women in the baseline stated they do not ask anyone for advice about menstruation. At endline, most respondents stated that they had talked to a female household member after receiving training in MHM and the MHM product(s). Mothers and SWTs also talked to their husbands as well as friends. However, a mother explained that she did not talk to anyone about the menstrual cup besides her husband, because she is the only one in her community with a menstrual cup.

Figure 14: Data from endline questionnaire.

The participants generally refer to the MHM products, especially the menstrual cup, as "that thing" or "this one". This illustrates that there are still taboos about talking about menstruation freely and explicitly. Teachers however noted that the schoolgirls now speak more openly about menstruation among each other as well as to the teachers and that there has been an improvement in teacher-student relationships.

Mothers performing their role play at school 4

> "*I just appreciate this project so much, it has made us to get in touch. They come to fill those forms for ticking the days of menstruation, before that they used to not come, but now it has helped us to know these girls and help them. They have become so friendly to us and we have become friendly to them and we help them where necessary. Even at home, if the mother is quarrelling so much, we say talk slowly to the child. I just like the project, I love it and I encourage that we should continue with the project*".
>
> Teacher, School 3, endline FGD

SUMMARY OF FINDINGS AND RECCOMENDATIONS

Results from the baseline indicated that girls and women lacked the essentials to manage their menstruation safely and with dignity. They lacked access to menstrual management products, soap, underwear, and menstrual pain relief. Although respondents reported having access to water and handwashing facilities close to latrines, 58% reported not having access to a basin to wash MH products or having facilities for drying them. A number of other projects including MHM product and knowledge distribution have taken place in the communities, however respondents reported the supply of products to be inadequate and unreliable.

Despite reported restrictions on discussing menstruation (particularly for men) and reported restrictions on mobility and daily activities during menstruation, participants and their surrounding communities expressed an openness to talking about menstruation and were welcoming towards the intervention. The realities of living in a refugee settlement also seemed to allow for deviation from the set rules around menstruation. For example female heads of households, could not abide to restrictions on cooking or farming during menstruation as this would have adversely impacted the household's livelihood.

Acceptability of reusable menstrual products

Despite initial concerns about the menstrual cup (and to some extent the reusable pads), product uptake among intervention participants was high, 61% for menstrual cups and 100% for reusable pads (based on reported use during the last menstrual cycle). Despite challenges with both products being raised, respondents reported high levels of satisfaction, with the menstrual cup scoring slightly higher in terms of user satisfaction and both products were culturally and socially accepted.

The reported challenges related to reusable pads are mostly related to availability of infrastructure and facilities, while menstrual cup challenges revolve around experiences directly related to personal use. Respondents who received either both or choice of products were most satisfied with both reusable pads and menstrual cups and participants who received both products reported using them interchangeably depending on personal preference and water availability for washing products.

Feasibility of following hygiene guidelines

Self-reported adherence to safe care and use guidelines was high among participants, with correct cleaning, handwashing and storage procedures reported. Observations from the mid-line follow-up visit also confirmed that participants knew and understood the guidelines for both products. However participants also reported disruptions to availability of soap for washing both hands and used reusable pads and lack of access to underwear and washing basins. This may indicate that despite participants knowing the safe use practices, they may not always be able to follow them. For menstrual cups the challenge is most notably being able to wash one's hands before inserting and removing the menstrual cup. For reusable pads, lack of access to adequate water and soap were reported as challenges and could compromise girls and women's ability to thoroughly wash used pads. Extended drying times for reusable pads during rainy season could lead to participants not using their pads or using wet reusable pads.

In order to boost adherence to safe use and care guidelines, provision of both products is the optimal solution as this allows girls and women to adapt to the shortages in available water, soap and facilities. When introducing reusable pads, it is important to ensure that users have adequate access to soap and basins, this may require the provision of a kit rather than just the reusable pads. There is also need for further sensitisation to change restrictions around drying reusable pads out in the open or provide discrete solutions for drying pads. For the menstrual cup, it may be sufficient to provide the menstrual cup alone. However there is a need to invest in continued support to ensure product uptake and ensuring access to handwashing facilities. Both options have cost implications to actors wishing to implement MHM product interventions and further study is needed to understand the cost effectiveness of these models.

Product selection

- Choice of product is a good option where possible, as girls and women have different preferences for when to use which product, and different reasons for choosing one or the other product.
- Reusable pads require physical inputs, which are not always available in a refugee settlement context, such as basins, water, soap and underwear, as well as a supportive climate for washing and drying. However provision of reusable pads requires less sustained follow-up and support.
- Menstrual cups need more inputs in terms of training and sensitisation over a longer time frame, but less physical inputs. The follow-up visits have proved very valuable in terms of encouraging recipients to try menstrual cups. Longer-term follow-up to establish continued use of menstrual cups may be needed.

Creating a safe and effective training environment in schools

- **Involving boys**: An additional training on sexual reproductive health was held in May 2017 for both schoolgirls and schoolboys, and another one for women and men. The feedback received was supportive of training girls and boys together in mixed groups. Future training on menstruation should include both boys and girls.
- **Creating a safe space:** Consider creating a space outside of the school setting to meet with the schoolgirls for data collection purposes to reduce the linkages between the intervention and school in order for the participants to speak more freely about for example school attendance, teacher – student relationship, and school's wash facilities. Conducting follow-ups outside the school environment may also encourage schoolgirls to speak more freely.
- **Participatory learning:** Due to the diversity on linguistic and cultural groups, engaging translators in training is vital. Including participatory learning exercises that include demonstrations ensures that students who are less fluent in the predominant languages can still learn through practical demonstration.
- **Knowledge retention:** Include handouts/pictures to training curriculum if possible for future reference for the participants.
- **Working around work and school schedules:** Take agricultural seasons and corresponding workload into consideration, as well as school terms when planning intervention schedule. Work around school hours to avoid schoolgirls missing out on classes.

Take home tools

- Provide a MHM leaflet or booklet with pictorial representations on information and skills gained during training.
- The provided menstrual calendar was not systematically used by participants to assist in tracking their menstrual cycle. Follow-up sessions within the first four months of the intervention should include a follow-up on diaries to support use.

Engaging adult women through community leaders and groups

- Throughout the intervention there was a low turn-up of mothers and guardians in M&E activities and follow-up visits due to other engagements and schools being far from their daily activities. It is clear that engaging adult women through a school-based support system is not effective.

- To engage adult women going forward it is recommended to implement activities through community level authorities (for example LC1 or community leaders) to enforce participation and to be in a location that is convenient for adult women to take part alongside daily activities (household chores, working in markets, farming). Other reasons given for lack of participation were strikes, demonstrations, donor distributions, bad weather as well as not wanting to be away from home for security reasons (theft).
- Training sessions should be no longer than 2 to 3 hours.
- Take into consideration food distribution days as coinciding training and follow-up session participation will be lower on these days.

Avoiding jealously and enhancing acceptance

- **Participant selection**: Include a larger number of participants in each community in order to avoid jealousy, and increase the number of peers and support networks. It would be recommendable to scale-up within the communities involved in the pilot, rather than extending to other communities to start with.
- **Menstrual Champions**: Utilise already trained participants as menstrual champions, community focal points and future trainers. Identify ways of making the champions visible to their peers and other community members (for example provision of t-shirts), as this will make them more comfortable talking about menstruation and the product to others.
- **Support networks outside school environments**: Ensure that beneficiaries have a support network available in their community, and consider further engaging VHTs as they are able to better reach adult participants than school based support systems.
- **Continued sensitisation**: Where possible continued community engagement should be supported, rather than just at the beginning of product distribution. Particularly for reusable pads, there is a need to increase community acceptance of drying menstrual products in publically visible places.

Understanding existing access to products

- Participants noted a growing demand for products which in some cases resulted in jealously and pressure to share products. Including alternate access points for reusable menstrual health products for non-targeted populations could relieve pressure off schoolgirls and adult women receiving products.
- Provide support persons with resources to refer people to alternate sources within communities.
- Engage a wider range of stakeholders working in the area to better understand overlapping programmes and projects. Participants had engaged in prior interventions and received reusable pads in the past. If supplying reusable pads, it is important not to duplicate efforts.

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