

Keeping it simple: a gender-specific sanitation tool for emergencies

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Mainstreaming gender in an emergency water and sanitation (WatSan) response can be difficult as standard consultations and participation processes take too much time. To facilitate a rapid response that includes women's needs, a simple Gender and Sanitation Tool has been developed that can also be used by less experienced staff. The tool is a step-by-step guide on how to collect required data to define design parameters for sanitation facilities, based on ad hoc consultations with women who will be their users. In 2012 the tool was tested in South Sudan within the context of a Médecins Sans Frontières (MSF) emergency intervention. Using the tool allowed for a quick and easy way to consult women about the design of facilities and consequently, after construction, an increased usage of facilities was observed in the intervention group compared with a control group where the tool was not used.

Keywords: gender, sanitation, emergencies, disaster response, displaced population, refugees, women

MEETING WATER AND SANITATION (WATSAN) needs of displaced people in emergencies is a top priority in order to avoid outbreaks of diarrhoeal and other hygiene-related diseases. Gender-specific considerations are needed when developing and adapting WatSan facilities and services. Women specifically require more privacy than men, especially when dealing with their menstruation (Ngales, 2007; WaterAid, 2005; Crofts and Fisher, 2012), more space when taking care of children, and increased security to avoid gender-based violence (GBV).

There is no lack of guidance on how to design and build appropriate facilities for the users. Several international organizations have developed handbooks and manuals covering emergency interventions (Adams, 1999 (for Oxfam); ACF, 2005; UNICEF, 2005; UNHCR, 2007; IFRC, 2008; MSF, 2010) and other high-quality guidance books exist such as the WEDC publication *Excreta Disposal in Emergencies* (Harvey, 2007). Realistically, however, in an emergency there is limited time to

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Newly built latrines in a small IDP camp near Jacobabad, Pakistan 2010. There is little privacy, no cleaning organized and as a result they were not used. Thousands of these types of latrines were built in the Sindh and Baluchistan provinces after the flooding disaster. *Photos: Rink de Lange*

read a 200-page manual. Additionally, agencies often work with the staff they have or can hire in a short period of time, sometimes without any emergency WatSan experience. The pressure to complete activities in a short time, difficulties in finding qualified staff, and problems with funding or supply issues, can all result in what is frequently seen in emergencies: inadequate facilities set up, constructed without any input from the users, limited planning to clean or maintain the facilities, and inappropriate design for the needs of their users, especially women. Gender issues are regularly overlooked.

As sanitation programmes in emergencies fail, women and girls opt to go outside the camps or inhabited areas to defecate, wash themselves, and do other chores, such as washing clothes. In addition to the obvious sanitation and hygiene hazards, this takes up a lot of energy, affects their dignity, and puts them at much greater risk of GBV. Equally for men, their dignity is affected by having to use dirty or poorly constructed latrines and therefore they choose to defecate in the open.

What makes a WatSan intervention in an emergency successful? Setting appropriate priorities, acknowledging the true scale of the emergency, responding quickly, meeting minimum standards, and having good communication with the users are essential to a successful intervention. However, in an emergency there is little opportunity to carry out a full participatory consultation process. Skipping this step entirely is also not an option, as this input in programme design is essential to success. Current guidelines offer little information on how to include women in the planning, design, and management of the WatSan programmes, considering the limited time and resources available in an emergency.

The Gender & Sanitation Tool

To address this issue, an eight-page, step-by-step tool was developed that incorporates guidance to conduct very basic but essential consultations with users of the

facilities. It combines technical guidance from existing manuals and guidebooks with common sense instructions on how to collect relevant data through an interview process that will help shape an emergency WatSan intervention, with a focus on gender-sensitive sanitation facilities. It reduces the risk of building facilities that will not be used because they are inappropriate. This approach provides even the less experienced WatSan practitioners with enough guidance to rapidly implement a successful WatSan intervention.

The Gender & Sanitation Tool (G&ST) is focused on the needs of women. The rationale is that they are the principal users of sanitation facilities, as it is mostly women who assist children or sick family members to use the facilities. Moreover, they also have to manage their menstruation, do laundry, and wash dishes and small children. Often, it is the women who are cleaning the latrines as well. They are most at risk of GBV and benefit most from increased security at hygiene facilities. Also, if the facilities are used by women, and appreciated by women, then it is likely that the men in the population would appreciate similar facilities.

The eight-page tool is divided into four sections:

1. Before anything else

In this section immediate action points and priorities are discussed, such as coordination with other actors and the need to hire a female assistant/translator.

2. Initial choices

In the second step some basic choices need to be made, such as: is it possible to realize family latrines or showers? In general, family latrines and showers are the preferred option over community facilities, but that is not always appropriate in emergencies as it takes more materials and time to get a construction programme going, it is more difficult to control quality and drainage around pits, and there needs to be special support for vulnerable people as they may not be able to construct their own latrine or shower. Another option would be to have two to four pre-assigned families share one latrine and/or shower. If that is also not an option, communal facilities will be required.

3. First phase

This section addresses the collection of the minimum data required and the order in which it should be collected. This includes basic data about population, location, soil conditions, preferred building techniques, and preferences and habitual behaviour of the target population. Furthermore it provides guidance on how to find and consult the community leaders and women in the target population. Three checklists with questions are included in this section of the tool. In this phase, site data collection and mapping is included.

4. Second phase

The section guides the WatSan practitioner through the actual design of the facilities and how to verify whether the chosen design will actually address the needs of the future users. It includes a checklist on design parameters that can also be used as an accountability/reporting tool. In this phase correct numbers of facilities will have been calculated and materials ordered. This phase also includes the training of a construction team and planning a cleaning and maintenance schedule. Design details should be established, such as locks on doors, types of walls, and whether additional water points need to be constructed.

Using and testing the Gender & Sanitation Tool in Jamam, South Sudan

The tool was tested in a refugee camp in Jamam, Maban County, South Sudan in July and August 2012. The refugee camp was established in December 2011 and housed around 37,000 refugees by March 2012 (UNHCR, 2012). A new wave of an estimated 35,000 refugees arrived in May and June in the same area, all of whom required the full services of the agencies – food, water and sanitation, shelter, and medical care – while in transit to a new refugee camp. The Jamam area was unsuitable for a refugee camp, primarily because of the inability to provide sufficient drinking water. Parts of the camp flooded between June and August and soil conditions made it difficult to provide adequate sanitation. Water and sanitation actors were not able to meet basic SPHERE standards (The Sphere Project, 2011) until October 2012. The crude mortality rates in the camp only dropped below the emergency threshold in August when part of the camp was moved to a new site (Tiller and Healy, 2013). Although the influx of refugees was the result of an ongoing conflict in the Blue Nile state just across the border in Sudan, there were no security issues hampering the emergency response in Maban. But the remoteness and inaccessibility of the area, especially in the rainy season, left the actors struggling to get supplies in and forced the World Food Programme to supply food to the camps by airdrops.

Research strategy and methods

The research strategy followed was that of ‘action research’ (Denscombe, 2010: 125–36).

The primary objective of our research was to determine whether the use of the Gender & Sanitation Tool prior to the construction of facilities would increase the uptake of sanitation facilities by women and children in the refugee population in Jamam.

Secondary objectives of the research were:

- to determine the feasibility of use of a G&ST in emergency settings in terms of time, money, and expertise of staff required;
- to compare the satisfaction level of users in the intervention group versus the control group; and
- to determine impact of the G&ST on cases of diarrhoea.

As such, the research was developed as a means to solve a practical problem and produce guidelines for best practice.

An intervention and a control group were identified. In the control group an MSF WatSan practitioner had implemented a latrine programme in two villages that were part of the refugee camp. Sixty-nine latrines were built using standard MSF procedure for a population of about 1,800 people. This group functioned as the control group. The intervention group was represented by a population of about 3,300 people from six other villages in the camp where already existing emergency latrines needed to be replaced with 147 new latrines using the Gender & Sanitation Tool.

Experiences of using the tool were recorded on forms and in a researcher's diary to allow for future improvements. Usage and satisfaction levels regarding facilities were compared between the two study groups. For two and a half weeks, monitors counted the usage in female-designated latrines in both the intervention and control group to measure the uptake of latrines over a set time period daily. Observations recorded visits by women and children over the age of five years to the female-designated latrines. It was difficult for the observers to determine if a child was male or female. Therefore children between 5 and 12 were recorded by age and not as boys and girls. Assumptions in calculating the usage rates were that children under five years did not use the latrines, and that children between the ages of 5 and 12 years would use both male and female latrines equally. Therefore the target usage group for the women's latrines consisted of females aged over five years. Separate focus group discussions (FGDs) with women and with men in the control and intervention groups were held to gauge satisfaction levels. To measure a potential epidemiological impact of using the tool, clinic staff collected data on the number of diarrhoea cases presenting to the MSF health facilities from each of the control and intervention groups.

The study protocol was approved by the MSF Ethics Review Board.

Results

Following guidance from the tool, seven ad hoc consultations were held in intervention villages to determine how women prefer to use latrines, showers, manage menstrual hygiene, and wash their laundry. The first women's group involved MSF kitchen staff living in the refugee camp. Camp leaders, namely the village Sheiks, were then consulted to facilitate further consultations with small groups of women who were approached in the intervention area. In order to access the women, it was necessary for an international staff member to hold simultaneous talks with the men, while his assistant and a female translator would hold the consultation with the women only. Checklists with questions, included in the tool, were used to gather the information on needs and habitual behaviours around sanitation issues.

Table 1 summarizes the household, gender, and age group make up of the control and intervention villages.

Table 1 Latrines in the study groups

<i>Group</i>	<i>Number of households</i>	<i>Total population</i>	<i>Female population > 5 years</i>	<i>Total latrines</i>	<i>Female designated latrines</i>	<i>Number of females > 5 years per latrine</i>
Intervention	820	3,325	1,396	147	73	19
Control	374	1,754	737	68	32	23

Uptake of usage

The uptake of usage of the latrines was calculated in the control and intervention groups. Observations of female-designated latrines started on average at 6.45 a.m. and lasted till 11.00 a.m. There was very little difference in the number of visits observed per latrine in each group: 13.2 visits/latrine per observation period in the control group versus 13.5 in the intervention group. But as each female-designated latrine in the control group had to be shared among 23 females over the age of five years versus 19 in the intervention group, there was actually almost a 25 per cent increase in usage in the intervention group, calculated as usage per woman. The number of visits per latrine per observation period per females over the age of five years in the control group was 0.57 versus 0.71 in the intervention group ($p < 0.001$) as shown in Table 2.

Table 2 Observed visits by females > 5 years old to female-designated latrines

<i>Group</i>	<i>Observation periods</i>	<i>Number of visits</i>	<i>Visits per female > 5 years per latrine per observation period</i>
Intervention	66	888	0.71
Control	58	763	0.57

A limitation is that the population data for the intervention and control groups was difficult to verify and the real difference in uptake of latrine usage may be different from what was demonstrated. The population numbers in Table 1 are based on registration data from UNHCR and ACTED (camp management), and on population counts by MSF. It could be argued that the lesser availability of latrines in the control group could also have had a negative effect on the uptake in this group, but the average availability of a latrine per user in the control group was every 19 minutes versus 18 minutes in the intervention group, making this unlikely.

User satisfaction

There was a significant improvement in user satisfaction with the 147 new latrines that replaced the old ones in the intervention group. There were more of them, they now had doors with locks, a roof, and were easier to clean than the old latrines. Through four FGDs, two in each group (women and men separately), it was clear that both types of latrines were appreciated and the quality was considered good. All

toilets in the intervention group had locks, but none of the latrines in the control group had locks. The lack of locks in the control group was considered a problem. Also men pointed out the importance of privacy: 'You go inside, lock the door and be comfortable'.

Cleaning latrines and filling up hand washing buckets was done by unpaid users according to a cleaning schedule via a programme supported by another organization. This worked well in both groups, as only nine of the 124 observations noted a dirty latrine first thing in the morning, and only six by the end of the morning. Hand washing buckets were usually filled up when latrines were cleaned and most people washed their hands after latrine use when water was available in the bucket. Of all people using the latrines in the control group, 78 per cent washed their hands after use, versus 62 per cent in the intervention group. As for showers, there were complaints about the limited number of showers available, and the plastic sheeting distributed to each family to make showers was often used for other purposes, aggravating the issues around washing and drying menstrual cloths. Other complaints related to sanitation included the lack of torches and an insufficient number of wash basins available to them. People were using the same basin for washing dishes, washing laundry, and washing small children.

Epidemiological impact

To measure the potential epidemiological impact of the use of the tool for the design and construction of the facilities, clinic staff maintained line lists for all cases of watery and bloody diarrhoea that sought consultation at MSF's clinics in Jamam during the period 28 August to 4 October. These line lists included the village of residence of reported cases so we could identify which patients were residing in the control and intervention villages. Additionally, as part of MSF's routine disease surveillance activities in Jamam, we collected weekly consultation data (from all villages) for watery and bloody diarrhoea.

Limited surveillance data made a proper comparison between the two study groups unreliable. In the intervention group, the incidence of diagnosed diarrhoea cases decreased from 11.4/1,000 population/week in the two weeks prior to the completion of the last latrines, to 7.9 in the two weeks thereafter. The incidence of diarrhoea in the entire camp had already stabilized a few weeks earlier in week 34 and hovered between five and six cases/1,000/week (see Figure 1). Incidence in the control group was already low with 3.8 and 4.8 cases/1,000/week, respectively, over the same two calendar periods as in the intervention group. The lack of difference between the two groups, despite the increased usage by women and children, could indicate the importance of simply having facilities of a decent quality and a good cleaning programme. Although both groups benefited from the same health promotion activities, hand washing was observed more in the control group than in the intervention group. This finding is particularly interesting given the importance of hand hygiene; however, we were not able to evaluate the reasons for the difference. This is an area for future study.

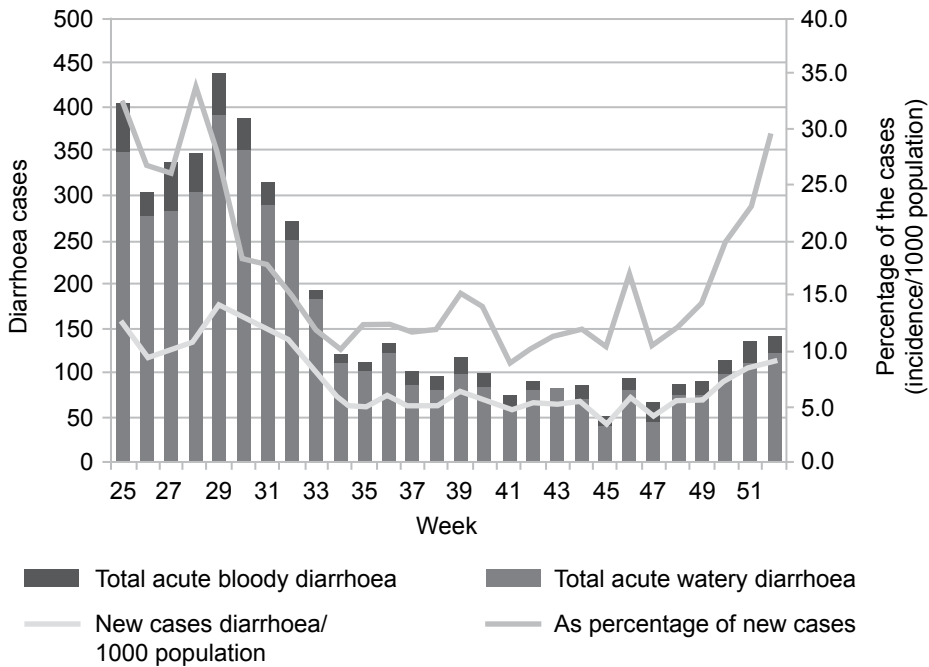


Figure 1 Diagnosed diarrhoea cases in Jamam from June to December 2012

Feasibility of the tool

Using the tool was a quick and easy way to gather design criteria for the facilities. Once a female translator was identified, it took one expatriate staff and two regional staff one afternoon to consult with six small groups of women and have simultaneous talks with men. Ambiguities in the results of those consultations were easily addressed by going back and asking for clarification. After ad hoc consultations with groups of women, it was determined to cancel the plans for a menstrual cloth washing station once it was clear that the women wouldn't use it. While checking the design of the cloth washing stations with a group of female local staff (the MSF kitchen staff, also living in the refugee camp) it came to light that the women will only wash a menstrual cloth in absolute privacy, so women would choose to wash the cloths in a shower rather than in a cloth washing station. Surprisingly, there were no issues consulting small groups of females as a male WatSan practitioner. However, the presence of the female translator was essential and it was important that the questions were asked in a straightforward and professional manner. It is also worth noting that women were not asked to share their own experiences but rather to give advice on how they would like to see the facilities designed. Particularly in the case of sensitive issues such as gender-based violence, this may have been a reason why it was possible for a male WatSan practitioner from another culture to consult the groups.

In reviewing the results of the intervention, we recognized that the issue of excreta disposal for under-fives was not adequately addressed in the tool. This led to the inclusion in the tool of specific questions and recommendations on the disposal of small children's faeces.

Not all issues identified while using the tool were resolved. In all consultations with women, the issue came up of having no torch to go to the latrine at night, but was never resolved. Interestingly, the desire for lighting was not linked to a risk of GBV but rather to the fear of stepping on a snake in the dark.

Eventually, 147 latrines were built in the intervention group that had slightly higher material costs (7.5 per cent) per latrine than the 68 latrines in the control group, but total costs per latrine were lower as labour and transport costs were lower. Using the tool had no influence on the speed of construction, as supply issues in this particular emergency were the main determining factor.

Conclusion and recommendations

Usage of the facilities by women in the intervention group, where the tool was used, was 25 per cent higher than in the control group. The G&ST allowed the WatSan team to collect essential data easily and rapidly to guide the building of gender-sensitive sanitation facilities in an emergency situation. The resulting facilities were reported by the community to be appropriate and an improvement over those built without any consultation. No link could be established between using the tool and the incidence of diarrhoea. WatSan practitioners in South Sudan found the tool easy to use, and the checklists helpful in the consultation process. Importantly the tool did not cause delays in the intervention and had no obvious negative effect on cost. The generic design easily allows for use in other emergencies with a displaced population. Based on the trial of the tool in South Sudan, revisions have been implemented in the current version (December 2013). The research also revealed some gaps in the provision of standard non-food items, namely torches and sufficient wash basins.

This is the first time that a gender-specific water and sanitation tool, developed for use in emergencies, has been tested. More experience with the tool is needed in a variety of emergency settings to document and share the experiences in order to make further improvements.

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Website

The MSF Gender & Sanitation Tool: <<http://fieldresearch.msf.org/msf/handle/10144/311201>>