



# Experiences from East Africa and lessons in addressing the menstrual hygiene needs of women and girls

*Chelsea Giles-Hansen MPH, George Mugambi, and Alexandra Machado*

**Abstract:** *This practice paper outlines key results from research conducted by the International Federation of Red Cross and Red Crescent Societies (IFRC) in East Africa from 2012 to 2016. Implemented in Burundi, Uganda, Somaliland, and Madagascar, the work aimed to better understand the menstrual hygiene management (MHM) needs of women and girls and the challenges they face with menstruation in humanitarian contexts. Based on a participatory consultation with women and girls, three types of ‘MHM kit’ were designed and tested to generate evidence on the appropriateness, acceptability, and value of the kits as a relief item.*

*Results showed improvements in dignity, health, and knowledge after the distribution of MHM kits and promotion of menstrual hygiene. Findings highlighted the importance of appropriate facilities, including safe, private spaces for washing, changing, and drying pads.*

*Key lessons and recommendations for future MHM programming include: distribute sanitary items together with supportive items (for washing, drying, and disposal); distribution must come with information and a demonstration on use and care; involve men and boys from the beginning; build confidence and capacity of male and female staff and volunteers; and link with sexual and reproductive health service providers.*

**Keywords:** menstruation, MHM, menstrual hygiene, menstrual health, women, dignity

## Background

Despite growing attention to the menstrual hygiene needs of women and girls in humanitarian contexts, menstrual hygiene management (MHM) continues to be an issue that is frequently overlooked or poorly addressed. Support for MHM is often provided in a ‘piecemeal’ way, and coordination (between both sectors and agencies), lack of technical guidance, and lack of clarity on key components and sectoral roles all remain key challenges (Sommer et al., 2016).

MHM refers to a range of actions and interventions that ensure women and girls can privately, safely, and hygienically manage their monthly menstrual flow with confidence and dignity (IFRC, 2016).

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There is growing consensus that comprehensive, effective MHM responses in humanitarian contexts have three essential components (Sommer et al., 2016; IFRC, 2016; VanLeeuwen and Torondel, 2018):

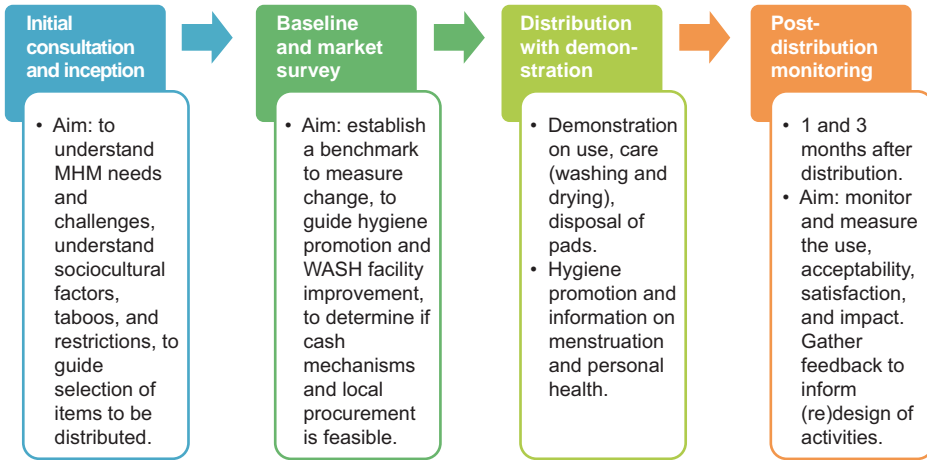
1. MHM materials and supportive items. For example pads, cloth, underwear, and tampons to absorb the menstrual flow and items to support washing, drying, and disposal.
2. Private, safe, and appropriate water, sanitation, and hygiene (WASH) facilities, for changing, washing, drying, bathing, and disposal of sanitary items and wastewater.
3. Information on menstruation and hygiene, including basic, practical information on the menstrual process, hygiene promotion, and demonstrations delivered with any distribution of MHM-related items.

Continuous engagement and consultation with women, girls, men, and boys is critical to identify barriers and sociocultural determinants for improved menstrual hygiene, and to ensure the MHM response is appropriate and adapts to changing needs and challenges.

### **Problem identification: what are the issues with standard hygiene and dignity kits?**

Distribution of non-food items to families affected by disasters continues to be a core relief activity for many humanitarian agencies. Some of the main issues related to MHM include:

- Hygiene kits are generally designed for a family, with a limited number of standard sanitary pads regardless of how many menstruating females there are in the household.
- Standard hygiene and dignity kits that are distributed in the first phase of emergencies can often include socially and culturally inappropriate items, or items that are not preferred by women and girls in that context. This can lead to items distributed being unused, discarded, or resold.
- Personal dignity kits usually include sanitary pads, underwear, and hand soap (along with other items such as a torch, clothes, etc.) – however, critical items to support the use and care of sanitary materials (e.g. laundry soap and bucket for washing, rope and pegs for drying, cloth for privacy, bag or pouch for privacy and disposal) may be left out.
- If personal dignity kits are planned as a one-off distribution, they do not meet the MHM needs of women and girls on a continuous (or ongoing) basis.
- Most hygiene and dignity kits do not include information on the use, care, and disposal of menstrual items (e.g. how to wash, dry, and dispose of used sanitary items), or practical information on how to stay healthy and what the menstrual process is.
- Menstruation is very personal, and there is no ‘one-size-fits-all’ kit. There is a wide diversity of preferences, materials, and practices for managing menstruation across different cultures and contexts, which need to be considered.



**Figure 1** Overview of IFRC's operational research process

## IFRC's operational research in East Africa: MHM kits as a humanitarian relief item

### *Aim*

Between 2012 and 2016, the International Federation of Red Cross and Red Crescent Societies (IFRC) conducted operational research in Burundi, Uganda, Somaliland, and Madagascar, which aimed to better understand the MHM needs of women and girls and the challenges they face with menstruation in humanitarian contexts.

### *Process*

An overview of IFRC's operational research process is shown in Figure 1. Emphasis was placed on consultation to guide selection of MHM items and support, with rigorous monitoring and feedback to measure use, acceptability, impact, and satisfaction.

### *Methods*

Table 1 outlines key qualitative and quantitative methods used at each stage of the operational research process.

In each pilot country, 2000 girls and women between 12 and 50 years of age were distributed kits, with a proportion surveyed at baseline and post-distribution (see Table 2 for number of surveys conducted in each country). All focus group discussion (FGD) guides and survey tools were developed in English and then translated to the local language, before being tested for clarity and understanding.

All FGDs were segregated by age into three groups: 12–17 years old, 18–34 years, and 35–50 years. Summary data tables (including questions asked) and information on the number of surveys conducted in each age group is available in the IFRC's 'MHM in Emergencies: Consolidated Report' (see References).

**Table 1** Key qualitative and quantitative data collection methods used

	<i>Qualitative methods</i>	<i>Quantitative methods</i>
<b>Initial consultation and inception</b>	Focus group discussions (age and sex segregated) Key informant interviews; direct observation	–
<b>Baseline and market survey</b>	Direct observation	Individual knowledge, attitudes, and practices (KAP) survey Market survey questionnaire
<b>1 month post-distribution</b>	Key informant interviews; direct observation	Individual KAP survey
<b>3 months post-distribution</b>	Focus group discussions (age and sex segregated) Key informant interviews; direct observation	Individual KAP survey

### *Types and content of MHM kits*

Based on consultation with women and girls, three different types of ‘MHM kit’ were designed:

1. Kit A (disposable)
2. Kit B (reusable/washable)
3. Kit C (combination of both disposable and reusable).

As well as pads, underwear, and bathing soap, items to support the washing, drying, and disposal of reusable or disposable pads were included (small bucket with lid, laundry soap, rope, and pegs).

A small pouch for privately storing or transporting pads was also included, as well as practical information (in local language and with descriptive pictures) on the menstrual process and how to manage it, and personal hygiene.

MHM kit type C was designed for water-scarce areas where ability to wash cloth pads may be limited.

### **Key results: improving health and dignity of women and girls**

Results from qualitative and quantitative data collected in all four countries showed improvements in dignity, health, and knowledge after the distribution of MHM kits and promotion of menstrual hygiene.

Findings highlighted the importance of appropriate facilities, including safe and private spaces for maintaining hygiene and washing and changing pads. A snapshot of selected key results is shown in Table 2.

Feedback emphasized how important the ‘supplementary items’ are for enabling women and girls to be able to manage their period hygienically and with dignity. Without a bucket, soap, or clothes line, washing and drying cloth pads can be very difficult. A separate bucket is important – pads and underwear soiled with menstrual blood should not be washed in containers that may be used for food or water.



Items included in MHM kit B (reusable/washable pads) distributed in Bwagiriza refugee camp; Burundi, 2013.

**Table 2** Snapshot of results from operational research in Burundi, Uganda, Somaliland, and Madagascar

	Before (baseline)	1 month after distribution	3 months after distribution
<b>Burundi</b> 891 girls and women surveyed	<ul style="list-style-type: none"> <li>47% reported irritation or itching during last period.</li> <li>50% demonstrated basic knowledge of what the 'menstrual cycle' is.</li> </ul>	<ul style="list-style-type: none"> <li>15% reported irritation or itching during their last period [31% reduction].</li> <li>65% demonstrated basic knowledge of what the 'menstrual cycle' is [15% improvement].</li> </ul>	Significant improvements in dignity and confidence reported: <ul style="list-style-type: none"> <li>'I am not scared anymore to stand up in church or the bus, because of blood and stains on my skirt'.</li> <li>'The men feel proud that girls aren't cutting up children's clothes anymore [to use to absorb menstrual blood]'.</li> </ul>
<b>Uganda</b> 581 girls and women surveyed	<ul style="list-style-type: none"> <li>40% reported feeling embarrassed during menstruation.</li> <li>36% reported facing restrictions during their last monthly period.</li> </ul>	<ul style="list-style-type: none"> <li>18% reported feeling embarrassed during menstruation [22% reduction].</li> </ul>	<ul style="list-style-type: none"> <li>Main challenges reported were pain in stomach, back, or breasts (75%) and lack of underwear (35%).</li> </ul>

	<i>Before (baseline)</i>	<i>1 month after distribution</i>	<i>3 months after distribution</i>
	<ul style="list-style-type: none"> <li>64% reported receiving information on MHM from their mothers.</li> </ul>	<ul style="list-style-type: none"> <li>16% reported facing restrictions during their last monthly period [20% reduction].</li> <li>25% dried their washable pads inside the house; 56% washed them at bathing areas.</li> </ul>	<ul style="list-style-type: none"> <li>80% of girls preferred disposable pads (compared to 50% at baseline).</li> </ul>
<b>Somaliland</b> <i>371 girls and women surveyed</i>	<ul style="list-style-type: none"> <li>78% reported restrictions (e.g. fetching water) in their daily life during menstruation.</li> <li>19% reported experiencing itching, irritation, or smelly discharge during last period.</li> <li>37% reported bleeding into their clothes without sanitary materials.</li> </ul>	<ul style="list-style-type: none"> <li>6% reported restrictions (e.g. fetching water) in their daily life during menstruation [72% reduction].</li> <li>1% reported experiencing itching, irritation, or smelly discharge during last period [18% reduction].</li> </ul>	<ul style="list-style-type: none"> <li>Main challenges reported were lack of access to pads (62%), feeling fatigued (21%), and lack of availability of water to wash pads (12%).</li> <li>65% prefer reusable pads (compared to 11% at baseline).</li> </ul>
<b>Madagascar</b> <i>(1 and 3 month follow-up combined for logistical reasons)</i> <i>720 girls and women surveyed</i>	<ul style="list-style-type: none"> <li>27% reported irritation or itching during their last period.</li> <li>87% reported using towels, pieces of worn-out fabric or cloth, or leaves to absorb their menstrual blood.</li> <li>63% reported bathing more frequently during menstruation.</li> </ul>	<ul style="list-style-type: none"> <li>17% reported irritation or itching during their last period [10% reduction].</li> <li>40% reported no longer feeling uncomfortable during their period, or fearful of leakage or bad odour.</li> <li>Main challenges reported were lack of availability of pads in local markets, difficulty in finding a private place to change and dry pads, and lack of water for washing and hygiene.</li> </ul>	

Improvements in confidence and dignity were reported through the individual KAP surveys and FGDs in all countries. Many women reported reduced itching or irritation during their monthly periods, after distribution of the MHM kits. Less anxiety about leakage was very common – many women and girls reported feeling confident and able to leave the home, collect water, or attend meetings and clinics, for example. Improvements in basic knowledge about menstruation were seen – particularly in adolescent girls.

Preferences for reusable or disposable kits varied widely by age, and often changed after distribution of the kits. For example, for some women it was their first time seeing and using ‘modern’ designed washable pads (they had only used

rags or cloth before). Many older women preferred washable pads because they were more comfortable and absorbent than pieces of cloth, and there is no need to keep buying new disposable pads each month. Some younger adolescent girls felt uncomfortable washing menstrual blood off the reusable pads, and considered disposable pads to be more 'clean'.

Before and during project implementation, information sessions and trainings were held to build the knowledge, confidence, and capacity of volunteers and National Red Cross/Red Crescent Society staff. Female volunteers were recruited to conduct the surveys and to consult directly with women and girls; they were given basic sensitization and training on menstrual health prior to activities commencing.

## Lessons and recommendations to guide future MHM actions

A number of key lessons and recommendations have been drawn from IFRC's operational research experiences, which can guide effective and comprehensive MHM action in future emergencies.

### 1. **Distributing pads and underwear alone is NOT enough: appropriate WASH facilities and information are critical**

Distributing pads and underwear does not address the MHM needs of women and girls. How women and girls will use, wash, dry, and dispose of sanitary materials must be considered, along with local culture and preferences. Without a bucket (or basin), soap, and water, women and girls cannot wash cloth pads and underwear. If there is no private place or items to support drying pads or underwear (such as a clothes line) women and girls may use damp, wet cloth. These 'enabling factors' for menstrual hygiene, including access to private changing, bathing, and disposal facilities and practical information, are critical. If they are not addressed it can lead to ineffective programming, and loss of accountability and trust.

### 2. **Consult with women and girls so that the MHM kit content is based on local preferences, culture, context, and availability**

Menstrual hygiene is very personal. The preferences and strategies for managing menstruation vary greatly across cultures, religions, locality (urban versus rural), and context (availability of water, population movement, temporary displacement, privacy, etc.). Different age groups within the same community can have very different preferences for sanitary materials. For example in the Uganda pilot, 14% of 12–17 year olds preferred washable pads compared to 59% of 35–50 year olds.

Based on consultation and feedback from women and girls, the content of MHM and/or dignity kits should be adapted to fit the preferences, culture, and context. This includes aspects like size and colour of underwear, type of laundry soap (e.g. bar or powder, scented or unscented), and type of disposal pad (with or without 'wings', absorbency, etc.).

Where possible, MHM kits should be procured locally and possibilities for using cash programming explored. A short market survey should be incorporated as part of the assessment process, to find out what types of sanitary items are available and their cost.



Women read the information brochure (included in each MHM kit) during a focus group discussion in Bwagariza refugee camp; Burundi, 2013.

### 3. **Involve men and boys from the start**

Communicate with and involve men and boys in MHM, so they are aware of the needs of women and girls and are supportive of activities, to reduce stigma, and to help address harmful cultural taboos or restrictions. Buy-in from men and boys is essential for the success of MHM actions.

Men are also husbands to wives, fathers to daughters, and brothers of sisters who menstruate. They may be unaware of the challenges, anxieties, and needs of the females in their life – but once they are aware they may support women and girls more effectively. In Bwagiriza refugee camp, Burundi, some men collected MHM kits for their wives who were unable to attend the distribution. Other males reported feeling discontented or ‘left-out’ as head of households, because they were not consulted on the distribution process or project.

### 4. **Buy-in and coordination of multiple sectors is vital for effective MHM action**

Although many of the core actions to support menstrual hygiene are the responsibility of WASH, health (especially sexual and reproductive health or SRH), protection, gender, and inclusion (including sexual and gender-based violence or SGBV), shelter, and education all have important roles to play.

A multi-sectorial approach and strong coordination between agencies is key, especially in emergency settings (such as refugee camps) to avoid duplication of distributed items, to advocate for standardized kit content, and to prevent distribution of culturally inappropriate items. It is also important to coordinate with any national governance bodies, and to refer to national guidelines on MHM (if any).



Key decision-making staff across these sectors need to be aware and understand the importance of including menstrual hygiene in emergency programming. Advocacy and capacity building of staff across all sectors is an important preparedness activity and can also be built into longer-term programming.

**5. Don't assume women and girls know how to use pads: demonstration during distribution is important**

In all pilots, demonstration and information sessions were vital for the success and use of the MHM kits. There should be NO distribution without demonstration on use and care of sanitary materials.

Make sure you have a good understanding of what women and girls used to manage their periods before the emergency. Women and girls may prefer a certain type of pad but have no experience using it, or they may have incorrect knowledge. Never assume that women or girls already know how to use the items inside the MHM kits.

**6. Accountable, open communication before, during, and after distribution**

Continuous engagement and consultation with women, girls, men, and boys is critical to ensure the MHM response addresses their needs and challenges, is appropriate, and can adapt when needed.

Ensure that information on what is going to be distributed, to whom, when, why, and how the distribution process will work is communicated before, during, and after the actual distribution. Some 'consumable' items are quickly used up, such as soap and disposable pads. It is very important to be clear and up-front



A Uganda Red Cross volunteer demonstrates how to use and care for reusable sanitary pads during the distribution of MHM kits; Impevi refugee settlement, Uganda, 2017.

about any subsequent distributions that are planned (if any), or if the support is a one-off. If some women and girls are excluded from the distribution, ensure that you explain why and let them know where they may be able to access support (e.g. local health clinic or other agency).

It is important that women, girls, boys, and men have the opportunity to complain or provide feedback and that internal systems are in place to ensure that feedback is acted on and responded to. Set up a complaint and feedback mechanism and management system in the planning phase, before any distribution is done.

#### **7. Make the link with sexual and reproductive health and involve service providers**

Many discussions with women on MHM will inevitably bring up questions around pregnancy, sexually transmitted infections, intimate hygiene, and possibly sexual violence or genital mutilation.

Include a representative from the local health clinic or women's group (check that they are trusted by women and girls first) in the demonstration session to answer questions on preventing and treating vaginal infections, managing pain, and addressing misinformation or risky practices. In Bwagiriza refugee camp in Burundi, women with itching or infection would wash themselves with lemon juice. It was common to share razor blades between close family members and friends to shave pubic hair, especially just before menstruation. Having a trusted health worker to address these issues can improve knowledge and health, and raise awareness of the sexual and reproductive health services that are available.

Get to know who is working in SRH and SGBV, and include them in consultations, development of materials, and information sessions. Advocate for inclusion of MHM in SRH activities, either in the community or through local health facilities. Make sure that everyone who is involved in distribution or consulting with women and girls is briefed on protection issues and has up-to-date information on support services (health, PSS, policy, legal) that are available, including where they can safely refer a survivor of SGBV in case of a disclosure.

#### **8. Build the confidence and capacity of staff and volunteers in MHM**

It is vital that male and female staff and volunteers have the knowledge, confidence, and capacity to identify menstrual hygiene as an issue, advocate for inclusion of MHM in humanitarian operations, and to effectively implement MHM actions. Begin providing training and capacity building well before MHM activities are planned to be launched or implemented, for example as a preparedness activity.

MHM can be incorporated into longer-term programming in communities and schools, including opportunities for empowering women to develop locally made sanitary materials and improved WASH facilities for safe, private disposal of pads and wastewater.

#### **9. Integrate menstrual hygiene into existing emergency WASH (or health) programming**

Menstrual hygiene should be incorporated as a standard component of emergency WASH (and/or health) programming. MHM assessments, feedback

mechanisms, and hygiene promotion activities can be incorporated into existing or planned activities, making use of existing resources and not placing extra work on staff and volunteers.

Hygiene promotion volunteers (usually female) can engage and have a conversation with women and girls to identify their preferences, motivations, and barriers to improved menstrual hygiene. Sharing this information and working together with engineers and hardware teams can help to ensure 'female-friendly' WASH facilities.

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## References

International Federation of Red Cross and Red Crescent Societies (IFRC) (2016) 'International Federation of Red Cross and Red Crescent Societies Menstrual Hygiene Management (MHM) in Emergencies: Consolidated Report'. Available from: <[https://ifrcwatsanmissionassistant.files.wordpress.com/2018/10/menstrual-hygiene-management-in-emergencies\\_-consolidated-report-2016.pdf](https://ifrcwatsanmissionassistant.files.wordpress.com/2018/10/menstrual-hygiene-management-in-emergencies_-consolidated-report-2016.pdf)> [accessed 19 December 2017].

Sommer, M., Schmitt, M.L., Clatworthy, D., Bramucci, G., Wheeler, E. and Ratnayake, R. (2016) 'What is the scope for addressing menstrual hygiene management in complex humanitarian emergencies? A Global review', *Waterlines* 35:3, 245–64. Available from: <<http://www.developmentbookshelf.com/doi/pdf/10.3362/1756-3488.2016.024>> [accessed 19 December 2017].

VanLeeuwen, C. and Torondel, B. (2018) 'Improving menstrual hygiene management in emergency contexts: literature review of current perspectives', *International Journal of Women's Health* 10, 169–86. Available from: <<https://www.dovepress.com/improving-menstrual-hygiene-management-in-emergency-contexts-literatur-peer-reviewed-article-IJWH>> [accessed 7 May 2018].