

# **WASH and gender in HCF: The uncharted territory**

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## **Abstract**

Health care facilities in low- and middle-income countries are “high risk” settings and pose special challenges to achieving sustainable water, sanitation and hygiene (WASH) services. Applied research conducted in India and Uganda analysed six dimensions of WASH services provision in selected health care facilities: hygiene and health, security and safety, privacy, accessibility, comfort and menstrual hygiene management. Findings underline the low priority accorded to WASH facilities and services, e.g. missing or defunct hand washing stations, the lack of MHM materials and the means for their safe disposal as well as of basic functions, such as 24/7 water supplies and regular emptying of septic tanks. The complexity of basic WASH services, which require robust infrastructure and regular operation and maintenance, calls for more holistic WASH services monitoring and evaluation in health care facilities. An effective monitoring strategy would combine gender-sensitive WASH infrastructure evaluations, using state-of-the-art mobile phone based assessment spot-checks and data gathering tools that include Semi Structured Interviews and the participatory Gender Action Learning System (GALS). Both of these are highly effective in assessments of WASH services and facilities from user and provider perspectives.

# 1 Introduction

The topic of water, sanitation, solid waste and hygiene (WASH) in health care facilities (HCF) in low and middle income countries has gone unnoticed for a long time. WASH facilities in HCF in developing countries fail to provide user friendly and gender sensitive services. A first comprehensive WHO report estimated that 38% of HCF in low and middle income countries lack access to an improved water supply within 500 meters of their premises. Lack of sanitation is encountered in 19% of HCF and 35% do not have water and soap for handwashing and that 15% of all patients develop an infection during their stay in a HCF (WHO & Unicef, 2015). Health care related infections can be as high as 19%, meaning that two out of five patients in low- and middle-income countries develop an infection during a health care facility stay. It is assumed that many of these infections can be related to the lack of hygiene, hand hygiene in particular and inadequate water supply and sanitation (WHO, 2011; Allegranzi, 2011).

Poor WASH service provision disproportionately affects women and girls due to biological and cultural factors. Inadequate, or poorly administered WASH services may increase women's burden of work and lead to negative health impacts, e.g. maternal mortality rates and reproductive health (Fewtrell et al, 2005; Prüss et al, 2002 & 2008; Murray & Lopez, 1996). In addition to the health aspect, women are confronted with gender-specific social norms, e.g. taboos, which often hinder proper hygienic habits during menstruation and therefore not only affect women's health but also challenge their dignity. Also within the realm of WASH, the aspect of menstrual hygiene has been identified as one of the most neglected (Mahon & Fernandes, 2010; WSSCC 2014) and women's specific requirements regarding sanitary facilities. These are hardly ever addressed by policy makers (de Albuquerque 2012). Although there is an increasing awareness of the problem (Brocklehurst & Bartram, 2010; Kirk & Sommer, 2006), further action and implementation are often hindered because of the sensitive nature of the issue. However, gender concerns are rarely addressed, as societal barriers often restrict women's involvement in decisions regarding sanitation and hygiene-related projects (COHRE et al. 2008).

Vulnerable groups such as disabled persons, elderly people, small children and pregnant women, have to overcome particular challenges, when using WASH facilities. Studies showed, that improved access to safe water and sanitation are clearly associated with decreased maternal mortality (Ali et al, 2006; Benova et al, 2014; Esrey et al, 1991; Cairncross et al, 2010; Shordt et al., 2012; and WHO, 2013). Gender equality, and availability of water and sanitation were identified as the two most important determinants of maternal health in a study by Hunt & Bueno de Mesquita (2010). Most work has focused on

gender and WASH on the household level, but WASH services are especially important to consider at public HCF.

Generally there is a lack of evidence about the WASH infrastructure in public HCF in low-income countries. While it is clear that the situation in these settings is insufficient, there is hardly any detailed and gender-disaggregated data on the issue. Specifically there is a lack of solid evidence about existing shortcomings, about the needs of different user groups and about possible negative impacts of poor infrastructure on the health situation on the ground (Cheng et al., 2012). There is a pressing need to integrate a gender perspective into the efforts to promote safe and sustainable sanitation in the context of HCF in middle and low-income countries, as there are different risks associated with different gender. This is all the more important as water and sanitation access in HCF is proposed as one of the indicators for measuring progress in the post-2015 Sustainable Development Goals, the Agenda 2030.

This study therefore seeks to address the gender gap in needs-based sanitation research, by looking at the socio-cultural as well as the hygiene and sanitation issues during menstruation and childbirth among women, but also to provide evidence for results that are both technically appropriate and socially acceptable for both women and men. To achieve this our research addresses the following research questions:

What are the shortcomings of existing WASH facilities in health centres and what are the needs of specific user groups with regards to WASH infrastructure in order to achieve “genderised” sanitation?

## **2 Methods**

The hypothesis stated above were tested in HCF in India and Uganda for a country comparative study. In each country a district and a sub-district HCF in two different districts each, were selected. In India the districts Osmanabad and Beed in the state of Maharashtra were selected. These districts have rural characters and face long periods of drought in summer (Swedish Agency for Growth Policy Analysis, 2013). In Uganda the rural district of Buikwe and Kayunga were selected, also facing the absence of water supply during the dry season, when rainwater harvesting is not possible. (Zikusooka et al, 2009).

The HCF needed to fulfil the following criteria for selection: Enough men and women present during any given day to conduct a Gender Action Learning System (GALS) workshop, a maternal ward, inpatient facilities, a HCF run by the government.

The selected HCF were assessed for the different aspects of WASH (Water, Sanitation and Hygiene) and within six dimensions: Hygiene and health, security and safety, privacy, accessibility, comfort and menstrual hygiene management (MHM).

The following user groups were identified beforehand and integrated into the study: Outpatients, inpatients, attendants, medical staff, cleaning personnel and managers and administrators, all both female and male. Special focus was put on vulnerable groups, such as menstruating woman, pregnant women and women in childbed.

Three different methods were select for the assessment of WASH in HCF and its user perception in order to triangulate the data. The three methods are the GALS method, Semi Structured Interviews (SSIs) and an infrastructure spot-check which are all described in more detail below. The GALS method and the SSIs were used to assess the WASH user and WASH provider perspective, as well as the WASH software in general. The infrastructure spot-check was used to compare user perception to the available WASH infrastructure in the HCFs, by assessing the WASH hardware.

GALS is a focus group discussion method, originally used for gender justice in relation to livelihood improvement (Mayoux 2010). GALS promotes the collection of gender disaggregated data and gender mixed plenary discussions, as well as the identification of sensitive topics. The two core elements of GALS are the “Gender Diamond” and the “Action Trees”, integrating a gender perspective by separating female and male groups and gender mixed plenum discussions. The purpose of this first step, the “Gender Diamond” exercise, is to identify the challenges faced by the participants in connection with their experiences on a given certain topic (e.g. WASH issues in the presented case). The goal of the second step, the male and female “Action trees”, is to identify the causes, or roots of the tree, of the named problems which are the trunk of the tree, from the “Gender diamond” and to find possible solutions, the branches and fruits of the tree, to address and solve them. The “Action Trees” are the final products of the GALS exercise and present the basis for an action plan (Kohler 2013).

GALS was adapted to the realm of gender and sanitation in HCF settings and conducted with inpatients and their attendants capturing their specific experiences, needs and priorities in connection with WASH services in the selected four HCF.

In each of the two Indian hospitals one GALS was conducted with a total number of 50 participants, 28 female and 22 male. In each of the two Ugandan hospitals two GALS, with a total number of 40 participants, 20 female and 20 male were undertaken. The time to conduct a GALS varied from four to six hours per session.

For each of the six identified user groups a different type of question guide was developed addressing WASH aspects as well as topics around menstrual hygiene management, pregnancy and childbed. In each of the four hospitals 18 SSIs were conducted, leading to a total of 72 SSIs for both countries. The time to conduct a SSI varied from 30-60 min. For non-staff user groups, interviews with males and females were conducted for gender comparisons.

The answers were noted down on the spot and audio recorded for completion. Where English was not the spoken language, the interviews were translated from the local language to English. The qualitative data collected in the interviews was analysed using the Atlas.ti 7 software.

In order to assess WASH infrastructure and services in selected HCF, an infrastructure spot-check was conducted. This was done for two reasons, first to triangulate the user perception data collected with GALS and the SSIs and second to develop and test a novel and more adequate set of indicators for WASH infrastructure and services in HCF.

First, previous assessment tools for service provision in HCF and their WASH related questions and indicators used were identified, namely the Service Availability and Readiness Assessment (SARA) by WHO, the Service Provision Assessment (SPA) by USAID and the Service Delivery Indicators (SDI) by the World Bank, as well as the WASH in HCF core indicators (WHO, 2016). The identified assessment tools were undergone a shortcoming analysis with regards to the assessment of WASH infrastructure and services in HCF. This was done through first field visits in India and Uganda, in order to check if these indicators are suited to reproduce reality. Out of this desk based assessment, a technical assessment was then created and field tested in four selected HCF in India and Uganda. In a second phase, the assessment was calibrated by further testing it in 19 HCF in Kavrepalanchok District of Nepal. While in India and Uganda printed versions of the assessments were used, filled out with a pen, a mobile phone based assessment using KoboToolbox was used for Nepal.

### **3 Results**

In this section the results of the three different assessment tools will be presented. Firstly, the results from the Gender Action Learning System (GALS) workshops. The “Gender Diamond” on common challenges in the two HCFs in India with inpatients and attendants indicated that they feel unsafe in the toilets and bathrooms, that soap is not available, the hospital environment is unclean (i.e. open defecation) and that Menstrual Hygiene Management is

problematic as there are no buckets for disposal, no place for changing, washing and drying of reusable sanitary material. Proposed solutions from the “Action Tree” of the male participants were to recruit more cleaning staff and provide awareness training for patients and their attendants. The female participants claimed the provision of Information, Education, Communication (IEC) around MHM and menstruation.

The results from Uganda showed that inpatients and attendants suffered from the dirtiness of the sanitary facilities, lack of water, missing hand washing facilities and non-existing lights. MHM matters were also stated as being challenging, as in India. The male participants proposed to demand for self-involvement in cleaning, fundraising from patients and other stakeholders, a suggestion box for complaints and for sensitization on MHM. The female participants suggested to have the toilets emptied, to integrate ventilation, the provision of public toilets to evade the bottleneck in the hospital and to provide containers for MHM material disposal.

GALS results from both countries indicated that the most burning issues for the patients and attendants were the lacking and dysfunctional sanitary facilities and missing sensitization on hygienic behaviour.

Secondly, the results from the Semi Structured Interviews (SSI). As the presentation of the overall results from both countries in all four HCFs on all aspects of WASH would lead too far in given format, following portrayal concentrates on gender specifics around Menstrual Hygiene Management, addressing aspects of comfort, support, products and needs. Further, beliefs, myths, restrictions and taboos around menstruation in general and in the setting of HCFs as well as answers on support of immobile female patients are presented here.

In both countries none of the menstruating respondents felt comfortable during their hospital stay, indicating that a lot more needs to be done in supporting those women, namely an upgrading of the facility's infrastructure and -services, the provision of MHM material and medical support against bodily discomforts. The perception of support around MHM matters differs here between two different groups of respondents: Patients experiencing menstruation during their stay in the hospital feel a need for increased support whereas medical staff members as providers think they do already enough.

Inappropriate disposal of menstrual hygiene products, like dumping into toilets and throwing out of windows, creates a lot of discomfort among all the user groups in all of the selected hospitals. Although in many locations there are waste bins provided and reachable, their usage seems to be unclear or is being ignored, stemming also from cultural beliefs on menstrual blood about which craft (Uganda) and conceptions of impureness and purity (India).

Especially in India different spheres of the home seem to be loaded with different types of restrictions and rules for menstruating women on where to stay and sleep, what and who to touch and what food products to prepare and consume. The strongest mentioned restriction is linked with religious beliefs and forbids the menstruating females the worshipping of God and going into temples. The notions from Uganda showed that there are less beliefs, myths, and restrictions around menstruation. The knowledge on menstruation matters also differs between women and men, in both countries. Many male respondents stated not to know much about women experiencing menstruation or were shy or embarrassed to talk about those matters.

It was quoted from individuals of different groups that the hospitals offer quite a range in assisting immobile patients during pregnancy and childbed in using toilets and in bathing. Not only midwives and nurses are involved hereby, also strong support from the attendants is necessary and requested. Their roles as care givers seem to go without saying because of their responsibility for family members.

Thirdly, the results from the infrastructure spot-check verified the user perception assessed with GALS and SSIs. A review of the assessment tools for service provision in HCF and their WASH related questions, showed that WASH remains a neglected topic and the indicators used are outdated. The SARA by WHO covers questions on the water source, the type of toilet, solid waste management, including infectious and sharps waste, as well as hygiene,

The correspondent questions on water and sanitation are based on the Millennium Development Goals (MDGs) for households. The Service Provision Assessment (SPA) by USAID and the Service Delivery Indicators (SDI) by the World Bank are both partly based on the SARA and include these same questions. The three main shortcomings of the previous assessments that were identified are that there is no gender disaggregated and specific data, the complexity of WASH in HCF is not adequately assessed and attendants are not recognised as a user group.

## **4 Analysis**

GALS is of qualitative character, and apart from its gender sensitivity, a striking method when it comes to the discussion of topics which are unusual, sensitive or taboo, as shown when addressing sanitary habits or topics around MHM among women and men in a hospital setting.

As shown from the heterogeneous groups of patients and attendants, it offers the involvement of persons with different personalities, skills and knowledge and supports social

exchange among the participants. Personal experiences are validated and awareness-raising on existing needs is created, like the need for sensitization on MHM as a main outcome for both countries, men and women alike.

GALSs focus lies not only on the encountered challenges themselves, but on problem solving strategies of the respondents which can be used as action plan for further steps in planning, designing and implementing for better WASH in HCF.

The results from the qualitative data gathering tool SSIs showed that, although asked the same set of questions, the perceptions of challenges and needs in given hospital settings differ for the different user groups.

The SSI as a qualitative method is strong in exploring particular themes and responses further and in more detail, as showed in given reasons behind incorrect disposal of sanitary material which are also linked to cultural beliefs about menstrual blood.

The two-way dialogue between the interviewee and the respondent allows for addressing sensitive topics like menstruation which, especially in India, pervades many aspects of the lives of men and women. Although it was assured for female and male interviewees, gender gaps in the knowledge and communication along menstruation matters still leave the topic as an unpleasant mystery.

The SSIs confirm data assessed by other assessment tools, like the fact that attendants are also involved in taking care after the sanitary needs of immobile female patients, once more pointing to their important roles as care givers.

There are no indicators to measure gender specific needs and data is not collected with disaggregation for gender. Especially a measurement for menstrual hygiene management is missing in each assessment, e.g a private place with running water and a waste bin.

The complexity of WASH infrastructure in HCF is not reflected in the current assessments. Often, more than one sanitation system and a variety of water sources are in service in the same HCF, varying according to the time of day, seasonal conditions and the composition of user groups. The following WASH dimensions are not covered by the previously mentioned assessments: Water availability, water quality, water quantity, sanitation for gender, sanitation for people with reduced mobility, sanitation greywater and stormwater, as well as handwashing to name a few. Furthermore the WASH indicators are measured in a binary form only, i.e. either there is an improved sanitary facility or there is not, instead of a ladder approach, where incremental improvements are possible and can be measured.

Infrastructure requirements of attendants are neglected. Attendants are visitors who fulfil the role of patient care-takers, due to the fact that the overstretched medical staff are not able to handle basic services for all patients. Attendants provide WASH services such as drinking water provision, cooking, helping during defecation and medical procedures.

## 5 Discussion

The Agenda 2030 Goals which aim for safely managed universal coverage in WASH everywhere, with special attention to the needs of women and girls, set out ambitious targets for improving WASH in health care facilities. These facilities are “high risk” settings and pose special challenges for achieving the WASH goal, but also the universal health goal #3. This research complements previous studies and reviews of WASH in HCF in low-resource settings and underlines the low rate of service coverage found (UNICEF/WHO, 2015; GLAAS, 2014). Our findings provide evidence of needs-based, gender sensitive and technically appropriate solutions to improving WASH in HCF. Specifically, this entails:

- **The inclusion of attendants as a user group**, when planning for WASH services in HCF. The role of attendants as users and providers of WASH services can be examined by counting them in the HCFs and including them as regular WASH service users. However, more research needs to be conducted to determine their exact role, responsibilities and status in various HCF settings.
- **The collection of gender specific and gender disaggregated** data through appropriate monitoring tools and methods. For facilities providing inpatient services, the capturing of gender disaggregated data on WASH services can be conducted on a ward by ward assessment, as wards usually are gender segregated.
- **Taking into account the complexity of WASH services in HCF** both from a WASH user and a WASH provider perspective. This means moving beyond a merely infrastructure focused assessment towards a holistic service evaluation. For example, even an improved water source will not provide any service if it is unavailable throughout the year, be it due to lack of proper operation and maintenance or seasonal challenges. By opening the questions asked on WASH a more accurate picture of the on ground situation can be drawn.
- **The selection of appropriate methods for data collection.** Each of the three data gathering tools (infrastructure spot-check, Gender Action Learning System (GALS) and Semi Structured Interviews (SSIs) has its specific strengths and limitations. Novel tools like GALS are qualitative and dynamic and adaptable for different uses and topics and ideal for starting action at a grass roots level. It would be worthwhile to

further explore how GALs could be integrated into existing Project Cycle Management tools used by development actors and national ministries.

- **The need for improved policies and strategies on WASH in HCF**, as existing policies on water and sanitation are weak and heavily centralized. Existing strategies and national standards neglect operation and maintenance (O & M) of facilities, MHM facilities and key software aspects like awareness raising, communication, sensitization and education on a regular basis between different users, providers and the management of existing facilities and the involvement of communities. Given the Agenda 2030 Goals, it is pivotal to prioritize WASH infrastructure in health care facilities in order to provide robust services, especially for the underserved and the most vulnerable.

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