International Federation of Red Cross and Red Crescent Societies

# Menstrual Hygiene Management (MHM) in Emergencies: Consolidated Report

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*Credit: IFRC*

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## Executive Summary

Disasters and emergencies can disrupt usual coping strategies and support structures, including access to sanitary protection materials. Despite increased attention from the global humanitarian community in addressing the menstrual hygiene management (MHM) needs of adolescent girls and women in emergency settings, this issue is often overlooked and neglected.

Inadequately addressing menstrual hygiene management needs of women and adolescent girls in emergencies may lead to a loss of dignity, gender based violence (if they have to wait for dark to change their pads), dropping out of school as well irritations and infections related to poor hygiene.

Distribution of hygiene kits and Non-Food Items (NFIs) to families affected by disasters continues to be one of the core relief activities of Red Cross and Red Crescent National Societies and the International Federation of Red Cross and Red Crescent Societies (IFRC) in emergency operations. However, key issues related to family hygiene items have been identified, including:

- Discrepancy between the number of sanitary pads provided compared to the number of menstruating females.
- The limited number and scope of MHM related items in the Emergency Relief Item Catalogue (ERIC is an online, open-source catalogue that aims to standardize the selection and procurement of relief items during emergency operations).
- Inadequate consideration of critical aspects such as disposal methods (e.g. burning of disposable pads) and care of reusable pads (e.g. washing, drying and storing).

Given these issues, and the lack of an evidence base for interventions that improve MHM of women and adolescent girls in emergencies, the IFRC developed and initiated a pilot operational research project in Burundi around MHM in emergencies in 2012. Based on the results of the pilot project, three additional trials were initiated in Uganda, Somaliland and Madagascar in 2014 with support from the Humanitarian Innovation Fund (HIF) and the British Red Cross. The main aim of the scale up projects was to generate further evidence for MHM Kits as global relief items, to scale-up advocacy and sensitization around menstrual hygiene as well as building capacity of National Societies (NSs) and Partner National Societies (PNSs) around MHM in emergencies.

### Research Protocol and Methods

Given the wide differences in Knowledge, Practices and Attitudes (KAP) around menstruation that are common between adolescent girls and women, it was crucial to gather age-segregated data. The direct beneficiaries were split into three defined age groups:

- Group A: younger menstruating adolescent girls (12 – 17 years)
- Group B: women of reproductive age in general child-bearing years (18 to 34 years)
- Group C: women above general age of reproduction, prior to menopause (35 – 50 years)

Initially, age-disaggregated Focus Group Discussions (FGDs) were conducted to gain a deeper understanding of the issues and needs surrounding MHM in emergency situations in three different contexts:

1. Religious (Muslim) and arid region context (**Somaliland**)
2. Remote Island communities affected by natural disasters (**Madagascar)**
3. Emergency resulting in disruption or displacement to normal situation (different to the population movement/refugee situation in the initial Burundi pilot) (**Uganda – refugee settlements**)

Baseline KAP surveys were conducted in each country to establish a benchmark against which to measure impact, appropriateness and content.

The project targeted 2,000 direct beneficiaries who were selected based on specific selection criteria from each country (i.e. 2000 from Madagascar, 2000 from Uganda and 2000 from Somaliland). MHM Kit A (disposable) and MHM Kit B (reusable/washable) were both distributed in Madagascar and Uganda, while MHM Kit C (reusable and disposable) - adapted and developed based on feedback from initial FGDs with beneficiaries, was distributed in Somaliland. Following distribution, one and three-month post- distribution monitoring and follow-up KAP surveys, along with additional FGDs and Key Informant Interviews (KIIs) were conducted to measure and analyze the changes in KAPs and usefulness of the MHM Kits.

## Key Results

KAP surveys conducted in all three countries revealed that Information, Education and Communication (IEC) materials and information sessions carried out during MHM Kit distribution were working. Compared to baseline survey results from 2014, there has been a marked positive change in the beneficiaries' knowledge on menstruation across the three countries. In Madagascar, for example, the three-month post distribution survey revealed that approximately 88% of all respondents knew the normal length of a menstrual period (taken to be 3 to 7 days) up from 78% in the initial baseline survey.

The survey findings also highlighted the differences in preference for washable and disposable pads among different age groups in all three locations. For instance, in Uganda, 19% of 12-17 year olds reported a preference for washable pads at baseline. This fell to 14% three months after distribution. However, among 18-34 year olds, preference for washable pads increased from 15% to 46% and among 35-50 year olds, it increased from 21% to 59%. FGDs and KAP survey responses suggest women saw washable pads as a more sustainable, long-term option, whereas adolescent girls found the process of washing and drying the pads more difficult to manage alongside their daily routine.

*A Beneficiary of the MHM Kit B in Mungula refugee settlement, Uganda. Credit: IFRC*

Improvements in dignity and hygiene were also reported in all three countries after distribution of the MHM Kits. In the case of Somaliland, the proportion of women and adolescent girls who reported restrictions in their daily life during menstruation (e.g. restrictions in fetching water) fell from 78% at baseline to 6% one month after distribution. There was also an overall 19% reduction in reported cases of itching or irritation from all respondents in Somaliland one month after distribution.

The findings from Uganda, Somaliland and Madagascar also highlighted that effectively addressing MHM requires provision of appropriate infrastructure, including safe and private spaces for maintaining hygiene, washing, drying and changing pads.

## Recommendations

Key recommendations include:

- The following items should be added to MHM Kit A (meant to last for 1 month): 400g (or more) of bathing and laundry soap; 3 units of underwear (varied sizes); 3 packs of disposable pads (8 pads per pack) to support women and adolescent girls with heavy flows.

- If distributing MHM Kit B (meant to last for 12 months), ensure repeated monthly distribution of consumables like laundry and bathing soap.

- Continue sensitizing and building capacity of both male and female staff at both National Society at Federation level, with a focus on WatSan and DM staff. For capacity building, the emphasis should be placed on practical aspects e.g. importance of cultural beliefs and perceptions, importance of initial assessment and consultation with women and girls, relief/distribution of items including assessment and identification of beneficiaries, appropriate design of latrines and bathing areas for women/adolescent girls, issues around solid waste management and disposal.
- Locally adapt and procure MHM Kits where possible.
- Improve sensitization and education sessions on use of MHM items – before, during and after distribution of MHM Kits.

## Conclusions

These operational research trial projects in Somaliland, Madagascar and Uganda have shown the Menstrual Hygiene Management Kits (A, B and C) to be comprehensive relief items that appropriately and effectively meet the menstrual hygiene needs of women and adolescent girls in emergency settings by improving their health, dignity, knowledge and hygiene.

Based on the results of these trials, IFRC plans on including detailed specifications of the MHM Kits in the Red Cross/Red Crescent (RC/RC) Emergency Items Catalogue (ERIC). Through this, it is envisaged that IFRC, National Societies and International Water and Sanitation actors will adopt the MHM Kit as a global relief item, with further adaptation to various contexts and local procurement where appropriate.

Given the multi-faceted nature of MHM, additional research needs to be carried out by IFRC and other humanitarian actors to further explore various contexts: emergency and developmental, geographic, religious, cultural, socio-economic etc. so as to add onto the existing but limited evidence base and effectively and appropriately respond to MHM needs of women and adolescent girls.

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## Background and rationale

Menstrual hygiene in emergency situations continues to be of great concern but it is often overlooked and not properly addressed by the international humanitarian community. Though sanitary pads are not considered a life-saving item, they play a crucial role around important issues such as dignity, hygiene, health, education, protection and security of women and adolescent girls in emergencies.

The risks of not appropriately addressing menstrual hygiene management needs, particularly in emergencies, are many. Due to a lack of access to adequate and sufficient latrines, bathing areas and private drying areas for cloth pads (or similar), many women face a loss of dignity and embarrassment as well as potential gender-based violence (for example if girls and women must wait for dark to visit the latrines or place to change/dispose of pads). Women with no other option often use old and dirty cloth to absorb their menstrual flow, leading to irritation and/or vaginal or urinary tract infections. Adolescent girls are likely to stay away from school and fall behind in their education due to a lack of segregated, private and appropriate sanitation facilities at school.

The current approach by IFRC and other humanitarian actors to Menstrual Hygiene Management (MHM) has typically been to distribute disposable pads as part of their household hygiene kits, with no adjustments for the number of menstruating females in each household. This results in issues around the inevitable discrepancies and inequity of number of sanitary pads distributed for different families, compared to the need. For example, if one household (or family) hygiene kit includes 10 sanitary pads – this is barely sufficient for a family with one menstruating woman; furthermore, these 10 pads are not sufficient if the family has two, three or more menstruating women.

Sanitary pads as described in the Red Cross/Red Crescent (RC/RC) Emergency Relief Items Catalogue (ERIC) are disposable napkins, referring to washable menstrual cloths as other alternatives that might be supplied but which require prior research of local hygiene habits and means of waste disposal. This limited entry in the catalogue does not reflect the diversity of solutions that might be considered when dealing with menstruation management in emergencies, nor does it incorporate critical aspects of safe and appropriate means of disposal of used sanitary materials (e.g. burning, burying for disposable pads) or hygienic care of reusable pads (e.g. washing, drying and storing). Information on use, care and disposal of materials is also missing, along with pragmatic information on menstruation.

In an effort to address these needs and the multi-faceted nature of MHM as well as contribute to the limited evidence base for MHM interventions in emergencies, IFRC initiated a pilot operational research project in Burundi around MHM in emergencies in 2012 (completed in 2013), supported by the Norwegian, Netherlands and British Red Cross Societies. In 2013, three additional pilots were initiated in Madagascar, Somaliland and Uganda with funding from Humanitarian Innovation Fund (HIF) and British Red Cross Society with an aim of testing the kits in a wider range of locations and contexts.

The overall goal of the pilot and scale-up projects was to improve the dignity of women and adolescent girls during emergency situations by exploring the appropriateness, effectiveness, acceptability and value of MHM Kits in emergencies thus providing evidence based information for inclusion of MHM kits as a specific humanitarian relief item.

This report provides a critical analysis of the results of the scale up operational research MHM projects in Uganda, Madagascar and Somaliland in an effort to fill the existing gap in knowledge and evidence based research and inform best practices around menstrual hygiene management.

## Project goal and objectives

The overall goal of the Menstrual Hygiene Management (MHM) in Emergencies scale-up operational research project was to improve dignity of women and adolescent girls during emergency situations and to provide further evidence for MHM Kits as global relief items.

### Project objectives:

1. MHM Kit A (disposable) and Kit B (reusable) are adopted by IFRC as standard emergency relief items[1]

2. Improved knowledge of National Society staff to incorporate menstrual hygiene management into WASH emergency response activities.

3. Results and outcome of MHM operational research are documented and shared with wider WASH partners.

This project aims to fill the existing gap in knowledge and evidence based research to guide best practices around menstrual hygiene management. A robust approach was taken in documenting evidence on the MHM kits acceptability, value and appropriateness. The core methodology that formed the backbone of the research protocol for these trials included initial qualitative research to inform quantitative data collection. Experiences and lessons learnt from the pilot research project in Burundi were drawn on to guide implementation and methodology of the scale up projects.

To rigorously test the MHM Kits, it was necessary for females of reproductive age to use them over a sufficient period of time, with information gathered periodically at critical stages to establish evidence against the key research questions. Focus group discussions (age-disaggregated) were conducted to gather qualitative information and gain a deeper understanding of the issues and needs surrounding MHM in the specific trial context. A baseline Knowledge, Attitude and Practice (KAP) survey was also conducted in order to establish a benchmark against which to measure the impact of the MHM Kits. Following this, one and three-month post-distribution follow up KAP surveys, along with additional Focus Group Discussions (FGDs) and Key Informant Interviews/KIIs (at three-month stage) were carried out.

[1] MHM Kit C (disposable and reusable) was developed and designed following formative qualitative data collection in Somaliland (appropriate for the local context).

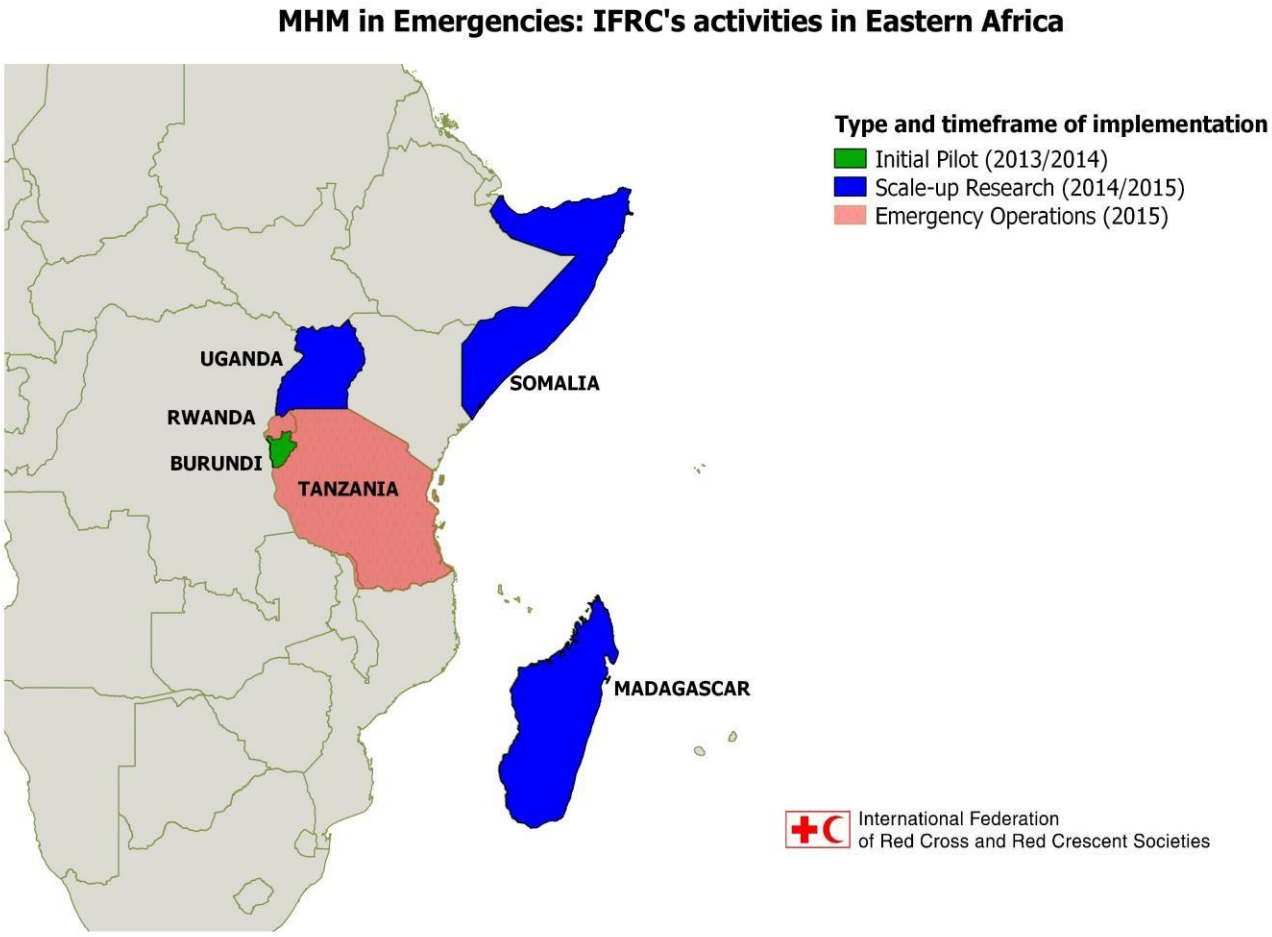
## Location and implementation modality

The primary focus of this project targeted emerging humanitarian situations in Eastern Africa and the Indian Ocean Islands (EAIOI) region. Based on the selection criteria, discussions with EAIOI Multi - Country Cluster (MCC) WASH teams and respective National Societies were held to identify the beneficiaries in each location.

Somaliland, Uganda, Madagascar were selected for the MHM scale-up project implementation due to their accessibility, vulnerable populations and the presence of the National Societies in the area. The implementation team included a mix of male and female staff members from the respective National Societies supported by IFRC staff at the EAIOI office in Nairobi.

### Somaliland

Socio-cultural and religious beliefs play an important role in MHM particularly for Islamic communities in Somaliland. Issues like availability (or lack thereof) of water for ablution, restrictions in going to mosque during menstrual periods, sex-segregated washing areas and latrines and other social and cultural issues were considered in the design of the project. Somalia Red Crescent Society (SRCS) identified Dilla and Allaybaday Districts (Muslim communities) in Somaliland as specific locations for project implementation. The total female population (between 12 to 50 years) as of 2014 in Alleybaday and Dilla was 3250 and 5000 respectively.




*A map showing countries that have implemented IFRC's MHM activities in emergency settings in Eastern Africa.*

**Uganda**

In collaboration with Uganda Red Cross Society (URCS), Mungula camp (Adjumani district) and Rhino camp (Arua District), were identified as the specific locations for project implementation. As at June 2014, Mungula refugee settlement had a total of 791 women and adolescent girls (between 12- 50 years) while Rhino camp (Ocea and Siripi clusters) had a total of 1,177 women and adolescent girls (information on refugee population was obtained from UNHCR Uganda). These two camps were selected with an aim of exploring the specific MHM needs of South Sudanese female refugees who fled into Uganda due to conflicts in their country.

**Madagascar**

In collaboration with Madagascar Red Cross Society/Croix-Rouge Malagasy (CRM), Ankililoaka and Miary communes in the province of Tulear located in the South-West region of Madagascar, were identified as the specific locations for project implementation. As at February 2014, a total of 2789 females (between 12-50 years) were living in Ankililoaka, while 1724 females (between 12-50 years) were from Miary. These two regions were selected due to their high risk of destructive cyclones and floods which could result in displacement of people and destruction of water and sanitation infrastructure. In addition to cyclones/floods, the communities in these regions have strong cultural and religious beliefs that affect menstrual hygiene management.

**Tanzania and Rwanda**

The learnings from the initial pilot and scale-up MHM projects are been translated into real emergencies for the current Tanzania[2] and Rwanda[3] emergency population movement appeals, supporting Burundi refugees in Nyarugusu and Mahama camps respectively. Tanzania Red Cross and Rwanda Red Cross Societies are preparing to carry out Initial FGDs informed from methodologies and tools used in the pilot and scale-up MHM projects, to better understand the MHM needs of adolescent girls and women in the refugee camps and thus inform and guide subsequent MHM Kit distribution activities.

[2] Tanzania Emergency Appeal
[3] Rwanda Emergency Appeal

## Research protocol and key questions

To rigorously test the MHM Kits, it was necessary for females of reproductive age to use them over a sufficient period of time, with data gathered periodically at critical stages to establish evidence against the key research questions. Given the wide differences in knowledge, practices and attitudes around menstruation that are common between adolescent girls and women, it was crucial to gather age-segregated data.

The direct beneficiaries were split into three defined age groups:

- Group A: younger menstruating adolescent girls (12 – 17 years)
- Group B: women of reproductive age in general child-bearing years (18 to 34 years)
- Group C: women above general age of reproduction, prior to menopause (35 – 50 years)

Initially, age-disaggregated Focus Group Discussions (FGDs) were conducted to gain a deeper understanding of the issues and needs surrounding MHM in emergency situations in three different contexts:

1. Religious (Muslim) and arid region context (**Somaliland**)
2. Remote Island communities affected by natural disasters (**Madagascar)**
3. Emergency resulting in disruption or displacement to normal situation (different to the population movement/refugee situation in the initial Burundi pilot) (**Uganda – refugee settlements**)

Continuous consultations with women and adolescent girls in the above mentioned countries were used to generate evidence on appropriate MHM interventions as well as develop kit contents. Baseline Knowledge, Attitudes and Practice (KAP) surveys were conducted to establish a benchmark against which to measure impact, appropriateness and content. This was followed by one and three-month post-distribution monitoring and follow-up KAP surveys, along with additional age-segregated FGDs and Key Informant Interviews (KIIs) with an aim of measuring the impact of the intervention in each country.

MHM Kit A (disposable) and MHM Kit B (reusable) were both distributed in Madagascar and Uganda (1000 MHM Kit A and 1000 MHM Kit B were distributed in each country, making a total of 2000 beneficiaries in each country), while 2000 MHM Kit C (which contained both reusable and disposable pads) were distributed to 2000 direct beneficiaries in Somaliland. The following selection criteria for the target beneficiaries was used:

*Uganda*

- Be of South Sudanese origin, from the same ethnic group (Dinka)
- Have official refugee status in Uganda, as determined by UNHCR and Government
- Not pregnant at the time of the baseline survey
- Fit within one of the three defined age groups at the time of the baseline survey

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*Madagascar*:

- Be of Malagasy ethnicity
- Inhabitants of the Ankililoaka and Miary communes in Tulear II district
- Fit within one of the defined age groups at the time of the baseline survey
- Not pregnant at the time of distribution

*Somaliland*

- Be a Muslim and of Somali ethnicity
- Be a permanent resident of either Dilla or Allaybaday, Somaliland
- Not pregnant at the time of the baseline survey
- Fit within one of the three defined age groups at the time of the baseline survey

Detailed content of the three types of MHM Kits (A, B & C) trialled are detailed in Table 1.

**Table 1: Types and content of Menstrual Hygiene Management Kits (A, B and C) trialled.**

| Type of MHM Kit | Items |
|---|---|
| **Kit A (Disposable)**<br><br>*(Timeframe for use: 1 month)* | 2 Packs of Disposable sanitary pads, normal (8 pads per pack) |
| | Plastic bucket, 6 Litres, with lid |
| | Bio-degradable plastic bags, 8 - 10 Litre size, non-transparent, black |
| | 220 grams personal bathing soap |
| | Underwear, 100% cotton, not white, Medium size |
| | Underwear, 100% cotton, not white, Large size |
| | Use, care and disposal instructions (Kit A - disposable) |
| | Polyethylene storage bag, with drawstring |
| **Kit B (Washable**)<br><br>*(Timeframe for use: Up to 12 months, with soaps consumed earlier)* | 1 pack of reusable sanitary pads (e.g. AFRIpads) which included 5 absorbing liners (3 winged pads + 2 straight pads) |
| | Plastic bucket, 6 Litres, with lid |
| | 4-meter length plastic coated rope |
| | Plastic pegs, pack of 8 |
| | 350 grams laundry soap |
| | 220 grams personal bathing soap |
| | Underwear, 100% cotton, not white, Medium size |
| | Underwear, 100% cotton, not white, Large size |
| | Use, care and disposal instructions (Kit B - reusable) |
| | Polyethylene storage bag, with drawstring |
| **Kit C (Disposable & Washable)**<br><br>*(Timeframe for use: Up to 12 months, with soaps consumed earlier)* | Plastic bucket, 7 Litre capacity, with lid, solid color |
| | Disposable sanitary pads, regular absorbency, pack of 10 |
| | Small plastic bags (bio-degradable), 1 - 2 L capacity, thin with handles, non-transparent, black |
| | 1 Pack of reusable/washable sanitary pads (e.g. AFRIpads) |
| | Plastic coated rope, 4-meter length |
| | Plastic pegs, pack of 8 |
| | 350 grams laundry soap, bar |
| | 220 grams personal bathing soap, bar |
| | Underwear, 100% cotton, not white, Medium size, with elastic waistband |
| | Underwear, 100% cotton, not white, Large size, with elastic waistband |
| | Use, care and disposal instructions (Both Type A Disposable and Type B Reusable/Washable) |

Key research questions to be evaluated and analyzed through the MHM Kit trials were developed in four broad categories:

**a) Usage and acceptability**

- What is the level of usage and acceptability of the different types of Kits (Kit A, B and C)? *(in the specific project context)*
- How dependent was the level of usage and acceptability of the different kits, given locally available materials and existing practices for dealing with menstruation?
- Why did women of different ages use or not use the kit?
- Did women continue to use the reusable kit for the months following the distribution?

**b) MHM kit content**

- Is the content of each kit sufficient?
- Are there enough pads?
- Do other items need to be added? Should some items be removed?
- How do the supplementary items (soap, washing basin, plastic bags, etc.) add value?
- Are the IEC materials sufficient, effective and conveying the correct key messages?

**c) Distribution considerations**

- What are the key logistic/ relief considerations for the distribution?
- How can National Societies distribute the MHM kit in combination with hygiene kits, dignity kits (potentially including MHM materials also) to avoid overlap?
- What existing structures or tools at NS level can be adapted to incorporate MHM kits and menstrual hygiene considerations?

**d) Mainstreaming MHM into global tools and knowledge**

- Can a global menstruation kit respond to specific local needs?
- What guidance is required for National Societies?
- How can inclusion of and considerations for MHM be advocated to IFRC and National Society staff?

## Methodology

To rigorously test the MHM Kits, it was necessary for females of reproductive age to use them over a sufficient period of time, with data gathered periodically at critical stages to establish evidence against the key research questions.

### Overview

Table 2 below outlines the key qualitative and quantitative research methods used at each project stage.

**Table 2: Data collection methods used at each stage of the operational research pilot project.**

| Stage | Qualitative methods | Quantitative methods |
|---|---|---|
| **Pre-baseline, pilot project inception** | Focus group discussions (age-segregated)<br>Key Informant Interviews (KIIs)<br>Direct observation | - |
| **Baseline** | - | Individual age-segregated survey (KAP survey) |
| **Distribution** | - | - |
| **One month post-distribution monitoring** | Key Informant Interviews (KIIs)<br>Direct observation | Individual age-segregated survey (KAP survey) |
| **Three month post-distribution monitoring** | Focus group discussions (age-segregated)<br>Key Informant interviews (KIIs)<br>Direct observation | Individual age-segregated survey (KAP survey) |
| **Market Survey** | Direct Observation | Market Survey Form |
| **Regional Mapping of actors distributing MHM items in East Africa** | - | Individual Survey (Survey Monkey) |

Age-disaggregated focus group discussions (FGDs) were conducted to gain a deeper understanding of the issues and needs surrounding MHM and to gather initial qualitative data to guide the finalization of MHM Kit contents in three different contexts:

I. *Religious context (Somaliland):* Socio-cultural and religious beliefs play an important role in MHM particularly in Muslim communities. Issues like availability (or lack thereof) of water for ablution, sex-segregated washing areas and latrines, restrictions in going to the mosque during menstrual periods and other cultural and religious issues were considered in the design of the project.

II. *Emergency context resulting in displacement or disruption to normal situation (Uganda):* Understanding the needs of women and adolescents around menstruation in humanitarian emergency context, specifically South Sudanese female refugees who took refuge in Uganda due to conflicts in their country.

III. *Indian Ocean Island Context (Madagascar)* – This region has a high risk of destructive cyclones and floods resulting in displacement of people and destruction of water and sanitation infrastructure. In addition to natural disasters, different cultural and religious beliefs that affect menstrual hygiene management among girls and women were explored.

A baseline Knowledge, Attitude and Practice (KAP) survey was conducted to establish a benchmark against which to measure impact, appropriateness and content. The project included 2,000 direct beneficiaries who were randomly selected from each country (i.e. 2000 from Madagascar, 2000 from Uganda and 2000 from Somaliland). Enumerators (Red Cross volunteers) were allocated a specific sector of the study area, and given a target number of girls and women in each age group to identify based on pre-determined selection criteria. MHM Kit A (disposable) and MHM Kit B (reusable) were distributed in Madagascar and Uganda, while MHM Kit C (reusable and disposable) - adapted and developed based on feedback from initial FGDs with beneficiaries, was distributed in Somaliland.

Beneficiaries included adolescent girls and women across the three age groups earlier defined in the research protocol. One and three-month post-distribution monitoring and follow-up KAP surveys, along with additional FGDs and Key Informant Interviews (KIIs) were then conducted.

## i. FGD guide

Focus group discussion guides previously developed by IFRC in English during the Burundi pilot were further reviewed, revised and translated into the local languages by the respective National Society (NS) staff i.e. SRCS, CRM and URCS. The FGD guide included the purpose, target groups, introduction and questions/prompts. Questions were split into different categories and labelled clearly (A.1, A.2, B.1 etc.), to assist with clear facilitation and for note-takers/observers to follow the discussion easily. The FGD explored the following topics: menstrual hygiene management practices, MHM Kit items, previous distribution of MHM items by other actors, water, sanitation and waste management facilities and information related to MHM. All FGDs conducted were age-segregated into three defined age groups as outlined in the research protocol.

### a) Translation of FGD guide

The pre-baseline English FGD guides were translated into Somali, Malagasy and Dinka by National Society staff and volunteers from SRCS, CRM and URCS respectively. To ensure validity of the results, IFRC staff reviewed the translated FGD guides to ensure that the meaning would not be distorted.

### b) FGD roles

Each FGD consisted of a lead and assistant facilitator, recorder/note taker (involved in translation of notes and key points from the discussion) and observer/time keeper. The following were language requirements for each National Society: SRCS – Somali speaking, URCS – Dinka speaking; CRM – Malagasy & French speaking. All translators were required to be able to translate the respective languages into English to facilitate report writing. If at any time a participant was unsure of the meaning of a term or question being asked, it was explained to them by the female assistant facilitators.

### c) Analysis and summary of FGDs

FGD notes were consolidated in English through a combination of the translated notes and discussion with key facilitators (respective National Society and IFRC staff), as soon as possible after the end of the discussion (usually in the same evening or morning afterwards). Notes were summarized (according to the categories of questions outlined in the FGD guide) and similar responses/themes grouped together for analysis. Responses and information were noted and summarized separately for the different age groups.

*FGD in Somaliland - displaying and discussing various MHM related items. Credit: IFRC*

## ii. Baseline, 1 month and 3 month post-distribution monitoring individual surveys

### a) Sampling frame

*Uganda*

A list of female refugees from Mungula refugee camp (Adjumani District) and Rhino Camp (Arua District) between the ages 12 and 50 was obtained from UNHCR. This list included full names, date of birth, age, UNHCR ration card number, and the sector and cell the refugee resides in. Each person identified to receive a MHM Kit presented a UNHCR ratio card number as a means of identification.

*Madagascar*

The list of potential beneficiaries was sourced from CRM's Disaster Risk Reduction (DRR) department of which had carried out a DRR project in the targeted regions (i.e. Miary and Ankililoaka communes) prior to the MHM project. A total of 2000 beneficiaries were randomly selected from the list and registered across the three defined age groups from Miary and Ankililoaka communes.

*Somaliland*

The SRCS enlisted the aid of women's groups to identify and come up with a list of females between 12 and 50 years in Dilla and Allaybaday (Somaliland) as these women's groups had knowledge, links and information on the whereabouts of women and adolescent girls who fit the sampling criteria and also information on the most vulnerable populations. Vulnerabilities included females from poor socio-economic backgrounds, females with poor access to WASH facilities etc.

### b) Sampling methodology

Stratified random sampling, using proportionate stratification by age groups (strata), was used for all three countries (Uganda, Madagascar and Somaliland). For example, the sample size, number of surveys done and kits distributed in each age group was proportional to the total population in each age group.

Once the sample size was determined within each age stratum, random sampling of individual beneficiaries was done by segmenting the refugee camps (as for Uganda) or communes/villages (as for Madagascar and Somaliland). Red Cross/Red Crescent Volunteers were then allocated a specific number of females in each age group to identify and interview, starting at a random location and then going house to house (skipping 1 house in between).

### c) Sampling size

An open source sample size calculator from the National Statistics Service of Australia[4] was used. As stratified random sampling was used, the sample size for each stratum was calculated. A confidence level of 95% was used. As the expected proportion of the population for the attributes included in the study was unknown, a standard value of 0.5 was used. The desired level of accuracy (confidence limit) was set to be 0.05.

[4] Source : http://www.nss.gov.au/nss/home.nsf/pages/Sample+size+calculator

## d) Distribution

*Somaliland*

A total of 2000 MHM Kit C were distributed in Dilla and Allaybaday. SRCS volunteers from Dilla and Allaybaday with support SRCS staff and women's groups, identified and pre-registered eligible female recipients of the MHM Kits in their communities based on criteria outlined in the research protocol. Distribution of MHM Kits in Dilla started on the 20th April 2014 while Allaybaday started on 22nd April 2015. Before distribution, communities received information about the content of the MHM Kits including the use and care of reusable pads. Demonstration on how to use the items was also included in the leaflets. Five SRCS volunteers were selected to pre-pack the MHM items. Distribution and registration of beneficiaries was done under a tent. SRCS Borama branch and coordination office invited the Ministry of Health (MoH) - central and regional officer, to attend the distribution of MHM Kits to communities. Borama regional medical officer, Public Health Coordinator and the Vice Ministry of health all attended the distribution of the kits in Dilla.

*Madagascar*

Two types of kits were distributed in Madagascar: MHM Kit A (disposable pads e.g. Talia/Softex) and MHM Kit B (washable pads). 2000 MHM Kits A&B were transported from Antananarivo to Miary (1000 MHM Kit A&B) and Ankililoaka (1000 MHM Kit A&B) communes, in the South West region of Madagascar. Distribution lists were sourced from the DRR department as outlined in the sampling frame. Primary schools were selected as distribution points as they were easily accessible by women and adolescent girls. Each distribution was preceded by a series of speeches by local authorities and regional CRM coordinators, who explained the purpose of the project and the distribution process. Local journalists were also present during the distribution which was broadcasted on "Televiziona Malagasy" - a National Television Network.

*Uganda*

1,000 Kit A (disposable pads) were distributed in Arua (Rhino camp) in the month of February 2014 and 1,000 Kit B (re-usable pads) were distributed in Adjumani (Mungula camp) in April 2014. The beneficiaries were randomly selected as outlined in the sampling frame.

Prior to distribution, trained URCS female volunteers conducted block to block education and demonstration sessions to the target beneficiaries on proper use, care/disposal of the items. These education sessions provided adequate opportunity for the beneficiaries to ask all relevant questions and address myths and fears about the MHM items. Each registered beneficiary personally received the MHM Kit (either Kit A or Kit B) after receiving instructions and demonstration on its use and care.

## e) Questionnaires

Guided by the research protocol, survey questions for the baseline, 1 month and 3 month post distribution survey (PDS) were drafted by the IFRC WASH team based in Nairobi. The questionnaires were then reviewed and revised by the respective National Society focal points and translated into the respective languages: Somali (Somaliland), French & Malagasy (Madagascar) and Dinka (South Sudanese refugees in Uganda).

The questionnaires were structured into the following sections:

i. General questions to be answered by all (e.g. age, location, knowledge, practices etc.)
ii. Questions to be answered by recipients of MHM Kit A or B or C during the post distribution surveys (PDS).

For Somaliland and Uganda, the questionnaires were uploaded onto Magpi[5] – a mobile data collection application.

### f) Volunteer training

Volunteers from all 3 National Societies were trained in effectively carrying out KAP surveys and FGD's. This also included explanation of the research protocol and expected outcomes. Training was also provided to URCS and SRCS volunteers on the use of Magpi application, data collection using mobile phones and how to manage and upload data. For each survey, the questionnaires were tested by the National Society volunteers during trainings carried out prior to the survey being conducted.

### g) Data collection and quality control

In Madagascar, data was collected by female volunteers using a paper-based questionnaire. At the end of each survey day, the CRM project focal points would review each completed survey form the volunteers, and identify and troubleshoot any problems or issues with incomplete or incorrectly filled forms.

In Somaliland and Uganda, mobile phones with Magpi data collection app, were used to collect data from the field. This was done by trained SRCS and URCS female volunteers respectively, who uploaded the data into Magpi at the end of each day. Magpi facilitated real-time monitoring and management of the data from IFRC EAIOI cluster office in Nairobi.

*SRCS volunteers using Magpi to collect data. Credit: IFRC*

### h) Data entry and analysis

In Madagascar, the data that was collected using paper-based questionnaires and manually entered into Microsoft Excel sheets by trained female CRM volunteers at the end of the survey. This was followed by analysis and report writing by the MHM focal point in Madagascar who then shared the final reports with the IFRC Nairobi team. As for Uganda and Somaliland, the data uploaded into Magpi was transferred to Microsoft Excel for analysis by IFRC staff in Nairobi. The analysis of the data was done by a WatSan focal point in IFRC Nairobi office using advanced Microsoft Excel functions and SPSS. This analysis was then shared with URCS and SRCS for facilitate the completion of the MHM narrative reports.

[5] Magpi: http://home.magpi.com/

## iii. Market Survey

### Introduction

Pre-positioning and local procurement of menstrual hygiene management items at strategic locations is key in addressing timeliness in responding to the dignity, hygiene and health of women and adolescent girls in emergencies. Additionally, local procurement significantly reduces transportation costs and lead times resulting in an effective and efficient emergency response. To address these issues, IFRC EAIOI cluster office in Nairobi conducted a market survey in 3 countries in East Africa i.e. Madagascar, Uganda and Somaliland, to determine the potential for local procurement and pre-positioning of MHM items and kits in these countries.

### Data collection

A market survey form was developed by the IFRC WatSan department in Nairobi. The survey form was then shared with NS MHM focal points in Madagascar, Uganda and Somaliland, with an aim of collecting data on the availability of MHM items from the local market/suppliers both at project sites and capital cities.

### Data analysis

The data collected by each National Society was exported from the market survey forms to an excel spreadsheet and analyzed by IFRC staff.

## iv. Regional Mapping of MHM items

### Introduction

Current hygiene/dignity/menstrual kits are generally designed for household level distribution (usually for a length of one month). With no adjustment for the number of menstruating females in each household, there are issues around the inevitable discrepancies and inequity of number of sanitary pads distributed for different families, compared to the need. To address these and other issues such as the possible "overlap" in distribution of MHM items by other humanitarian actors, IFRC conducted a desk-top review of hygiene, dignity and menstrual hygiene items that humanitarian actors in East Africa distribute in emergencies – in essence a mapping of "who distributes what".

### Data collection

An online Survey Monkey[6] questionnaire was developed by IFRC in Nairobi and shared with external humanitarian actors working in the field of MHM and WASH in East Africa. The questionnaire explored distribution methods, types of kits distributed and information gathering techniques.

### Data analysis

Data was exported from survey monkey to excel spreadsheets for analysis by IFRC Nairobi.

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[6] https://www.surveymonkey.com/

## Results

A summary table of the population in each age group, number of baseline surveys conducted, number of MHM kits distributed, and number of one and three month post distribution follow-up surveys completed can be found in **Annex 1** (Uganda), **Annex 2** (Somaliland) and **Annex 3** (Madagascar). A summary data table of the results from the baseline, one month and three month post-distribution surveys can be found in **Annex 4** (Uganda) and **Annex 5** (Somaliland). (*Excel data on Madagascar is not available as it was only captured in reports)*.

A synopsis of the main results is provided below (including age-segregated results where appropriate), presented at baseline, one month post-distribution and three month post-distribution. The summary results of the market survey and the regional mapping of MHM Kits are also included in this section.

### A. Uganda

### Baseline and 1 month Post Distribution Results

#### Knowledge

The findings showed a significant increase in the level of baseline knowledge of women and adolescent girls sampled in Uganda after distribution of the MHM Kits. Three months after distribution, approximately 78% of all groups knew the normal length of monthly menstruation (taken to be 3 to 7 days) up from 53% in the initial baseline survey.

#### Menstrual Practices

At baseline, over a third of all respondents (37%) reported difficulties in finding a private, comfortable place to change disposable pads. Approximately 76% of all respondents reported having used disposable pads before arriving at the refugee settlements in Uganda from South Sudan while 43% of all groups reported having used cloth pads before distribution of the MHM Kits.

#### Information on menstruation

In regards to MHM information, majority of the respondents (64%) reported receiving information from their mothers. Additionally, grandmothers were cited to be an alternative source of MHM education by 10% of all adolescent girls surveyed. Friends/peer groups, older sisters and school teachers were also common channels of information on menstruation.

#### Restrictions

16% of women and adolescent girls reported restrictions during their monthly period one month after distribution down from 36% in the baseline survey. The most common restriction reported was “can’t have sex” and “cannot drink milk” particularly from groups B and C.

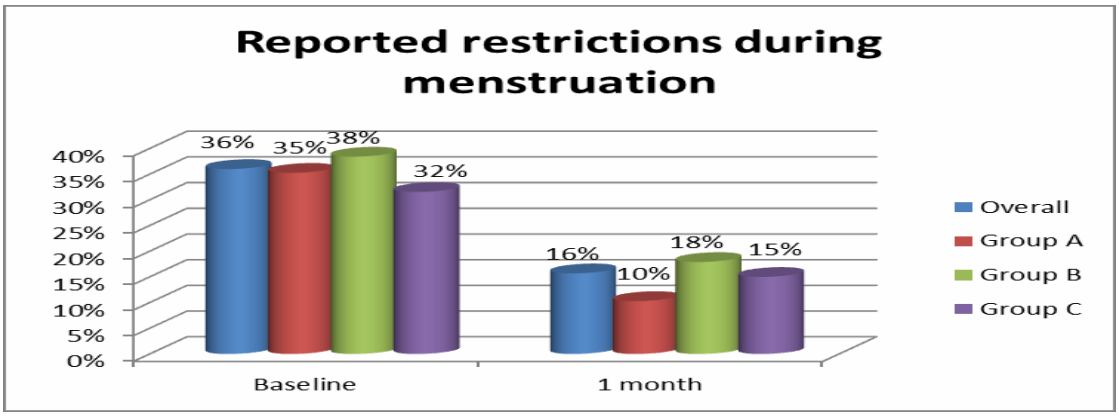



**Figure 1. Overall and by Age group, reported restrictions in daily life when menstruating**

Additionally, prior to distribution approximately 37% of all respondents reported difficulties in finding a private, comfortable place to change disposable pads with most respondents reporting changing their disposable pads in bathing areas or latrines. Furthermore, the proportion of respondents who reported feeling embarrassed during menstruation decreased significantly one month after distribution - from 40 to 18 percent, as shown below.

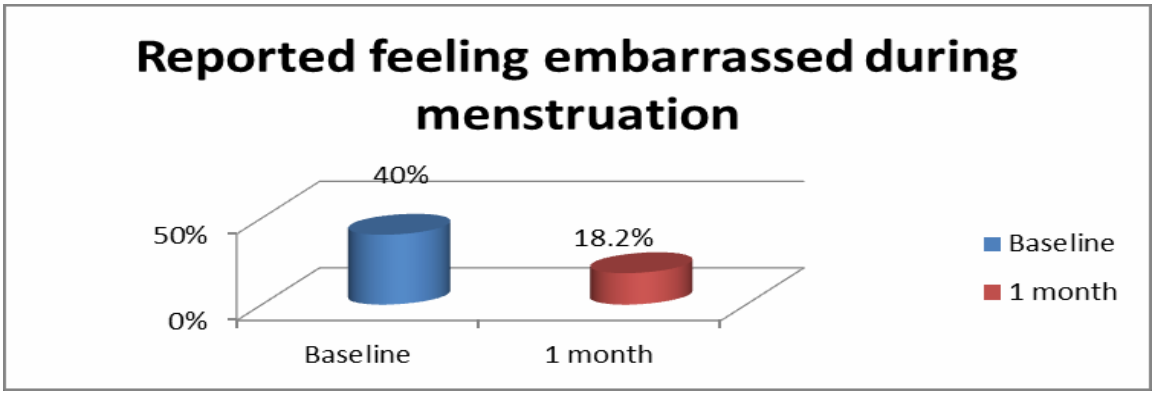



**Figure 2. Overall, reported having had feelings of embarrassment during menstruation**

### Health and infections

At baseline, less than a third of all respondents (24%) reported suffering from irritations or itching during their last monthly period with similar figures reported one month after distribution. There was however a slight reduction in reported cases of itching among adolescent girls from 19% at baseline to 13% one month after distribution.

### Usefulness and experiences with the MHM Kits

In regards to usefulness and acceptability, findings from the one month distribution survey revealed that less than half of all respondents (43%) were “very satisfied” with the MHM Kit. The main reason respondents reported for not being satisfied, as revealed from the follow up FGDs, was an inadequate number of items in the kits (pads, holders, soaps and underwear).

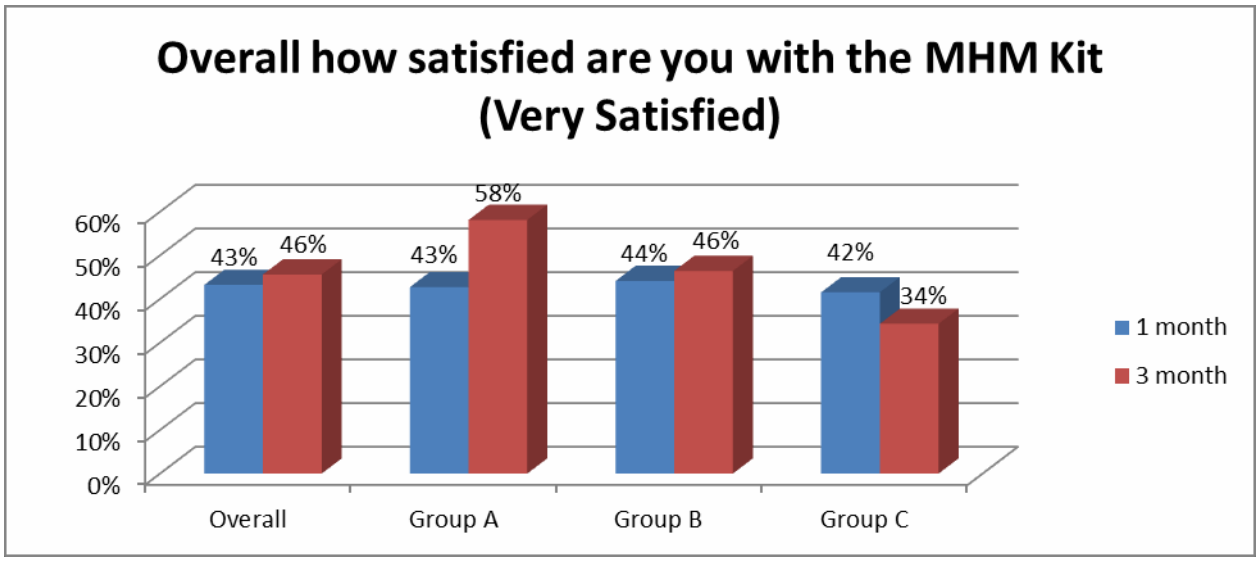



**Figure 3. Overall and by Age group, reported being very satisfied with MHM Kits**

Despite this, most respondents found the pads easy use, with less than 10% of all groups reporting difficulties using the disposable and washable pads one month after distribution.

Approximately 11% of all respondents reported difficulties with washing the reusable pads one month after distribution. Slightly less than half of all respondents (49%) who received MHM Kit B (from Mungula camp) reported that the washable pads were comfortable to use one month after distribution. In addition, follow up FGDs in Mungula camp revealed that some adolescent girls experienced some itching and irritations during the first few days of using the washable pads, as they reported that it was their first time to use the pads.

One month PDS findings also revealed that twenty-five percent of women and adolescent girls who used washable pads dried their pads inside the house while 56% and 33% of all respondents washed and dried them in bathing areas respectively.

In regards to disposable pads, only 8% of all groups reported difficulties in using the disposable pads one month after distribution.

## Three months post-distribution

### Main challenges

The two main reported challenges among all respondents was pain in stomach/back/breasts (75%) and lack of underwear (35%) as shown below.

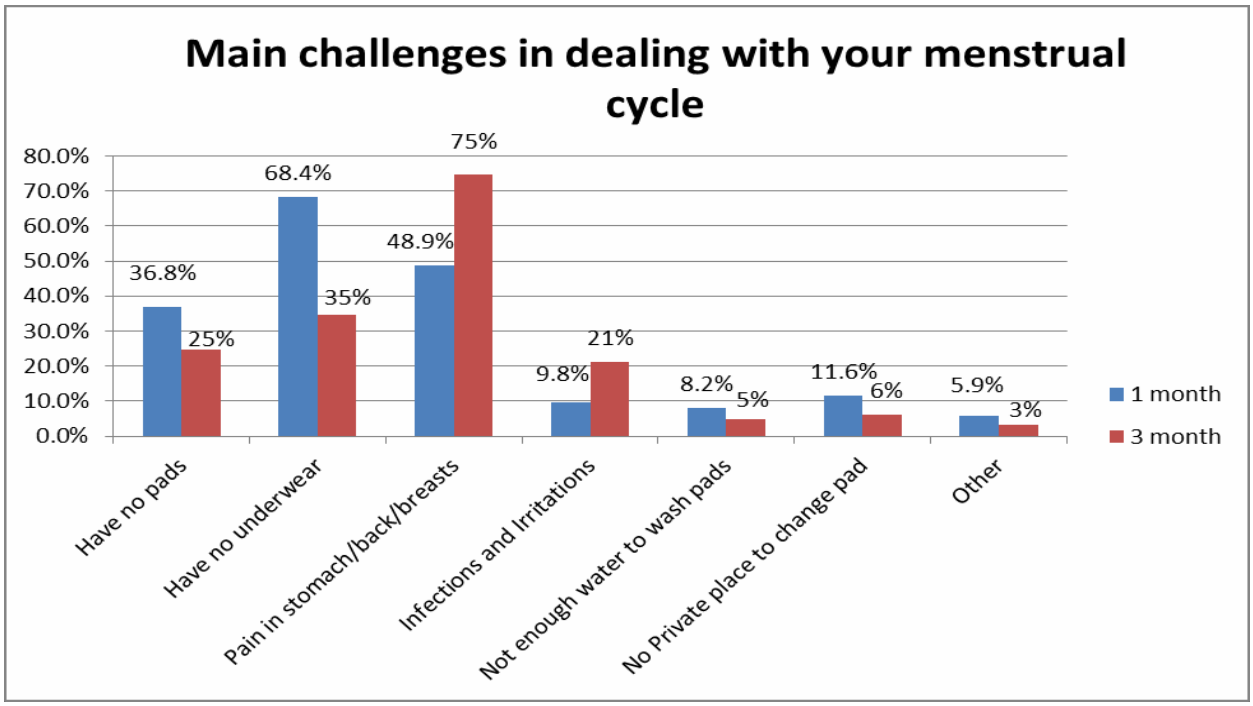


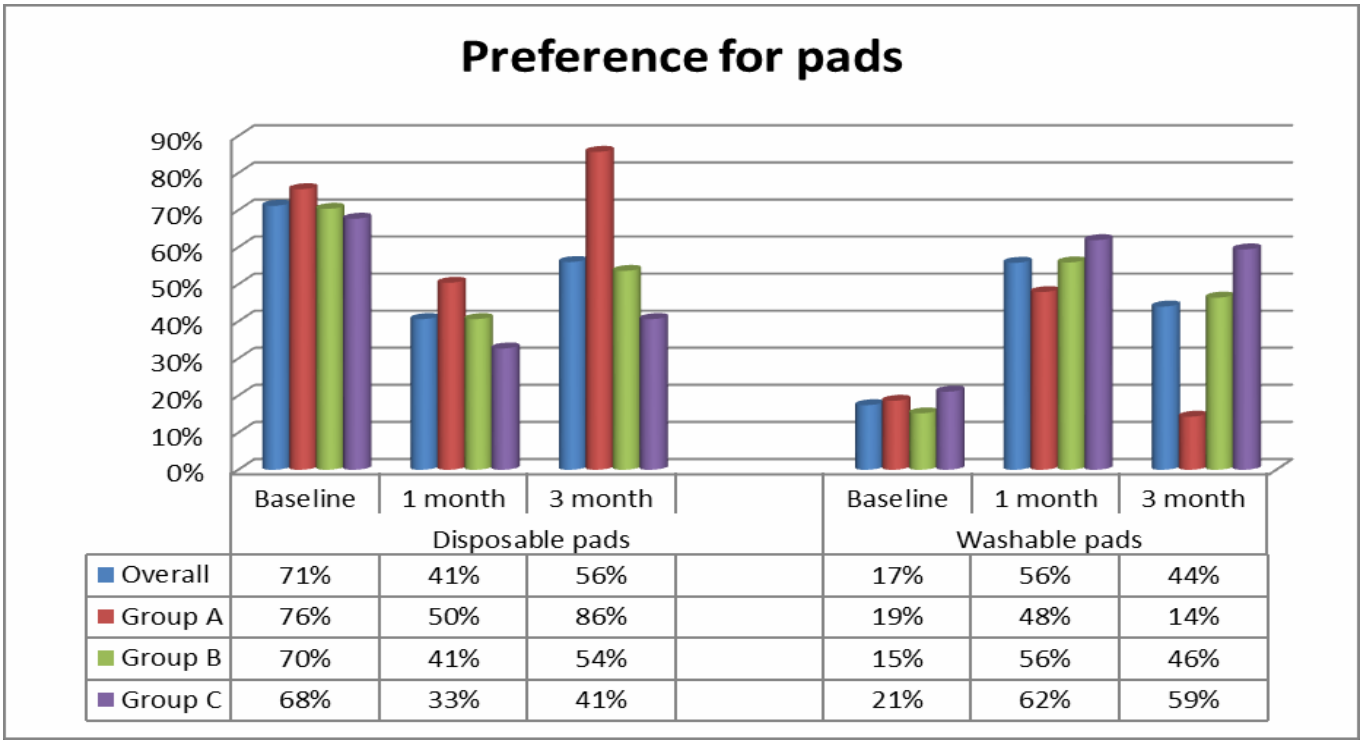

**Figure 4. Overall, reported main challenges faced during monthly period**

### Preference for Pads

Baseline results revealed an overall high preference for disposable pads among all groups (71%). One month after distribution, the proportion of women and adolescent girls who preferred disposable pads decreased significantly by thirty percent. Conversely, there was a marked positive increase in preference for washable pads among all groups (particularly women) one month after distribution compared to the first such study – from 17% to 56%, as shown in Figure 5. The follow-up KIIs and FGDs further strengthened these KAP survey findings, showing that most women preferred washable pads over disposable mainly due to their cost effectiveness and sustainability.

The three month post distribution survey also revealed a higher preference for disposable pads (56%) over washable pads (44%) among all respondents. Notably, more than eighty percent of adolescent girls preferred disposable pads three months after distribution, compared to 50% in the initial study.

This increase in preferences for disposable pads among adolescent girls was further explored through Key Informant Interviews (KIIs), which revealed embarrassment from seeing bloody water when washing pads and social norms (most school girls in the camp used disposable pads) as contributory factors to preference for disposable pads over washable pads among adolescent girls.




| | Disposable pads | | | | Washable pads | | |
|---|---|---|---|---|---|---|---|
| | Baseline | 1 month | 3 month | | Baseline | 1 month | 3 month |
| Overall | 71% | 41% | 56% | | 17% | 56% | 44% |
| Group A | 76% | 50% | 86% | | 19% | 48% | 14% |
| Group B | 70% | 41% | 54% | | 15% | 56% | 46% |
| Group C | 68% | 33% | 41% | | 21% | 62% | 59% |

**Figure 5. Overall and by Age group, reported preference for disposable and washable pads for managing monthly period**

## B. Somaliland

### Baseline and 1 month Post Distribution Results

#### Knowledge

The KAP survey conducted one month after distribution revealed that the MHM demonstration and education sessions were working. Compared to the results of the baseline study, there was a marked positive change in women and adolescent girls' knowledge, attitude and practice in the context of MHM.

Approximately ninety-four percent of respondents could correctly identify the normal duration of a monthly period (taken to be between 3 to 7 days), compared to 84% in the previous study with the greatest increase observed in adolescent girls - from 66% to 86%. In addition to assessing knowledge of the normal length of menstruation, respondents were also evaluated on their knowledge of the meaning of not experiencing a monthly period with more than sixty percent of all groups correctly identifying pregnancy (as one of the reasons) up from 47% in the baseline survey as shown in Figure 6.

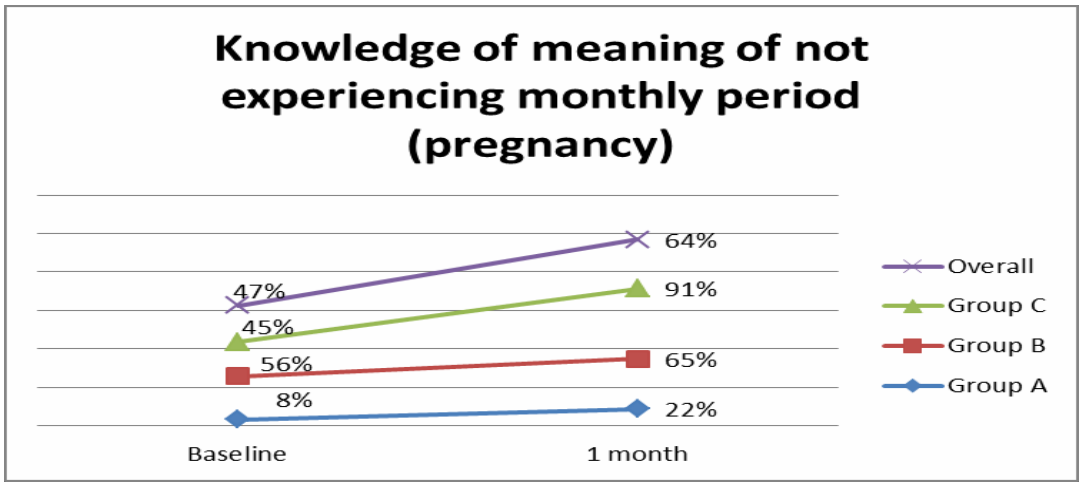



**Figure 6. Overall and by Age Group, Knowledge of the meaning for not experiencing a monthly period (Response=pregnancy)**

#### Menstrual Practices

Prior to MHM Kit C distribution, 44% of the respondents reported using clothes in underwear to absorb menstrual blood while 19% used disposable pads. Furthermore, more than one-third (37%) reported bleeding into their clothes without protective materials as shown below.

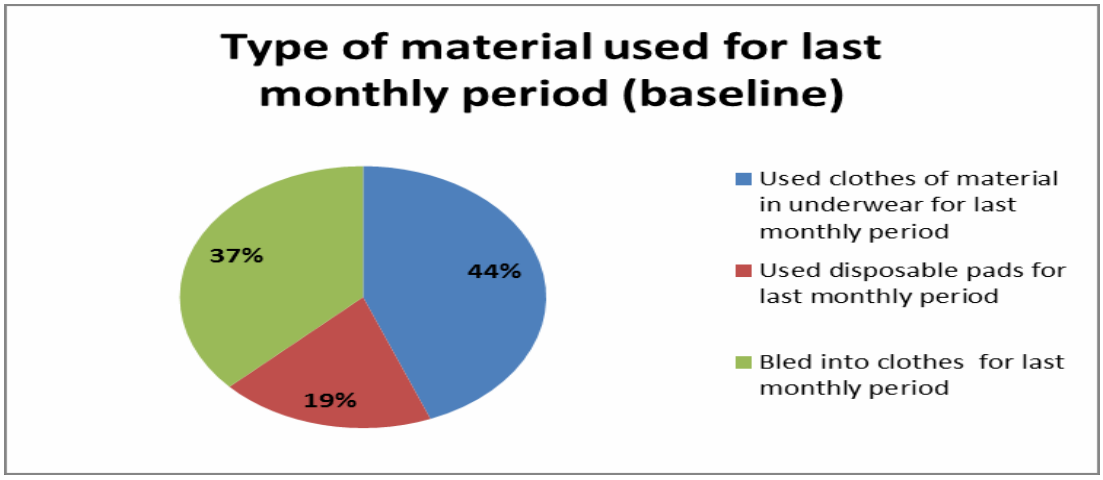



**Figure 7. At baseline (before distribution), reported type of material/pad used for last monthly period.**

In regards to personal hygiene, the baseline survey revealed that slightly more than a quarter (26.0%) of all respondents stated that they bathe daily during their periods while 40.9 % and 32.3 % bathe once and twice a week respectively during menstruation.

### Information on Menstruation

Prior to kit distribution, the most common source of MHM information during menstruation among all respondents, in order of rank, was mothers (35%), elder sisters/cousins (26%) and friends/peers (12.4%).

### Restrictions

There was a significant reduction in the proportion of respondents who reported having restrictions in their daily activities during their monthly periods one month after distribution compared to the baseline study – from 79% to 6% as shown below.

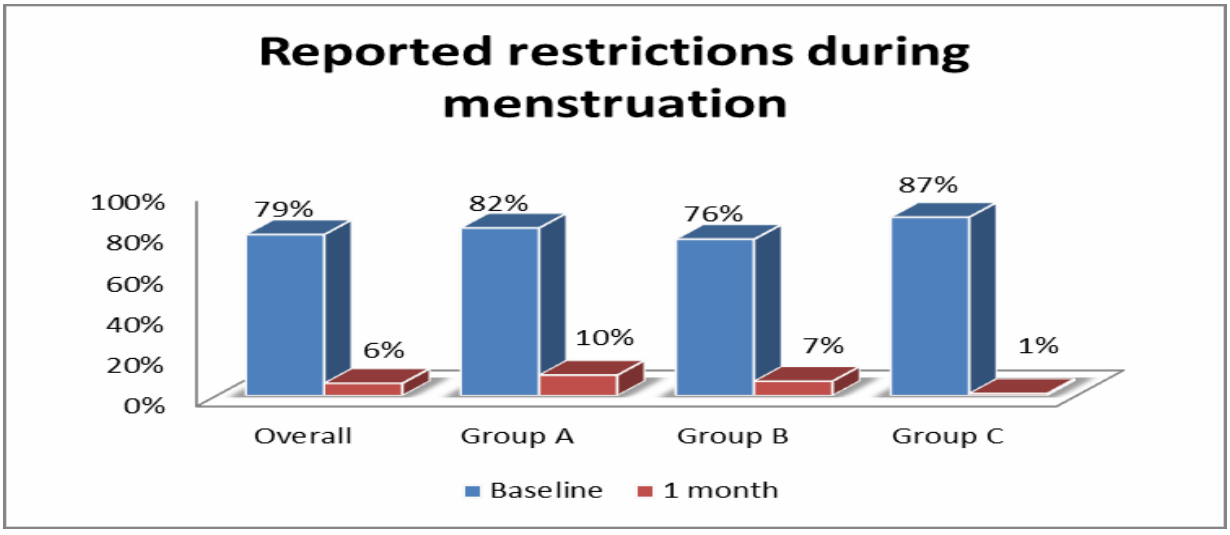
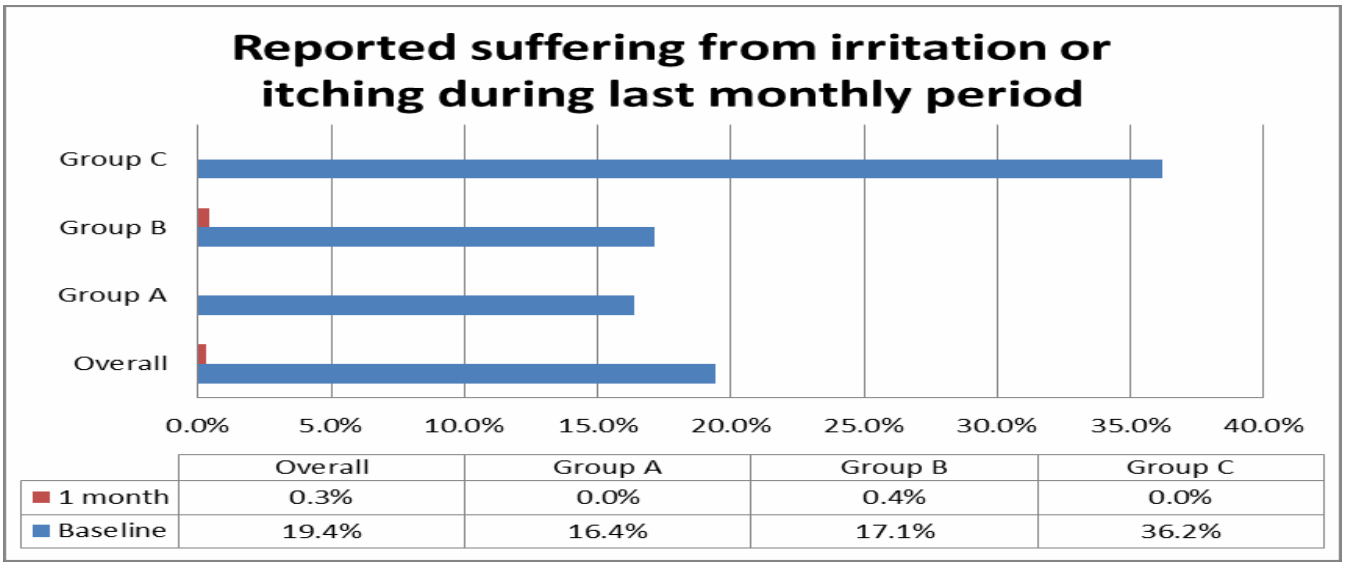



**Figure 8: Overall and by Age Group, reported restrictions in daily life when menstruating.**

Prior to kit distribution, 24% of respondents cited “Can’t fetch water” as one of their main restriction, which significantly dropped to 3.8% one month after distribution.

### Health and Infections

In all age groups, there was significant reduction in reported cases of irritation, itching or smelly discharge among all groups between baseline and one month after distribution - from 19.4% to 0.3%, with only one reported case from Group B during the 1 month post distribution survey as shown below.




| | Overall | Group A | Group B | Group C |
|---|---|---|---|---|
| 1 month | 0.3% | 0.0% | 0.4% | 0.0% |
| Baseline | 19.4% | 16.4% | 17.1% | 36.2% |

**Figure 9: Overall and by Age Group, reported suffered itching, irritation or smelly discharge during last monthly period**

### Usefulness and experiences with MHM Kits

Approximately two-thirds (77%) of all respondents who used washable pads reported them as comfortable to use one month after distribution.

In regards to privacy, in order of rank, 10%, 5% and 1.3% of Group A, B and C respondents respectively reported difficulties in finding a private place to wash their pads during the one month post distribution survey. Furthermore, 42% and 28% of all respondents reported washing their pads in latrines and houses respectively while over half (56%) of all women and adolescent girls surveyed reported drying their washable pads inside the house or trees near the house one month after distribution.

In regards to disposable pads, less than 1% of all respondents reported difficulties using the disposable pads one month after distribution. Baseline findings revealed that over eighty percent of respondents who used disposable pads reported discarding the used pads in latrines while 10% disposed of them in rubbish bins. One month after distribution, the proportion of women and adolescent girls who disposed of their pads in latrines fell to 47% while those that disposed of them in rubbish piles increased to 25%.

## Three month post distribution survey

The main reported challenge faced by the women and adolescent girls during their monthly period was no access to pads (62%), feeling fatigued (20.5%) and lack of availability of water to wash pads (12.1%) as shown below.

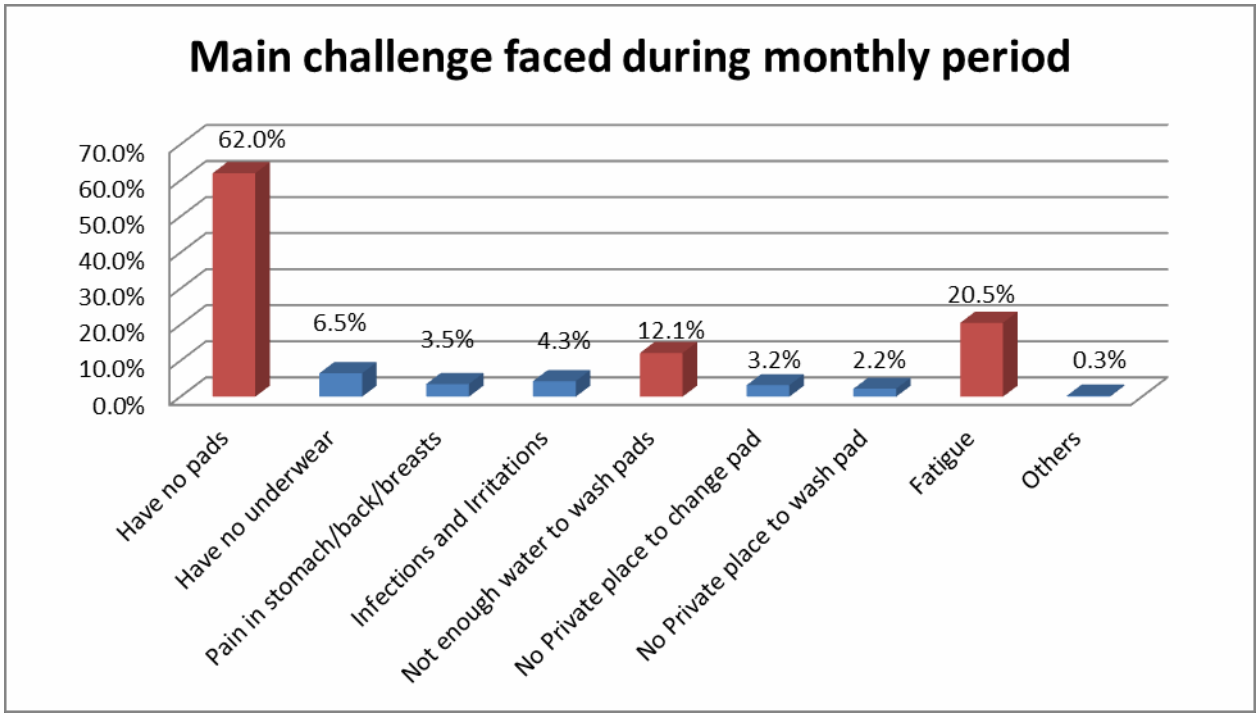
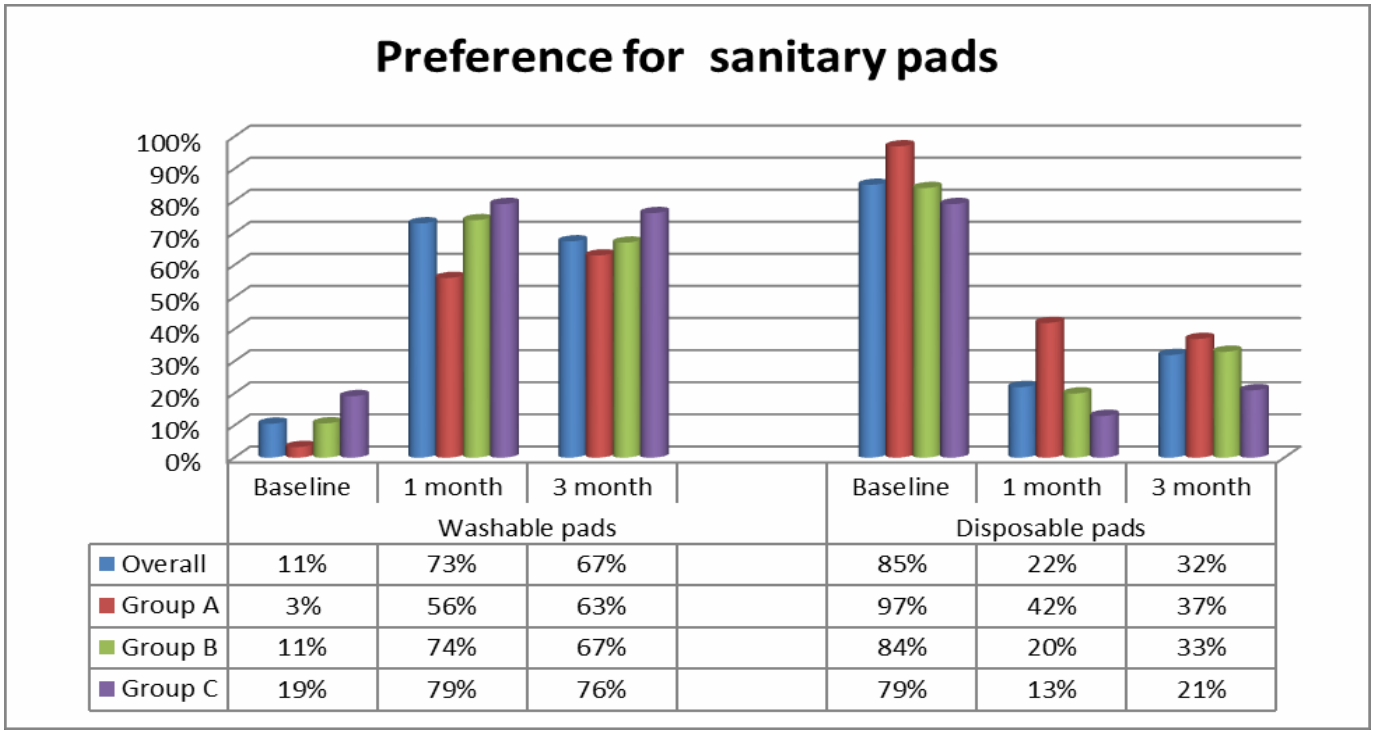



**Figure 10: Overall, reported main challenge faced during monthly period (3 month post distribution)**

### Preference for pads

The baseline, one and three month post distribution surveys revealed variances in preference for disposable and washable pads. Prior to kit distribution, over eighty percent of all respondents preferred disposable pads which significantly decreased to 22% in the one month follow up survey.

Conversely, over two thirds of all respondents preferred washable pads over disposable pads 1 and 3 months after distribution as shown in Figure 11.




| | Washable pads | | | | Disposable pads | | |
|---|---|---|---|---|---|---|---|
| | Baseline | 1 month | 3 month | | Baseline | 1 month | 3 month |
| Overall | 11% | 73% | 67% | | 85% | 22% | 32% |
| Group A | 3% | 56% | 63% | | 97% | 42% | 37% |
| Group B | 11% | 74% | 67% | | 84% | 20% | 33% |
| Group C | 19% | 79% | 76% | | 79% | 13% | 21% |

**Figure 11: Overall and by Age Group, reported preference for washable and disposable pads for managing monthly period**

## C. Madagascar

### Baseline and Three Month Post Distribution Survey Results

**Knowledge:**

The baseline findings revealed an above average knowledge around menstruation among all groups with approximately 65% of all respondents correctly identifying the normal duration of menstruation (taken to be between 3 to 7 days). There was a 10% increase in the level of baseline knowledge of menstruation being a natural process by all groups three months after distribution – from 78% to 88%, as shown below.

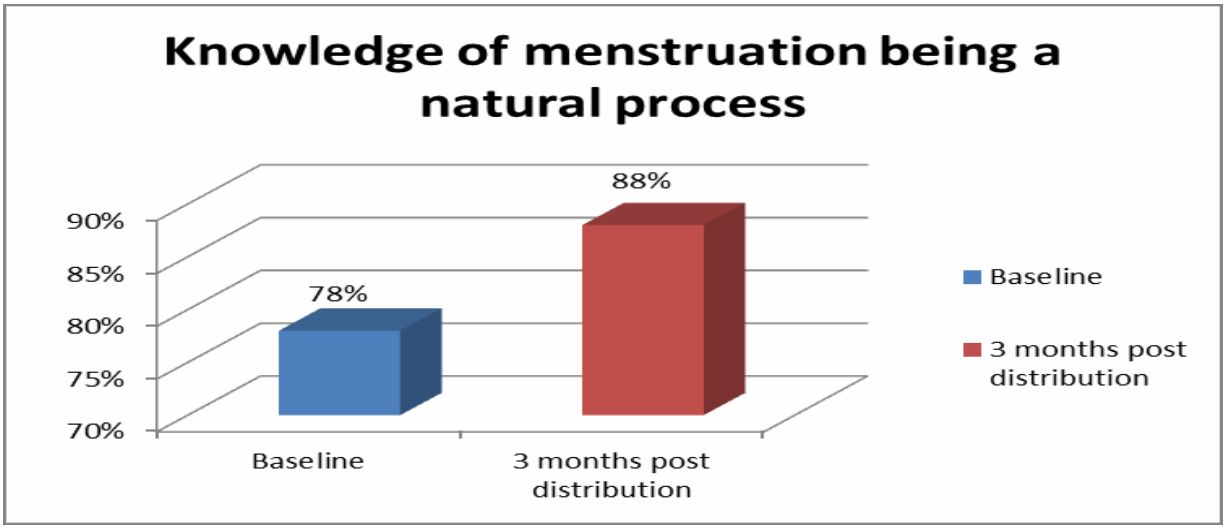



**Figure 12 Overall, Knowledge of menstruation as a normal physiological process**

### Menstrual Practices

Prior to distribution, 87% of menstruating females surveyed used towels or traditional fabrics (pieces of worn-out cloth etc.) to manage their menses. Some women reported using plant like leaves “hodi-kazo” by shaping them into an undergarment form and use them to manage their flow. After use, these rags and leaves were often thrown into the rivers.

The baseline survey also revealed that slightly under two thirds (63%) of women reported bathing more frequently during menstruating days than non-menstruating days despite of the reported lack of water in the region from the initial FGDs.

Of concern was that over two thirds (80%) of women surveyed reported that they openly defecated in the fields/bushes or on the edge of the rivers or the sea. The follow up three month post distribution survey revealed similar results, with 76% of respondents reporting openly defecating in fields or bushes. These high proportions are consistent with the baseline observational studies in the project sites which revealed a lack of sanitation facilities and quasi or non-existent bathing facilities.

### Usefulness and experiences with MHM Kits

Findings revealed that after distribution, 40% of all respondents reported that they no longer feel uncomfortable during menstruation and were not afraid of foul odor. They also were less fearful of leakage as the sanitary pads gave them protection.

### Information on menstruation

Prior to distribution, majority of respondents (52%) reported learning MHM from their mothers while the rest reported receiving MHM related information from their grandmothers (14%), self-learning (11%), peers (10%), sisters (10%) and school teachers (3%) as shown in the figure below.

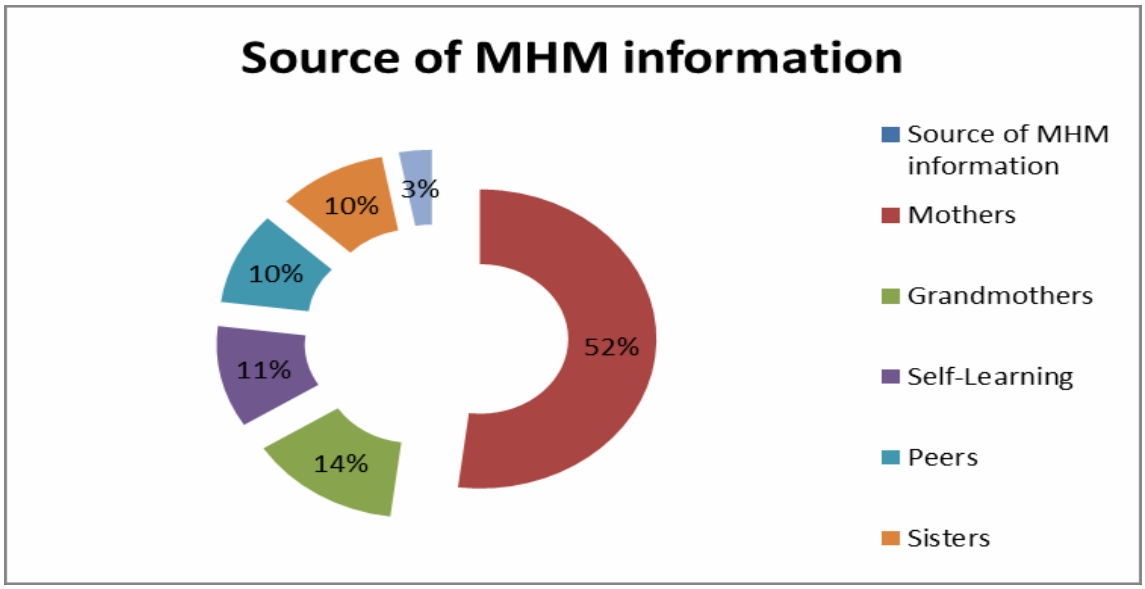



**Figure 13: Overall, who explained to you the reason for menstruation? (baseline survey)**

### Restrictions

There was a slight reduction in the proportion of respondents who reported having restrictions in their daily activities during their monthly periods three months after distribution compared to the baseline study – from 61% to 55% as shown in Figure 14.

The main restriction cited by majority of women in the follow up survey was “can’t have sex” and “can’t sleep with husband in same bed” while adolescent girls cited “can’t go to school” as their main restriction during menstruation.

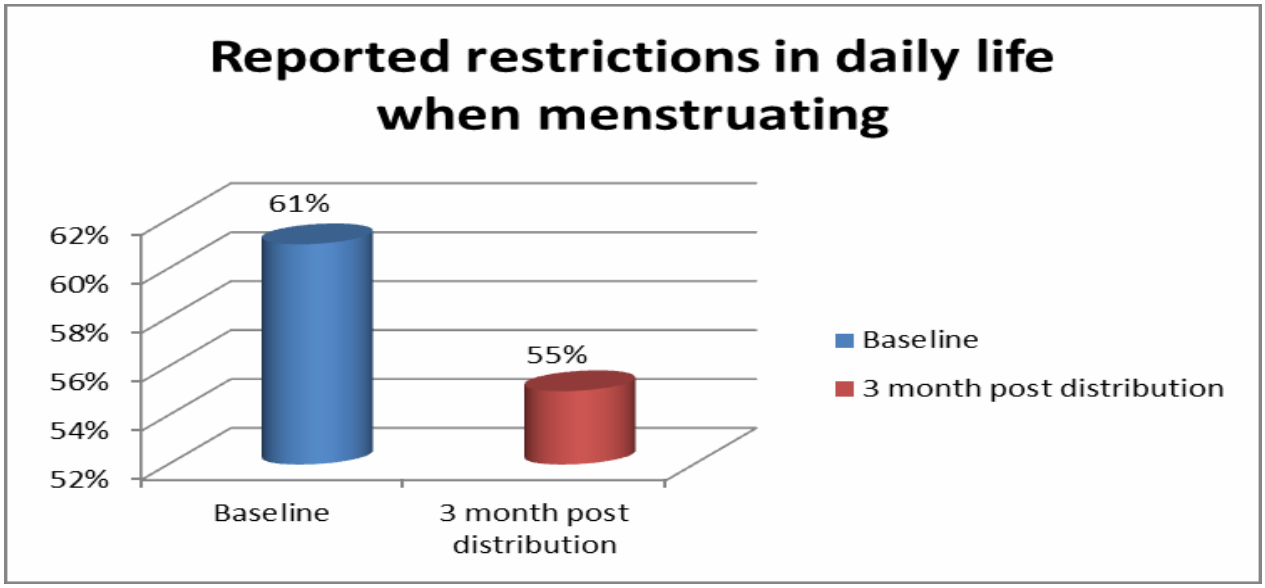



**Figure 14: Overall, reported restrictions in daily life when menstruating**

### Preferences

Baseline results revealed an overall high preference for reusable cloth/pad in underwear among all groups (87%). Three months after distribution, the proportion of respondents who preferred washable pads dropped to 57%. Conversely, there was a marked positive increase in preference for disposable pads among all groups three months after distribution compared to the first such study – from 8% to 40%, as shown below.

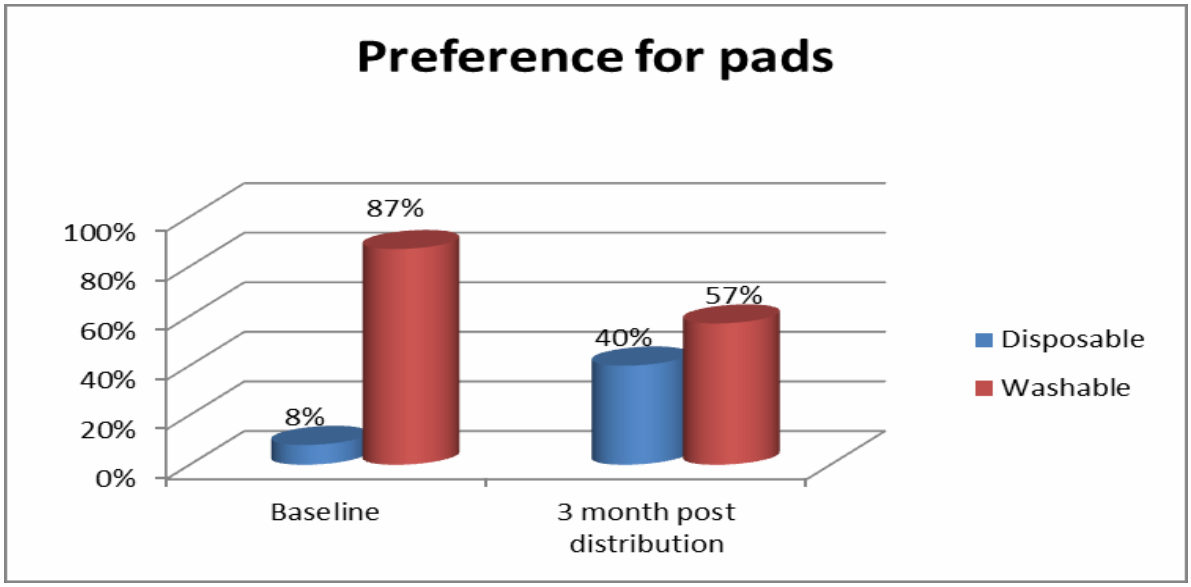



**Figure 15: Overall, reported preference for sanitary pads**

**Health and infections**

The initial KAP survey revealed that approximately 27% of women and adolescent girls reported having infections and itching during their menstrual flow. Three months after distribution of the MHM Kit, the occurrence of these infections were shown to reduce by 10 % among all groups.

**Main challenges**

The main reported challenges faced during menstruation by adolescent girls and women in Madagascar were:

- *Unavailability of disposable pads in the market.*
- *Difficulty in finding a private area to change and dry pads*
- *Lack of water for washing/hygiene*: women reported not having access to private showers with potable water and were thus forced to wake up very early, at about 4:30 am in the morning, to bathe in the rivers in the vicinity of their homes. As for women who work in the fields, they could only wash their clothes and shower when they arrived home from work, which was usually very late in the evening.

## D. Focus Group Discussions (Uganda, Somaliland and Madagascar)

The following are the key points from the age-segregated FGDs held three months after distribution:

**Table 3: Summary of results from follow up Focus Group Discussions**

| Country | Key Points from FGD |
|---|---|
| **Uganda** | ➢ The number of pads received were few. They stated that they needed more washable pads, preferably increase to 2 packs.<br>➢ The bathing soap was good however it was used to wash clothes as well.<br>➢ They quality of the washable sanitary pads was good however they were revealed to be too small for the elderly women.<br>➢ Mothers above 35 years confirmed they got underwear, in big and small sizes but mostly used big sizes only. They stated that the material was good quality, comfortable and the color was good.<br>➢ Some pads distributed by other partners prior to the MHM project were not as good as those distributed by Red Cross as women reported experiencing irritation while wearing those pads.<br>➢ Sustainability: The women had nothing to use after the disposable pads they received were all use up.<br>➢ There was a lack of proper sensitization on how and where to dispose of pads, as revealed by women disposing of pads in dustbins.<br>➢ The schools do not accept the girls to dispose of their pads in the latrines due to the difficulties in emptying them, as a result the girls have to hold on to the used pads until they got back home and this increases the risk of infection and embarrassment.<br>➢ Some women reported using the buckets given for carrying sorghum after grinding while the bags that were meant for storing the pads were used for shopping. |
| **Somaliland** | ➢ There were no reported feelings of embarrassment among women and girls as there was no risk of blood leaking out.<br>➢ Adolescent girls reported a preference for disposable pads. They also revealed that their school attendance had significantly improved after receiving the kits.<br>➢ Majority of the participants used pit latrines to dispose of their pads. Some mentioned disposing of pads in bushes as there were no family latrines. |

| | |
|---|---|
| | ➢ Most women in the FGD had knowledge of how to use the MHM Kits.<br>➢ Majority of the participants did not have a problem with the disposable pads, but mentioned that they do not currently use them (they use washable) as the disposable pads in the MHM Kit were too few and only managed menstrual flows for one month and stated that they needed more.<br>➢ There was need for varied sizes of underwear particularly for the women (35-50 years).<br>➢ All groups used the laundry soap but stated that is was only enough for one month.<br>➢ The main difficulties mentioned during the FGD were: accessing MHM items like underwear and cheap pads and lack of proper disposal facilities.<br>➢ All women and adolescent girls expressed the importance of demonstration sessions and IEC materials during distribution and how these sessions informed them on the proper use and care of each item in the MHM Kit as well as increased their knowledge on good hygiene practices and health. |
| **Madagascar** | ➢ All groups reported having a better understanding of MHM issues. Additionally, women reported passing on MHM information to the other women and girls that did not directly benefit from the project.<br>➢ All groups stated that the soap and disposable pads were insufficient.<br>➢ All groups could correctly identify the use of each item in the MHM Kit. However, the plastic buckets were revealed to be used for urination, especially at night. The buckets were also cited to be too small to wash the pads in.<br>➢ The women requested for the washable pads to be made thicker and increased in number.<br>➢ Additional items requested included: Pagne (loin cloth), short black shorts, more bathing soap, basins (as the buckets were too small to wash pads in).<br>➢ The underwear needed to be adjusted to accommodate all sizes i.e. S, M, L, XL. Also, they requested for black colored underwear as the red color easily washed off.<br>➢ Most of the women in the coast of Madagascar are accustomed to wearing a pareo/sarong/lambahoany (traditional wraparound cloth/skirt) and requested for these to be added as supplementary items to the kit.<br>➢ In regards to sanitation, women stated that they had problems accessing water for washing the pads and private locations for changing their pads despite the establishment of the water points provided by the CRM in the area. The current water infrastructure was reported to be inadequate to support their MHM needs. |

# Market Survey

## Introduction

Emergency situations call for prompt access to relief items, which is often a great challenge particularly due to the unavailability and access of items in the affected regions. Pre-positioning and local procurement of menstrual hygiene management items at strategic locations is key in facilitating a quick response to the menstrual hygiene and health needs of women and adolescent girls in emergencies. Additionally, local procurement significantly reduces transportation costs and lead times resulting in an effective and efficient emergency response. To address these issues, IFRC EAIOI cluster office conducted a market survey in 3 countries in East Africa i.e. Madagascar, Uganda and Somaliland, to determine the potential for local procurement and pre-positioning of menstrual hygiene management items and kits in these countries.

## Methodology

### Data Collection

A market survey form was developed by the IFRC WatSan department in Nairobi which was then shared with focal points in three National Societies (NSs) in East Africa i.e. Madagascar, Uganda and Somaliland, in order to collect data on the availability of MHM items from local markets/suppliers. In addition to MHM Kit A and B, data on availability and price of items in MHM Kit C (adapted by IFRC for Somaliland context with both washable and disposable pads) was also collected. All MHM items identified and reported by the respective NSs were according the IFRC's approved specifications.

### Data analysis

The data collected by each National Society was exported from the market survey forms into an excel spreadsheet for analysis. The following comparisons and criteria were made during the analysis:

- Prices of each item in all three MHM Kits (i.e. MHM Kit A, B and C) from each country were compared to the IFRC EAIOI cluster office local (Nairobi) prices sourced from the IFRC logistics and procurement department in Nairobi.

- Availability of each item in the MHM Kits in all countries was compared to availability of the same items in IFRC Nairobi.

- If an item was not available nationally, the IFRC EAIOI cluster office value of the specified item was used as part of the calculations for the locally (national) procured kit. For example, in Madagascar all items in MHM Kit A were available locally (in the surveyed markets) except for bio-degradable plastic bags according to the survey. Thus the total estimated value of the locally procured Kit A in Madagascar was inclusive of the IFRC EAIOI cluster office price of the bio-degradable bags.

- All items were converted from their local currencies into USD ($) for ease in analysis.

## Key Findings

**Availability:**
The results from this survey revealed that most of the items (e.g. underwear, pegs, ropes, soap) in the MHM Kits are readily available in the selected surveyed markets in each of the countries indicating the potential for local procurement. According to the survey, bio-degradable plastic bags (used for disposal of the pads) were unavailable in the surveyed markets in all 3 countries. Furthermore, Somaliland was revealed to have the least available items as per the IFRC MHM Kit specifications i.e. 220g of bathing soap and 350grams of laundry soap, buckets (6 or 7 Litres) and polythene storage bags were all unavailable in the surveyed markets (Hargeisa), however 100g of laundry soap, 75 grams of bathing soap as well as 10L buckets were available in the selected markets of Hargeisa, Somaliland.

**Cost:**

- The total price of the MHM Kit A&B procured in Madagascar was valued at $19, significantly lower than if procured in the IFRC regional office i.e. $27
- The total price of MHM Kits (A&B) in Uganda - valued at $33, was revealed to be $6 more than its equivalent IFRC EAIOI cluster office price.
- MHM Kit C was priced at $13 in Somaliland and $15 in the region (IFRC Nairobi)

**Recommendations**

- If procuring MHM Kits for distribution in Madagascar, it is preferable and cheaper to purchase MHM Kits A or B or C in Madagascar than from the IFRC Nairobi office.
- If procuring kits for Uganda, it is preferable to buy MHM Kit A or B or C in the IFRC EAIOI Nairobi office than in Uganda.
- MHM Kit A or Kit C should be procured locally in Somaliland, while MHM Kit B items should be procured in Nairobi.

## Regional Hygiene/Dignity/Menstrual Hygiene Kits survey

### Aims

The main aims of this mapping were:

• To identify the detailed content and items inside the hygiene/dignity/menstrual hygiene kits that humanitarian agencies distribute, including information about the decision making process for determining which items are included in kits;

• To understand the assessment and distribution mechanisms that humanitarian agencies use for hygiene/dignity/menstrual kits.

• To promote information sharing and collaboration between humanitarian agencies in the East Africa region around distribution and hygiene/dignity/menstrual hygiene items and kits.

### Methodology

A regional Hygiene/Dignity/Menstrual Hygiene Kit Survey Monkey form was developed by IFRC and sent out to humanitarian actors involved in MHM activities within the East Africa region. The form explored the following topics:

a) Contexts/Situations for distribution of menstrual hygiene and dignity items
b) Types of Kits distributed
c) Methods of gathering MHM related information
d) If Kits contained items for the protection of women and girls
e) Distribution mechanisms
f) Monitoring and Evaluation
g) Challenges in addressing MHM

Data was then collected by the IFRC EAIOI Nairobi office for analysis and reporting. Responses were gathered from various organization such as World Vision International (International response team), Netherlands Red Cross, UNHCR, GOAL (South Sudan), OXFAM (South Sudan and Kenya Office) and UNICEF (regional office);

## Key Findings

- Majority of respondents (85.7%) distributed menstrual hygiene and dignity items during floods. More than half (51.7%) of respondents also distributed MHM items during drought, civil unrest and cyclone/hurricanes.

- Majority of respondents (71.4%) reported distributing flexible kits i.e. the kits changes depending on the situation/context, while 26.6% reported developing their kits at national level. Furthermore, 14.3% of respondents reported distributing the standard ICRC Kits and 14.3% distributed UNHCR Dignity Kits.
- In regards to methods used to gather information, more than three-quarters of respondents reported gathering menstrual hygiene information through basic consultations with beneficiaries (e.g. small FGD's) or through their local staff (male/female) who have a good understanding of what beneficiaries use and need, while 25% of respondents reported using specific questionnaires.
- Results from the survey revealed that majority (75%) of the respondents hygiene/dignity/menstrual kits do not contain any items for protection of girls or women, with only 25% of those surveyed including a wind-up torch in their kits.
- A variety of distribution methods were mentioned by the respondents as shown in the table below:

**Table 4: Distribution mechanisms for hygiene/dignity/menstrual hygiene kits**

| **What is the distribution mechanism your organization uses for hygiene/dignity/menstrual hygiene kits?** | |
|---|---|
| World Vision International | • General hygiene kits through household registration;<br>• Female hygiene kits distributed through women's spaces;<br>• School kits through school teachers;<br>• Baby kits either through women spaces or through general distribution; |
| Netherlands Red Cross | Distribution from our clinics, medical points, mobile health units and other erected distribution points. |
| OXFAM (Kenya) | Women and girls are registered before distribution. The kit is distributed individually and accompanied by hygiene promotion messages and a demonstration session. Women and girls are consulted on distribution date/time/venue. Distribution is led by women leaders and supported by female staff. Items are displayed and demonstrations are carried out for small groups of 5 to 10 people at a time in private distribution rooms. Complaint desk is set up throughout the distribution period to handle any complaints. Women's concerns with dignity and privacy are prioritized throughout the distribution process. Age limits are determined during consultations with women and girls during the design of the kit. This varies from community to community. |

- In regards to demonstration sessions, half of the respondents stated that their organizations train or demonstrate on the use of items inside each kit before/during distribution, while 50% of those surveyed reported not carrying out any training or demonstration sessions during or prior to kit distribution.

- In terms of post distribution M&E activities, 50% and 25% of the respondents reported following up and sometimes following up respectively with beneficiaries of the menstrual hygiene/dignity/hygiene kits while 25% of those surveyed reported that they did not carry out post-distribution monitoring or evaluation.

The below table shows the key challenges highlighted by respondents in regards to addressing MHM more effectively in their organizations:

**Table 5: Key challenges in addressing MHM.**

| **What are the key challenges for addressing MHM more effectively in your organization?** | |
|---|---|
| World Vision International | Although MHM is now considered part of WASH program there is an issue in ensuring that women get access to some MHM items in extended emergencies. We are looking at the possible use of cash or vouchers for more protracted responses. |
| Netherlands Red Cross | There is a need for improved communication and stronger inter- sectorial collaboration. |
| OXFAM (Kenya) | Where cloth materials are provided (usually 1 or 2 $m^2$ of cotton toweling cloth given to women/girls per 6 months or per year), it is often not used for the intended purpose especially in refugee setting where people lack cloths to wear. Hygiene practices and preferred material differ from country to country, between urban and rural areas, and between age rages within the community. This raises the challenge in designing a kit where response covers both urban and rural contexts. The distribution needs to be repeated every 6 months and often the second round is not budgeted for. The material is bulky except where AFRIpads are distributed (which last for a guaranteed 12 months, and often used for the intended purpose)<br><br>There is lack of privacy for washing and drying of pads except where female wash facilities are appropriately designed. An Oxfam engineer is in consultation with public health promoters to build women's washing and bathing facilities that consider privacy. |

## Discussions

Menstrual Hygiene Management is complex and multi-faceted in nature, as evidenced by both the quantitative and qualitative results of these pilot research projects which trialled MHM Kits as relief items for emergencies. Distribution of the MHM Kits was seen to have a positive increase in the knowledge, hygiene and dignity of adolescent girls and women in all three countries.

Key discussion points and recommendations are presented below, categorized by the four key research questions as outlined in research protocol.

### Somaliland

#### Usage and acceptability

All groups reported using all the items in the kit with approximately 82% of all respondents saying that they were “very satisfied” with the MHM Kit C.

In regards to preference for pads, the one and three month post distribution survey results revealed an overall preference for washable pads over disposable pads among all groups. Further investigation through follow up FGDs revealed that this preference for washable pads was due to their cost effectiveness and sustainability over disposable pads - which were reported to only last for one month. Less than 5% of all groups reported difficulties in finding a private place to wash their pads with over 40% of respondents who used the washable pads reporting that they washed their pads in latrines while 28% washed them in their houses, one month after distribution. Majority of all respondents reported drying their washable pads in their houses.

The KAP survey further showed that MHM information sessions during Kit distribution as well as IEC materials included in MHM Kits were working. These results were strengthened by feedback from FGDs with most beneficiaries appreciating the information and demonstration sessions during kit distribution which greatly increased their knowledge in using the items in the kits, as they were previously not aware of or familiar with some of the items e.g. the washable pads (e.g. AFRIpads).

Significant improvements in dignity were also revealed from the survey, with over 50% of all respondents citing a reduction in the feeling of embarrassment during menstruation. Additionally, the proportion of baseline respondents who reported suffering itching, irritation or smelly discharge one month after distribution decreased significantly compared to the baseline survey– from 19.41% to 0.3%. This one month post distribution value could be attributable to the smaller sample sizes used for each stratum (which might have affected the level of accuracy) or the wording of the question during the one month PDS.

Women and girls need to be able to manage menstruation hygienically and access to water facilities is paramount in facilitating this. This however was not the case as evidenced from the baseline surveys which revealed water scarcity particularly in Dilla. These results were further strengthened by KIIs and FGDs which revealed an urgent need for improvement of washing facilities in the region. Furthermore, the 3 month post distribution survey results also revealed that over 12% of women and adolescent girls main challenge was the lack of water to wash their pads. Additionally, lack of adequate latrines in schools to comfortably change pads was noted as a challenge for some of the adolescent girls which resulted in difficulties in finding private places to dispose and change their pads. This could be a contributing factor for the 60% shift in preference for washable pads over disposable pads among adolescent girls that was reported three months after distribution.

#### MHM Kit content

The results from the KAP and FGDs in Somaliland stressed the need in addressing the multifaceted nature of MHM, by not only distributing sanitary pads but including supplementary items that support appropriate means of disposal and care of pads as well as considering the impact seasonal variability has in access to water when designing the MHM Kit.

Bathing and laundry soap was identified as very useful items by all groups, as it promoted hygiene while ropes and pegs were identified as valuable supplementary items that allowed for proper drying of the reusable pads. Despite the efforts to include both re-usable and disposable pads in the MHM Kit C to account for the seasonal variations in water availability, the provided disposable pads were reported to be

insufficient among all groups to support the beneficiaries during the dry season as revealed from the follow-up FGDs. Furthermore, majority of women over 35yrs felt that the underwear provided were too small, and requested for varying sizes.

Access to affordable pads and underwear was cited as the main issue that majority of the participants had in dealing with their menstrual periods. These findings were supported by the market survey which revealed that a pack of disposable pads went for $14 while a pack of underwear went for $ 4.5, both of which were too costly for most of the beneficiaries.

The IEC material were well received and understood by all groups and subsequently led to an increase in knowledge around hygiene and menstruation as evidenced from the one month post distribution KAP surveys with 94% of all respondents correctly identifying the normal duration of a monthly period (taken to be between 3 to 7 days), compared to 84% in the baseline survey. These information materials also provided guidance on the proper use, care and disposal of pads.

## Madagascar

### Usage and acceptability

Survey findings revealed that the intervention resulted in all groups having a better understanding of MHM issues with significant improvements in knowledge, attitudes and behavior in regards to MHM. The kit significantly improved the lives of the women and adolescent girls, as they were used to using traditional fabrics and towels prior to distribution with some reporting using leaves “hodikazo” by shaping them into an undergarment form and using them to manage their menses, thus increasing their risk to infections and irritations. The introduction of the MHM Kit was followed by a 10% reduction in reported restrictions during menstruation by all groups three months after distribution.

Four key questions on knowledge were asked at baseline and at the three month PDS stage. Across the three age groups, an increase was seen in knowledge related to these four questions. Many women expressed that this was the first time someone had talked with them about menstrual hygiene, and they were very grateful / happy with the education and information sessions provided.

Significant shifts in preference for both types of pads were revealed throughout the study, with approximately 30% decrease in preference for washable pads among all groups three months after distribution and thirty-two percent increase in preference for disposable pads reported in the same month among all respondents. The shift in preference for disposable over washable pads could be attributed to the lack of water particularly during the dry season as supported by follow up FGDs which revealed that women experience difficulties in accessing water for washing of pads and are forced to move closer to the rivers when the wells run dry. This was exacerbated by high maintenance fees for the available water facilities, imposed on the community by the local authorities, as revealed from the follow up FGDs. Furthermore, the relationship between social class and access to proper WASH facilities was also highlighted, with women living in poor neighborhoods reporting lack of access to portable water and shower facilities, with most reporting having to wake up very early (at about 4:30 am in the morning) to bathe in the rivers in the vicinity of their homes.

*Three month follow up FGDs being carried in Madagascar. Credit: CRM & IFRC.*

Taboos were revealed to also play a role in MHM. The difficulty in discussing MHM between fathers and daughters or brothers and sisters, significantly increased women and girls challenges in dealing with MHM. The provision of MHM Kits not only improved the hygiene and dignity of women and adolescent girls but also reduced restrictions in their daily lives such as attending school and church.

**MHM Kit content**

Generally, most women preferred washable pads over disposable as they felt that they were more economical and sustainable. For both MHM Kits, the supplementary items e.g. bathing soap, added value in terms of improving personal hygiene and enabling positive hygiene practices (e.g. using soap for handwashing and regular bathing during menstruation) with 10% reductions in reported cases of itching and infections among all groups 3 months after distribution. The IEC materials also added significant value by improving knowledge on MHM through providing guidance on use, care and proper disposal of pads.

There were however some challenges as revealed by the survey. Most women's flows were reported to last for a duration of 3 to 7 days, however the number of disposable pads distributed could only support menstruating females for just one month or less. It is important to note that the disposable pads in MHM Kit A were only designed to last for one month. This was exacerbated by the lack of disposable pads in the market which was cited as one of the main challenges in accessing pads among all groups.

Findings also indicated a need for an increase and adjustment of underwear sizes to accommodate all age groups i.e. S, M, L, XL. The buckets were found to be too small to wash the pads in with most respondents requesting for basins instead. Furthermore, the women requested for the washable pads to be made thicker and increased in number.

In addition to all the kit items distributed, women requested for pareo/sarong/lambahoany (a traditional wrap around cloth/skirt) to be included in the kits, as it was considered as cultural clothing.

## Uganda

### a) Usage and acceptability

The one month post distribution KAP survey findings revealed that more than half (56%) of all respondents preferred washable pads up from 17% in the initial baseline survey, with most of this proportion contributed by women in Groups B and C. Notably were the significant differences in preferences for pads between adolescent girls and women refugees in the camps. Findings from the three month follow up survey revealed that 86% of adolescent girls preferred washable pads, up from 76% in the baseline survey. This increase in preferences for disposable pads among adolescent girls was further explored through Key Informant Interviews (KIIs), which revealed embarrassment of washing bloody pads and social norms (most school girls used disposable pads) as being the main reasons adolescent girls preferred disposable pads over washable pads. The follow-up KIIs and FGDs further strengthened the KAP survey findings, showing that most women preferred washable pads over disposable mainly due to their cost effectiveness and sustainability. The one month follow up survey also showed that majority of the women who used washable pads reported washing and drying them in bathing areas.

Prior to distribution more than a third of all respondents reported difficulties in finding a private, comfortable place to change disposable pads with most respondents reporting changing their disposable pads in bathing areas or latrines. Seventy-six percent of respondents reported using disposable pads to manage their menses before arriving at the refugee camps in Uganda from South Sudan, with most of them being unfamiliar with washable pads (e.g. AFRIpads). This might have contributed to the varied preferences in washable pads among all groups throughout the survey, particularly among adolescent girls who generally have a tendency to discover and try new things.

In regards to MHM information sessions, most women expressed that this was the first time someone had talked to them about menstrual hygiene. Many women did not know their own basic anatomy and reasons why they experience their monthly period and they were very grateful / happy with the education and information sessions provided. The impact of these information sessions were revealed from the KAP results which reported a marked increase in the level of baseline knowledge of women and adolescent girls after distribution, with approximately 78% of all groups knowing the normal length of menstruation (taken to be 3 to 7 days) at the 3 month PDS up from 53% in the initial baseline survey. However, there were disparities between the apparent increase in knowledge on use of the MHM items provided and actual practice as evidenced from follow up KIIs and FGDs which revealed that some women reported using the buckets for carrying sorghum while the storage bags were used for shopping.

There were also noted disparities in access to sanitation facilities between girls and women as evidenced from the follow up FGDs with most women (Groups B and C) reporting lack of access to public and household latrines, however adolescent girls revealed that they had adequate latrines in schools. The girls however reported that they were not comfortable using the latrines as they were not sex-segregated and lacked privacy as they did not have locks. Additionally, they were not allowed to dispose of pads in schools by their teachers in order to avoid difficulties when emptying them, thus these girls had to carry/hold on to the used pads until they got home.

These findings provide a strong evidence base that private, safe and appropriate facilities for changing pads and solid waste management facilities for final disposal of used pads are critical to enable women and girls to manage their monthly period with dignity and in a hygienic manner.

### b) MHM Kit Content

Findings from the survey highlight the importance of having a comprehensive MHM Kit which includes various items needed for use with the specific type of pads (either disposable or reusable pads). Lack of sufficient sanitary pads was identified as one of the main issues that women and adolescent girls face in managing their monthly periods in the refugee camps during the FDGs. 38% of all respondents identified the rope, bucket and pegs as very useful items for enabling proper washing and drying of the reusable pads. However, only 29% reported using the plastic bags (as part of MHM Kit A) which suggests that 72% considered the plastic bag as not being very useful or appropriate. All women and adolescent girls reported that the two packets of disposable pads were enough for one period (one month), while those who received MHM Kit B (washable) recommended increasing the number to more than 5 - pads and two holders as it was revealed to be difficult to dry the pads during the rainy season. The final monitoring report also revealed that the buckets were too small to wash the pads in, with most women requesting for bigger buckets.

*MHM Kits in Uganda. Credit: IFRC*

Additional items were also requested to support MHM. 50% of the women interviewed recommended that kits should include a “Kitenge” i.e. a cloth used to wrap around the waist, during menstruation. This was to ensure that even if menstruation starts when they are not aware, they will not be embarrassed of leakage as it would be absorbed and not visible.

The need for MHM friendly WASH facilities was revealed from the post-distribution monitoring visits, with some respondents citing that they were embarrassed of disposing of the bloody water that come from washing pads, particularly adolescent girls. Furthermore, they also stated that the stagnant bloody water produced a bad odor.

### Distribution considerations

Collaboration with Ministries of Health and other actors is key in facilitating smooth and efficient distribution as seen in Somaliland, where the SRCS coordinated with the Ministry of Health (MoH) – central and regional officers, to officiate and support distribution of MHM kits.

*Collaboration between SRCS and MoH during MHM Kit distribution in Dilla. Credit: SRCS*

In Madagascar, rain disrupted outdoor distribution of MHM Kits, causing slight delays. This was sufficiently mitigated for through revision of the distribution plan and budget. There were also issues in clearance of the MHM Kits at the Somaliland port, however this was also anticipated for in the action plans and budgets. These events highlight the need for anticipation of natural events or other hindrances by organizations implementing MHM activities through designing flexible distribution plans and budgets.

Distribution in Uganda also highlighted the challenge of managing distribution in settlements /camps due to mobile populations, making it difficult to get people targeted for distribution in one place. Findings also highlight the need to further analyze the timing of information sessions and sensitization provided to beneficiaries during or before distribution. In the case of Uganda, limited time was allotted to sensitization and beneficiary education on MHM before distribution. Furthermore, survey findings revealed that only 6% of all beneficiaries of the MHM Kit read/used the IEC materials. This translated into poor practice evidenced from KIIs and FGD's where some women reported using the buckets for carrying sorghum while the plastic bags (meant for pads) were used for shopping. The misuse of plastic bags could also suggest that they were not regarded as a useful MHM item by beneficiaries.

Many National Societies, as well as the IFRC, have standard and/or adapted formats for rapid and detailed assessment. One of the key components of a strong assessment to enable MHM planning and activities to address needs is gender and age segregated data fields. Another important component is having sufficiently confident and knowledgeable male and female staff and volunteers who can mainstream MHM considerations into existing WatSan, DM and health interventions.

### Mainstreaming MHM into global tools and knowledge

The results from the scale up project in the three countries have further assisted with the development of specifications for items in MHM Kits using participatory methods through engaging with beneficiaries. For example, following the initial FGDs in Somaliland, a third type of Kit (MHM Kit C) that contained both reusable and disposable pads was developed to respond to the seasonal variations in access to water.

Furthermore, these findings highlight the intricate nature of MHM responses, that not only call for distribution of sanitary pads but also design of MHM friendly water and sanitation facilities as well as inclusion of additional items that promote safe and hygienic management of sanitary pads that will effectively and comprehensively address women and adolescent girls MHM needs in emergencies.

Based on the pilot and scale up project results, the MHM Kit specifications will be added to the IFRC's Emergency Relief Item Catalogue (ERIC) – an open online resource. Furthermore, these scale up projects and future findings will feed into the development of guidelines that would support RC/RC National Societies on pre-positioning, implementing and distributing MHM Kits in various contexts. It is expected that these specifications and evidence gathered as part of this project can be used by agencies within the WASH sector (as well as Red Cross and Red Crescent National Societies) to adapt the MHM Kits to specific local contexts and improve the health and dignity of women and adolescent girls in emergencies.

## Recommendations

| COUNTRY | RECOMMENDATIONS | FOR |
|---|---|---|
| | **Usage and Acceptability** | |
| **Uganda** | • MHM projects should be designed to included continuous sensitization and information sessions to women and adolescent girls on proper Menstrual Hygiene Management and use of all items in the MHM Kit throughout the project i.e. before, during and after distribution.<br>• The results, evidence and recommendations from this project should be shared widely with other humanitarian actors. There is a need to continue to advocate with UNHCR and other implementing partners to prioritize design of MHM friendly latrines, drainage systems, bathing areas and solid waste management facilities in communities and schools. | URCS<br>IFRC & URCS |
| **Somaliland** | • National Societies should continue to sensitize and raise awareness on the link between poor hygiene and reproductive health infections in the community and incorporate MHM in other reproductive health promotion activities.<br>• National Societies should include menstrual hygiene management activities in their longer term development activities, looking into sustainability e.g. empowering women to develop their own pads using local materials and designing facilities for safe disposal of pads. Private and hygienic latrine and washing facilities should also be considered at design level to allow for proper menstrual hygiene management.<br>• Advocacy with humanitarian and governmental partners in Somaliland should be carried out by SRCS to promote MHM activities in their programs and improve coordination and information sharing at local and national levels. | SRCS<br>SRCS<br>SRCS, MoH, |
| **Madagascar** | • Capacity building of local actors is needed to raise awareness of MHM issues in the regions.<br>• Waste Management and protection of the environment should be improved. As the sanitation coverage is low, awareness raising campaigns and social mobilization are needed at all levels particularly in regions with poor access to proper sanitation.<br>• There is need to look into building the capacity of women and girls to produce pads using local materials, particularly among the poor female populations who cannot afford pads.<br>• Improve access to water particularly in rural areas during dry seasons. | CRM & IFRC |

| MHM Kit Content | | |
|---|---|---|
| **Uganda** | • For a MHM Kit A that is expected to last one month the following should be added: 400g (or more) of bathing soap 3 units of underwear (varied sizes) and 3 packs of disposable pads (8 pads per pack) – to accommodate heavy flow;<br>• If possible, additional items can be included in the Kit: Kitenge (clothes used to wrap around the waist during menstruation), basin that can be used for washing pads (basins should not replace buckets, but should be a supplementary item).<br>• Review inclusion of plastic bags in the MHM Kit A (disposable), and analyze different or other items which could support and add value to the kit for disposal of used pads. | IFRC & URCS |
| **Somaliland** | • Increase the number of disposable pads to 3 packs (8 packs per pack) - meant to last for one month, in the MHM Kit C to support the women and girls during dry season and periods of water scarcity.<br>• Underwear should be larger (varied sizes – S, M, L, XL) and should have a plain elastic waistband. Furthermore, increase the number of laundry soap in the MHM Kit C. | SRCS<br>IFRC |

| | | |
|---|---|---|
| **Madagascar** | • Improve sensitization and education sessions on use of MHM items – during and after distribution.<br>• In response to women and girls with heavy flows, it is recommended that 2 packs (4 pads per pack) of washable pads e.g. the new range of AFRIpads[a] or similar product, are included in the MHM Kit B (washable)<br>• 3 units of underwear with varying sizes (S, M, L) should be included in MHM Kit A & B. Underwear provided should also be black as the red color washes off. If possible, additional items could be included: "pagne" or loin cloth, black small shorts to support women and girls when they are active (running etc.). Bigger buckets should be provided to wash pads in as the provided buckets (6/7 litre) were revealed to be too small. Increase the number of disposable pads and sizes of bathing and laundry soap (400g or more). | IFRC & CRM |

[a] The new AFRIpads consists of 3 Maxi pads, 1 Super Maxi pad and a storage bag in one pack. The design and performance of the AFRIpads kit can accommodate girls and women with heavy flow. The absorbency has tripled compared to the original version that was distributed in all three countries. Maxi pads last 6-8 hours and the Super maxi lasts for 8- 10 hours. The incorporation of high performing textiles has reduced the drying time by half, to 2 hours thus the pads will dry quicker during the rainy season and indoors.

| Distribution Considerations | | |
|---|---|---|
| **Uganda** | • Because of continuous sporadic influx and subsequent family re-unifications in the camps, targets continue to fluctuate almost on daily basis, hence there must always be a buffer stock of MHM items to fill gaps for new entrants in the future planning for delivery of items for distributions.<br>• Involvement of community leaders and refugee welfare council members in any activity averts many problems that might arise during the course of the activity implementation, more especially during distribution. | IFRC and URCS |
| **Madagascar** | • Thorough explanation of the trial project and reasons for selecting beneficiaries should be done before distribution to avoid complaints from women and adolescent girls that are not in the distribution list and to manage expectations about future kit distributions.<br>• Flexible distribution and budget plans should be developed to mitigate risk of rains (or other natural events) disrupting distribution.<br>• Include a health clinic representative in the distributions sessions (alongside Red Cross staff/volunteer), to assist with health and hygiene promotion information for example: how to prevent infections, how to deal with infections, how to manage period pain/cramps, and to give pragmatic information on the practices/perceptions/beliefs about risky alternatives such as using lemon juice to wash if they have itching/infection or that using a smelly latrine will give them an infection). This will strengthen the link between distribution and the health clinic, who are also willing to do more hygiene and health promotion sessions. | CRM<br>CRM<br>CRM, MoH |

| | | |
|---|---|---|
| **Market Survey** | | |
| **Uganda, Madagascar and Somaliland** | • In regards to Madagascar, it is preferable and cheaper to purchase MHM Kits A or B or C in Madagascar than from the IFRC EAIOI Nairobi office.<br>• If procuring kits for Uganda, it is cheaper to procure MHM Kits A or B or C from the IFRC EAIOI Nairobi office than from Uganda. This is mostly due to the high cost of disposable pads in Uganda.<br>• In regards to Somaliland, it is more economical to purchase MHM Kit A and C in Somaliland than in the IFRC Nairobi office, however it is preferable and cheaper to procure Kit B in Nairobi as it is slightly cheaper than its value in Somaliland.<br>• In terms of availability, it is recommended that Bio-degradable plastic bags (8-10L and 1-2L) are procured from the Nairobi office as they are difficult to find in the surveyed markets in Uganda, Madagascar or Somaliland.<br>• A more detailed and thorough market survey covering more markets and geographical areas is needed to better capture the availability and range of prices of MHM Kit items in Madagascar, Uganda and Somaliland as well as other Eastern Africa countries. | IFRC |
| **Data collection considerations** | | |
| **Uganda Somaliland and Madagascar** | • More rigorous testing of the hardware (phones) and software (Magpi / RAMP) well in advance of the survey is recommended.<br>• Allow for adequate time to train the field team, particularly new volunteers, on use of Magpi and other data collection tools.<br>• CRM volunteers need to be trained in RAMP, as the paper based survey used was tedious and time consuming. | IFRC & NSs |

| Mainstreaming MHM into global tools and knowledge | | |
|---|---|---|
| **Uganda**<br>**Somaliland**<br>**Madagascar** | • Continue sensitizing and building capacity of both male and female staff at both National Society at Federation level, with a focus on WatSan and DM staff. For capacity building, the emphasis should be placed on practical aspects e.g. importance of cultural beliefs and perceptions, importance of initial assessment and consultation with women and girls, relief/distribution of items including assessment and identification of beneficiaries, appropriate design of latrines and bathing areas for women/adolescent girls, issues around solid waste management and disposal.<br>• Scale up advocacy and sensitization around menstrual hygiene both at regional and international levels.<br>• Continued follow-up and evaluation of pilot and scale-up projects is needed for example, carry out a sustainability study on washable pads after one year in project locations. | IFRC & NSs |

## Limitations

Several limitations and challenges were encountered throughout the project:

- Results and quality of data collected was highly dependent on the capacity of National Society volunteers in various trial sites. While many had good capacity and quickly understood the questionnaires and what was expected of them, several did not. Results from FGDs revealed varied quality of responses, due to the probing capacity and experience of volunteers.

- The rotation of some of the volunteers in the Somaliland and Uganda MHM trial meant that data collection was conducted by different volunteers at each stage; this therefore required repeated training, and may have compromised data quality. However, efforts to ensure data quality was assured through carrying out 3 month post distribution surveys combined with follow up FGDs and KIIs to identify and cross check any anomalies in data.

- The Magpi application did not respond effectively during the surveys in Somaliland and Uganda. There were issues with the applications' features such as uploading or accessing records in the offline mode or during periods of intermittent internet or limited network in the field.

- Respondents of the regional hygiene dignity and menstrual hygiene items survey were fewer than expected despite the fact that the survey was shared well in advance and to many key humanitarian actors. The few responses were probably due to the fact that many of organizations surveyed were partly involved in MHM activities.

- Due to delays in clearance of MHM items at Somaliland customs, the surveys were carried out later than expected.

- The turnover of key IFRC staff during the project was not sufficiently mitigated for, which led to significant delays in the procurement of materials in both Somaliland and Uganda. However, this had been anticipated for in the work plan.

- Despite the history and risk of cyclones in the south west region of Madagascar (survey location), the testing of the MHM Kits in this area did not effectively reflect the use of the kits in the context of a current emergency as the participants surveyed had not been directly affected by natural disasters (e.g. displaced due to cyclones or floods) during the time of the survey.

- A one-month post distribution survey was not carried out in Madagascar due to remote management issues however this was mitigated for by conducting the 3-month post distribution KAP survey together with follow up FGDs and KIIs.

## Conclusions and next steps

These operational research trial projects in Somaliland, Madagascar and Uganda have shown the Menstrual Hygiene Management Kits (A, B and C) to be comprehensive relief items that appropriately and effectively meet the menstrual hygiene needs of women and adolescent girls in emergency settings.

The results of the surveys in all three countries demonstrated significant improvements from the baseline in relation to knowledge, health, dignity and hygiene and adds to the existing gap in evidence base research for MHM Kits as an emergency relief item as well as highlighting the need for amendments in water and sanitation infrastructure to effectively support MHM.

IFRC has also developed detailed specifications of the MHM Kits which will be included in the Red Cross/Red Crescent (RC/RC) Emergency Items Catalogue (ERIC) – an open resource center that aims to standardize and harmonize the selection and procurement of relief items during emergency operations across the RC/RC movement. Through this, it is envisaged that IFRC and National Societies will adopt the MHM Kit as a global relief item, with further adaptation to various contexts and local procurement where appropriate. It will also assist other actors in the water, sanitation and hygiene sector to make decisions regarding the inclusion of appropriate MHM items into their relief NFIs.

IFRC plans on developing guidelines based on the pilot and scale-up research projects to support RC/RC National Societies on pre-positioning, appropriate uses/contexts and distribution mechanisms for MHM Kits developed and disseminated.

In regards to dissemination, results and outcomes of MHM pilot and scale up projects have been documented and shared with wider WASH partners. This includes a case study publication developed by HIF/ALNAP[7] as well as the MHM consolidated report.

IFRC and other humanitarian actors should continue to advocate for improving the health and dignity of women and adolescent girls in emergency contexts through addressing menstrual hygiene management. MHM considerations should be incorporated into water, sanitation and hygiene interventions. Furthermore, capacity and confidence building of male and female staff at all levels (national, regional and international) is critical.

The findings from the trial and scale-up research projects have generated evidence on appropriate MHM interventions, however additional research needs to be carried out by IFRC and other humanitarian actors to further explore various contexts: emergency and developmental, geographic, religious, cultural, socio-economic etc. so as to add onto the existing but limited evidence base.

[7] ALNAP (2016), Improving menstrual hygiene management in emergencies: IFRC's MHM Kit

## Annex 1 (Uganda): Summary table by age-group; number of baseline surveys, MHM Kits distributed, one and three month post distribution surveys completed.

| Age groups | Female population (2014) | | Proportion of total population | | Baseline | | Distribution | | | | 1 month PDS | | | | 3 month PDS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | n[8] | %[9] | Kit A (disposable) | | Kit B (reusable) | | Kit A (disposable) | | Kit B (reusable) | | Kit A (disposable) | | Kit B (reusable) | |
| | Arua Camp | Mungula Camp | Arua Camp Kit A (Disposable) | Mungula Camp Kit B (reusable) | | | n | % | n | % | n | % | n | % | n | % | n | % |
| **Group A: 12 to 17 years** | 405 | 206 | 34% | 26% | 157 | 27% | N/A | N/A | N/A | N/A | 65 | 24% | 52 | 15% | 85 | 29% | 20 | 6% |
| **Group B: 18 to 34 years** | 420 | 351 | 36% | 44% | 291 | 50% | N/A | N/A | N/A | N/A | 162 | 60% | 185 | 55% | 173 | 59% | 191 | 60% |
| **Group C: 35 to 50 years** | 352 | 234 | 30% | 30% | 133 | 23% | N/A | N/A | N/A | N/A | 45 | 17% | 102 | 30% | 36 | 12% | 107 | 34% |
| **Total** | 1177 | 791 | 100% | 100% | 581 | 100% | 1000 | 100% | 1000 | 100% | 272 | 100% | 339 | 100% | 294 | 100% | 318 | 100% |

[8] number / count

[9] proportion of total, in each age group (strata)

**Annex 2 (Somaliland): Summary table by age-group; number of baseline surveys, MHM Kits distributed, one and three month post distribution surveys completed.**

| Age groups | Female population (2014) | | Proportion of total population | | Baseline | | Distribution (Kit C) | | | | 1 month PDS (Kit C) | | | | 3 month PDS (Kit C) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | n | % | Allaybaday | | Dilla | | Allaybaday | | Dilla | | Allaybaday | | Dilla | |
| | Allaybaday | Dilla | Allaybaday | Dilla | | | n | % | n | % | n | % | n | % | n | % | n | % |
| **Group A: 12 to 17 years** | 650 | 1000 | 20% | 20% | 61 | 16% | 200 | 20% | 200 | 20% | 17 | 10% | 33 | 17% | 47 | 25% | 18 | 10% |
| **Group B: 18 to 34 years** | 1625 | 2500 | 50% | 50% | 263 | 71% | 500 | 50% | 500 | 50% | 111 | 63% | 135 | 70% | 118 | 63% | 146 | 79% |
| **Group C: 35 to 50 years** | 975 | 1500 | 30% | 30% | 47 | 13% | 300 | 30% | 300 | 30% | 49 | 28% | 26 | 13% | 21 | 11% | 21 | 11% |
| **Total** | 3250 | 5000 | 100% | 100% | 371 | 100% | 1000 | 100% | 1000 | 100% | 177 | 100% | 194 | 100% | 186 | 100% | 185 | 100% |

**Annex 3 (Madagascar): Summary table by age-group; number of baseline surveys, MHM Kits distributed and three month post distribution surveys completed.**

| Age groups | Female population (2014) | | Proportion of total population | | Baseline | | Distribution | | | | 3 month PDS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | n | % | Kit A (disposable) | | Kit B (reusable) | | Kit A (disposable) | | Kit B (reusable) | |
| | Miary Commune | Ankililoaka Commune | Miary Commune | Ankililoaka Commune | | | n | % | n | % | n | % | n | % |
| **Group A:** **12 to 17 years** | 425 | 771 | 25% | 28% | 240 | 33% | 336 | 34% | 336 | 34% | 120 | 33% | 120 | 33% |
| **Group B:** **18 to 34 years** | 798 | 1064 | 46% | 38% | 240 | 33% | 336 | 34% | 336 | 34% | 120 | 33% | 120 | 33% |
| **Group C:** **35 to 50 years** | 501 | 954 | 29% | 34% | 240 | 33% | 328 | 33% | 328 | 33% | 120 | 33% | 120 | 33% |
| **Total** | 1724 | 2789 | 100% | 100% | 720 | 100% | 1000 | 100% | 1000 | 100% | 360 | 100% | 360 | 100% |

## Annex 4 : UGANDA, Data table – baseline, 1 month and 3 month post-distribution monitoring

| Key indicator / question | BASELINE | | | | 1 Month PDS | | | | 3 Month PDS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Over-all | Grp A | Grp B | Grp A | Over-all | Grp A | Grp B | Grp C | Over-all | Grp A | Grp B | Grp C |
| Have had children (given birth prior to baseline survey) | 72% | 16% | 89% | 100% | - | - | - | - | - | - | - | - |
| Have used any modern family planning method before | 6% | 1% | 7% | 11% | - | - | - | - | - | - | - | - |
| Experience regular menstrual periods *("Yes")* | 87% | 80% | 92% | 84% | - | - | - | - | - | - | - | - |
| Knowledge of normal length of monthly menstruation | 53% | 45% | 53% | 63% | 45% | 33% | 48% | 49% | 78% | 86% | 76% | 78% |
| Reported not knowing the normal length of monthly menstruation (Response=I don't know) | 15% | 13% | 16% | 15% | 1% | 1% | 0% | 1% | - | - | - | - |
| Knowledge of menstruation as a normal physiological process | 88% | 87% | 88% | 89% | - | - | - | - | - | - | - | - |
| Knowledge of the meaning for not experiencing monthly period (Response=pregnancy) | 74% | 50% | 85% | 80% | 52% | 9% | 60% | 67% | 74% | 53% | 80% | 76% |
| Reported restrictions in daily life when menstruating | 36% | 35% | 38% | 32% | 16% | 10% | 18% | 15% | - | - | - | - |
| Reported having had feelings of embarrassment during menstruation | 40% | 42% | 41% | 37% | 18% | 23% | 19% | 13% | - | - | - | - |
| Suffered stomach, back or breast pain, during last monthly period | 60% | 56% | 63% | 59% | 66% | 45% | 71% | 69% | - | - | - | - |
| Suffered itching, irritation or smelly discharge during last monthly period | 24% | 19% | 26% | 24% | 25% | 13% | 24% | 35% | - | - | - | - |
| Felt pain or burning during urination, during last monthly period | 19% | 12% | 22% | 21% | 31% | 19% | 35% | 36% | - | - | - | - |
| Have a bathing shelter or private, comfortable place to bathe | 77% | 80% | 78% | 72% | - | - | - | - | - | - | - | - |
| Reported defecating in a household latrine | 58% | 55% | 62% | 54% | - | - | - | - | - | - | - | - |
| Reported defecating in communal latrine | 34% | 38% | 32% | 36% | - | - | - | - | - | - | - | - |
| Have difficulty finding a private and comfortable place to go toilet | 41% | 40% | 41% | 41% | - | - | - | - | - | - | - | - |
| Sometimes have difficulty finding a private and comfortable place to go toilet | 10% | 12% | 8% | 12% | - | - | - | - | - | - | - | - |
| Have difficulties finding private, comfortable place to change DISPOSABLE pad | 37% | 36% | 40% | 31% | - | - | - | - | - | - | - | - |
| Sometimes have difficulties finding private, comfortable place to change DISPOSABLE pad | 12% | 10% | 10% | 24% | - | - | - | - | - | - | - | - |
| Have difficulties finding private, comfortable place to change CLOTH / MATERIAL | 39% | 38% | 42% | 35% | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sometimes have difficulties finding private, comfortable place to change CLOTH / MATERIAL | 11% | 12% | 9% | 17% | - | - | - | - | - | - | - | - |
| Where did you put the pad once it was full (Throw in latrine pit) | - | - | - | - | - | - | - | - | 48% | 80% | 48% | 25% |
| Used disposable sanitary pad to absorb blood flow, for last monthly period | - | - | - | - | - | - | - | - | 48% | 81% | 48% | 25% |
| Used washable pads to absorb blood flow, for last monthly period | - | - | - | - | - | - | - | - | 52% | 19% | 53% | 75% |
| Preference: Would prefer to use disposable pads to manage menstruation | 71% | 76% | 70% | 68% | 41% | 50% | 41% | 33% | 56% | 86% | 54% | 41% |
| Always have underwear available to use | 39% | 41% | 40% | 32% | - | - | - | - | - | - | - | - |
| Sometimes have underwear available to use | 15% | 10% | 14% | 22% | - | - | - | - | - | - | - | - |
| Have received hygiene items since being in the camp/settlement | 70% | 67% | 71% | 70% | - | - | - | - | - | - | - | - |
| Reported difficulties in washing the Washable pads (No private place) | - | - | - | - | 4% | 2% | 6% | 3% | 7% | 1% | 6% | 15% |
| Reported difficulties in washing the Washable pads (No water) | - | - | - | - | 2% | 2% | 2% | 1% | 6% | 2% | 5% | 11% |
| Reported difficulties in washing the Washable pads (Blood does not wash out of cloth) | - | - | - | - | 6% | 6% | 6% | 5% | 6% | 1% | 5% | 10% |
| Knowledge of the result of not washing yourself (become smelly) | - | - | - | - | 67% | 68% | 65% | 73% | - | - | - | - |
| Knowledge of the result of not washing yourself (become itchy) | - | - | - | - | 23% | 12% | 25% | 28% | - | - | - | - |
| Knowledge of the result of not washing yourself (I become dirty) | - | - | - | - | 51% | 46% | 50% | 55% | - | - | - | - |
| Reported difficulty in using the disposable pad | - | - | - | - | 8% | 5% | 10% | 5% | 2% | 1% | 2% | 1% |
| Reported that the Washable pads were comfortable to use | - | - | - | - | 49% | 44% | 47% | 60% | 44% | 17% | 44% | 62% |
| Reported running out of dry clean washable pads | - | - | - | - | 29% | 16% | 28% | 41% | | | | |
| Reported difficulty in washing the pads | - | - | - | - | 11% | 9% | 12% | 9% | 11% | 2% | 10% | 21% |
| Reported washing the reusable pad in bathroom area | - | - | - | - | 56% | 50% | 53% | 68% | | | | |
| Reported difficulty in drying washable pads (No Private Place) | - | - | - | - | 5% | 5% | 4% | 6% | 11% | 2% | 11% | 18% |
| Reported drying the washable pad inside the house | - | - | - | - | 25% | 21% | 25% | 27% | | | | |
| Overall, how satisfied are you with the MHM Kit (Very Satisfied) | - | - | - | - | 43% | 43% | 44% | 42% | 46% | 58% | 46% | 34% |
| Overall, main challenge of dealing with your monthly period (pain in stomach/back/breasts ) | - | - | - | - | 50% | 32% | 53% | 52% | 75% | 76% | 74% | 76% |
| Overall, main challenge of dealing with your monthly period (Have no pad/can't find or afford pad ) | - | - | - | - | 37% | 44% | 38% | 29% | 28% | 47% | 24% | 27% |
| Preference: Would prefer to use washable pads to manage menstruation | 17% | 19% | 15% | 21% | 56% | 48% | 56% | 62% | 44% | 14% | 46% | 59% |

## Annex 5: SOMALILAND, Data table – baseline, 1 month and 3 month post-distribution monitoring

| Key indicator / question | BASELINE | | | | 1 MONTH | | | | 3 MONTH | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Over-all | Grp A | Grp B | Grp C | Over-all | Grp A | Grp B | Grp C | Over-all | Grp A | Grp B | Grp C |
| Reported restrictions in daily life when menstruating | 79% | 82% | 76% | 87% | 6% | 10% | 7% | 1% | - | - | - | - |
| Reported feeling of embarrassment during menstruation | 51% | 59% | 49% | 51% | 0% | 0% | 0% | 7% | - | - | - | - |
| Felt pain or burning during urination, during last monthly period | 25% | 18% | 23% | 45% | 0% | 0% | 0% | 0% | - | - | - | - |
| Used disposable sanitary pad to absorb blood flow, for last monthly period | 19% | 33% | 18% | 6% | 85% | 68% | 88% | 88% | 98% | 99% | 99% | 93% |
| Where did you put the pad once it was full (Throw in latrine pit) | 82% | 90% | 77% | 100% | 47% | 52% | 48% | 40% | 71% | 77% | 71% | 60% |
| Where did you put the pad once it was full (Throw in rubbish pile) | 10% | 10% | 10% | 0% | 25% | 10% | 27% | 24% | 9% | 8% | 9% | 14% |
| Overall, main challenge of dealing with your monthly period (have no underwear) | 69% | 82% | 70% | 53% | 24% | 18% | 20% | 41% | 7% | 2% | 5% | 21% |
| Used washable pad (cloth in underwear) to absorb blood flow, for last monthly period | 44% | 46% | 42% | 53% | 78% | 64% | 79% | 84% | 63% | 52% | 66% | 57% |
| Knowledge of normal length of monthly period | 84% | 66% | 87% | 94% | 94% | 80% | 98% | 91% | 94% | 86% | 96% | 93% |
| Knowledge of the meaning for not experiencing monthly period (Response=pregnancy) | 47% | 8% | 56% | 45% | 64% | 22% | 65% | 91% | 66% | 29% | 70% | 93% |
| Knowledge of the meaning for not experiencing monthly period (Response=sickness) | 47% | 67% | 41% | 55% | 31% | 60% | 31% | 9% | 29% | 55% | 27% | 7% |
| Suffered itching, irritation or smelly discharge during last monthly period | 19% | 16% | 17% | 36% | 0% | 0% | 0% | 0% | - | - | - | - |
| Preference: Would prefer to use DISPOSABLE pads to manage menstruation | 85% | 97% | 84% | 79% | 22% | 42% | 20% | 13% | 32% | 37% | 33% | 21% |
| Preference: Would prefer to use WASHABLE pads to manage menstruation | 11% | 3% | 11% | 19% | 73% | 56% | 74% | 79% | 67% | 63% | 67% | 76% |
| Reported difficulties in washing the Washable pads (No private place) | - | - | - | - | 5% | 10% | 5% | 1% | 2% | 3% | 2% | 0% |
| Reported difficulties in washing the Washable pads (No water) | - | - | - | - | 4% | 10% | 3% | 1% | 3% | 2% | 3% | 0% |
| Reported difficulties in washing the Washable pads (Blood does not wash out of cloth) | - | - | - | - | 0% | 2% | 0% | 0% | 6% | 2% | 8% | 2% |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Knowledge of the result of not washing yourself (become smelly)** | - | - | - | - | 52% | 50% | 50% | 60% | - | - | - | - |
| **Knowledge of the result of not washing yourself (become itchy)** | - | - | - | - | 47% | 34% | 48% | 52% | - | - | - | - |
| **Knowledge of the result of not washing yourself (get discharge or infection)** | - | - | - | - | 61% | 44% | 61% | 75% | - | - | - | - |
| **Reported difficulty in using the disposable pad** | - | - | - | - | 1% | 0% | 0% | 1% | 4% | 6% | 3% | 7% |
| **Reported that the Washable pads were comfortable to use** | - | - | - | - | 77% | 64% | 78% | 84% | 54% | 49% | 55% | 57% |
| **Reported running out of dry clean washable pads** | - | - | - | - | 4% | 2% | 5% | 3% | - | - | - | - |
| **Reported difficulty in washing the pads** | - | - | - | - | 5% | 10% | 5% | 1% | 8% | 3% | 11% | 2% |
| **Reported washing the reusable pad in latrine** | - | - | - | - | 43% | 32% | 44% | 47% | - | - | - | - |
| **Reported difficulty in drying washable pads (No Private Place)** | - | - | - | - | 3% | 8% | 2% | 3% | 12% | 26% | 9% | 7% |
| **Reported drying the washable pad inside the house** | - | - | - | - | 56% | 60% | 56% | 55% | - | - | - | - |
| **Overall, how satisfied are you with the MHM Kit C (Very Satisfied)** | - | - | - | - | 81% | 90% | 83% | 68% | 82% | 92% | 82% | 64% |
| **Overall, main challenge of dealing with your monthly period (Others - Feel Fatigued)** | - | - | - | - | 69% | 68% | 73% | 53% | 21% | 37% | 18% | 10% |
| **Overall, main challenge of dealing with your monthly period (Have no pad/can't find or afford pad)** | - | - | - | - | - | - | - | - | 62% | 62% | 63% | 55% |
| **Suffered stomach, back or breast pain, during last monthly period** | 69% | 66% | 71% | 57% | 98% | 96% | 98% | 100% | - | - | - | - |
| **Reported difficulties in finding a private place to wash and dry the CLOTH /MATERIAL** | 35% | 18% | 39% | 36% | - | - | - | - | - | - | - | - |
| **Sometimes have difficulties finding a private place to wash and dry the CLOTH / MATERIAL** | 36% | 39% | 37% | 28% | - | - | - | - | - | - | - | - |
| **Have had children (given birth prior to baseline survey)** | 61% | 5% | 69% | 87% | - | - | - | - | - | - | - | - |
| **Experience regular menstrual periods *("Yes")*** | 85% | 92% | 87% | 64% | - | - | - | - | - | - | - | - |
| **Experience regular menstrual periods sometimes *("Sometimes it changes")*** | 12% | 7% | 11% | 26% | - | - | - | - | - | - | - | - |
| **Knowledge of menstruation as a normal physiological process** | 100% | 100% | 100% | 100% | - | - | - | - | - | - | - | - |
| **Sometimes suffered itching, irritation or smelly discharge [during last monthly period]** | 12% | 3% | 15% | 9% | - | - | - | - | - | - | - | - |
| **Have difficulty finding a private and comfortable place to bathe** | 34% | 25% | 34% | 45% | - | - | - | - | - | - | - | - |
| **Sometimes have difficulty finding a private and comfortable place to bathe** | 27% | 10% | 32% | 19% | - | - | - | - | - | - | - | - |
| **Reported defecating in a household latrine** | 70% | 87% | 68% | 55% | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Reported defecating in bushes or field** | **18%** | **2%** | **21%** | **28%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Have difficulty finding a private and comfortable place to go toilet** | **35%** | **11%** | **38%** | **43%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Sometimes have difficulty finding a private and comfortable place to go toilet** | **20%** | **11%** | **22%** | **26%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Used no sanitary material (bled into clothes) to absorb blood flow, for last monthly period** | **37%** | **21%** | **40%** | **40%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Have difficulties finding private, comfortable place to change DISPOSABLE pad** | **13%** | **14%** | **14%** | **0%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Sometimes have difficulties finding private, comfortable place to change DISPOSABLE pad** | **25%** | **14%** | **30%** | **25%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Have difficulties finding private, comfortable place to change CLOTH / MATERIAL** | **36%** | **11%** | **39%** | **52%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Sometimes have difficulties finding private, comfortable place to change CLOTH / MATERIAL** | **20%** | **7%** | **24%** | **16%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Disposable pads are available in the local market *(Response: Yes)*** | **13%** | **10%** | **16%** | **5%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Cloth in underwear' is available in the local market *(Response: Yes)*** | **5%** | **0%** | **7%** | **0%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Sanitary materials are affordable *(Response: Yes)*** | **11%** | **16%** | **11%** | **0%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Sanitary materials are sometimes affordable *(Response: Sometimes, when I have money)*** | **12%** | **18%** | **11%** | **11%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Always have underwear available to use** | **7%** | **8%** | **8%** | **2%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Sometimes have underwear available to use** | **35%** | **36%** | **36%** | **30%** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |