

# COPING STRATEGIES TO DEAL WITH INADEQUATE WASH FACILITIES AND RELATED HEALTH RISKS

The SHARE Research Consortium and the Water Supply and Sanitation Collaborative Council (WSSCC) formed a research partnership in 2013 to investigate the specific impact of inadequate access to water, sanitation and hygiene (WASH) facilities on women and girls in India and Bangladesh.

Women and girls are particularly disadvantaged as a result of multiple sociocultural and economic factors that deny them equal rights with men. Millions of women today are denied access or lack the facilities and means to manage the simple biological necessities of defecation and menstruation, and are often forced to adopt a range of coping strategies.

This partnership supports four studies which focus on:

- Specific WASH needs of women and the deleterious impact of coping strategies in Vadu, Maharashtra
- Hygiene in maternity wards in Gujarat and Dhaka
- Social and psychological impact of limited access to sanitation, the link between menstrual hygiene practices and reproductive tract infections, and between WASH practices and pregnancy outcomes in Bhubhaneshwar and Rourkela, Odisha
- Links between the psycho-social stress women face of where to relieve themselves and wider structural inequalities in Pune, Maharashtra and Jaipur, Rajasthan.

All four studies converge on the lack of safe and acceptable choices for women and girls. Links between unsafe sanitation and women and girls' poor health in terms of stress and infections are raised and major evidence gaps are highlighted. The higher incidence of reproductive tract infections linked to poor menstrual hygiene management under socioeconomically deprived groups is striking. Also remarkable is the lack of WASH facilities accessible by pregnant women.

This partnership brings together the expertise of the SHARE Research Consortium in delivering rigorous research relating to key challenges in the sanitation sector with WSSCC's networks and experience in linking policy and practice in developing countries for the realization of the human right to water and sanitation.

While the primary aim of this collaboration is to raise important questions that have not been given sufficient attention, it also aims to catalyze changes in public policy in order to see the rights of Indian women and girls realized.

## OUTLINE OF RESEARCH QUESTIONS

Sanitation responds to the most basic of human needs. Different factors influence the use of sanitation installations, including their availability, social and cultural norms, and user experience. Limited access to water and sanitation (WASH) facilities is likely to result in stress. Other sources of stress in under-served communities, especially the threat of violence and the fear of victimization, may in turn limit access even where facilities are available. Cultural values can make women particularly vulnerable to limitations of WASH-related resources and further amplify stress arising from limited resources. The links between stress and WASH are not well studied however. WASH-related research topics are more likely to focus on engineering challenges, material needs (toilets and latrines), economic constraints and environmental issues than the impact of culture, gender and stress on community experience, priorities and behaviour. In the past, sanitation programmes have been accused of failing to adequately consider such issues. Research is also needed to clarify the relative influence and interrelationship of stress, resources and motivation with regard to WASH, and ways of coping with such stress. Disregard for needed privacy of adolescent girls and

unmet demand for menstruation hygiene also remain barriers to their education, but the combined impact of limited knowledge and limited facilities pose challenges that require study. In health facilities offering antenatal care and institutional deliveries, improved sanitary conditions are not universally available, which might be health hazards and reduce the appeal of such health facilities.

The study focused on the perceived adequacy of WASH-related resources, stress from inadequate resources and access, and the experience, practice and materials for menstrual hygiene. We identified specific needs while recognizing the enhanced burden on women arising from gender-based cultural values concerning modesty, reluctance to acknowledge bodily functions, and culturally based ideas of cleanliness, purity and pollution. Coping strategies to deal with inadequate WASH facilities were studied, with particular attention to strategies that result in unintentional self-harm. Thus, the study identified local conditions, priorities and needs, and provides essential information to guide development that is sensitive to WASH-related priorities for women.

## APPROACH AND METHODOLOGY

The study focuses on the population covered by the Health and Demographic Surveillance System (HDSS) of Vadu, near Pune in Maharashtra state, an area that is comparatively well developed. Over 100,000 individuals, spread over 22 villages, have been regularly monitored by the HDSS surveys since 2002. The census lists, research infrastructure and staff of the HDSS were used to implement this study.

The mixed-methods approach to data collection among women included focus group discussions (FGDs), key informant interviews (KIIs) and a community survey. A facility infrastructure survey and free listing of priorities complemented the data collection approach. The community survey clarified the range and distribution of rural women's experiences while the FGDs provided a platform to women to elaborate on the nature, range and impact of stressors, including

stress that limits use of available WASH-related resources, stress arising from access constraints, and coping strategies. During key informant interviews, the priorities, needs and related activities of community leaders and interest groups, both women and men, were identified. The facility survey mapped sanitation conditions in health facilities that offer perinatal care and institutional deliveries.

The final dataset included information from 308 questionnaires filled in by randomly selected women (165 adolescent girls aged 13-18 years and 143 women aged 19-35 years), nine FGDs (three with adolescent girls; 2 with each young adult women, older adult women and seasonal migrant women workers), and 21 KIIs (10 with community leaders; six with school teachers; five with health care providers) and 49 free lists by women and adolescent girls. The health facility survey included six private and six governmental institutions.

## KEY FINDINGS

Nine percent of study households and most seasonal migrant women workers lacked access to toilet facilities at household level. Among residents, illiteracy was a predictor for open defecation. Public places such as markets and transportation hubs often lack adequate sanitation facilities. The major problems reported by women who used latrines was unavailability of water (14%), inadequate lighting (10%), a long waiting time (4%) and unclean toilets (3%). In contrast, the major problems reported by open defecators were uncleanliness (46%), unavailability of water (42%), feeling unsafe (23%) and the defecation sites being too far (19%). Ninety four percent of the women had no concern with regard to personal safety when using latrines but among open defecators, 36% were afraid of accidents, injury, snake bites or animal attacks and 5% feared mental or sexual harassment. Women rated cleanliness and availability of water as the most important features of a 'good' toilet. Compared to women who used latrines, a significantly higher proportion of open defecators reported feeling worried, rushed, irritated, depressed and tense when relieving themselves. Indignity, shame and embarrassment due to lack of privacy were significant sources of stress related to open defecation. Users of shared toilets and those practicing open defecation reported limitations more spontaneously than those with household-level toilets. Seasonal migrant women workers perceived the lack of privacy as a significant source of psychosocial stress but not fear for personal safety or injury, despite their general lack of access to toilet facilities.

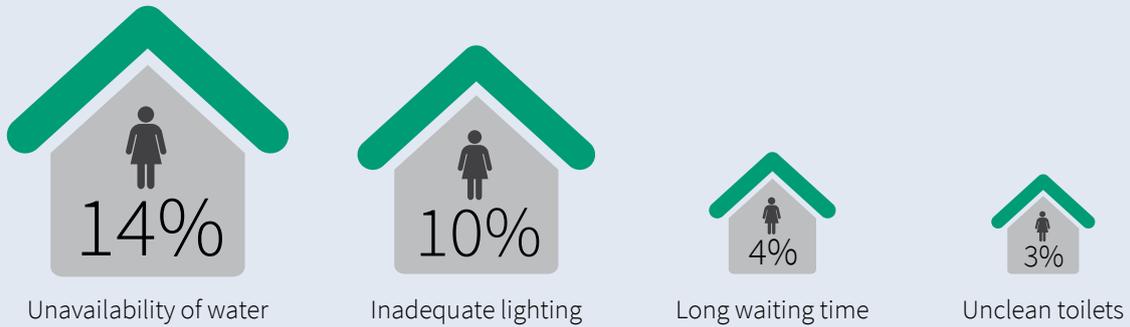
Strategies to cope with limitations from inadequate sanitation were reported more often by users of shared toilets and open defecators. Reflecting the low prevalence of permanent open defecation, women resorted to coping strategies mainly during travel or other non-routine situations outside their home. Delaying relief was the most commonly reported coping mechanism (19% of respondents) followed by drinking less (8%) and eating less (6%). Awareness for possible health problems resulting from some of the adopted coping strategies was reported by some women and most health care personnel.

The mean number of latrines per health care facility was 2.4 (public facilities: mean 1.3; private facilities: mean 3.5). One public health care facility did not have any latrines. Generally, one handwashing station (tap) was available per latrine but two public facilities did not have any handwashing stations. Most latrines were classified as improved and handwashing stations were always located close to latrines, and supplied with water from a tap connected to the main water source of the center. On average, one latrine was available for about four beds. While this relationship was relatively steady across the private health care facilities, it varied in public ones. One latrine was available for every seven outpatients in private facilities while in public ones, a mean of 34 out-patients shared one latrine. The functionality of the available latrines and handwashing stations was generally good but garbage bins, toilet paper, soap and hand drying materials were typically not available. The order and maintenance of at least one latrine per health care facility was good in all private and half of the public facilities. Separate latrines for males and females were rare. Clean WASH installations are expected to be present in all health care facilities as they are seen as part of their basic infrastructure. Almost all (97%) questionnaire respondents agreed that WASH installations in health care settings were satisfactory. The availability and conditions of latrines are considered by 73% of the respondents when deciding which health care facility to use for antenatal care and delivery. However, other factors such as a good reputation and especially well-respected doctors and the ability to competently deal with complications were generally seen as being more important than the WASH situation.

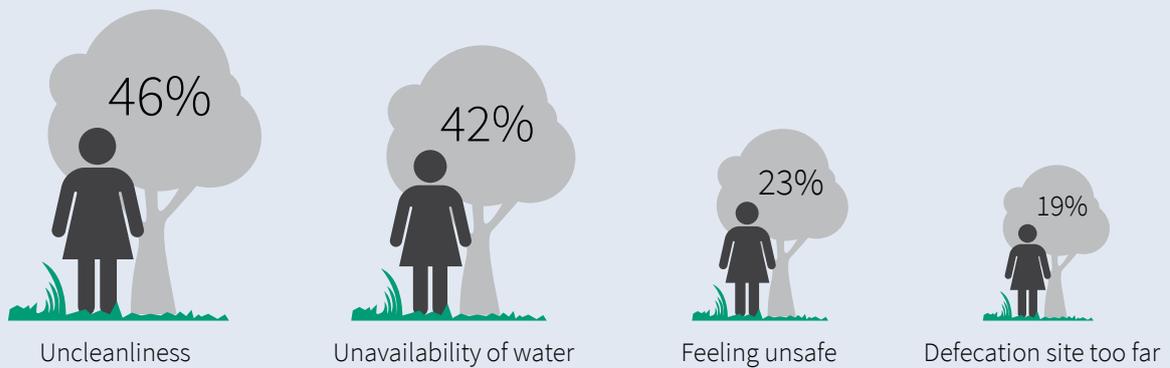
Sanitation programmes need to consider local realities (e.g. the prevalence of open defecation, the presence of migrants) and the specific needs as well as concerns of women with regard to latrine maintenance, safety and privacy. Programmes should educate and motivate rather than be punitive to encourage communities to be 'open defecation free' as "Good Morning Committees" were identified as contributing to stress and potentially unhealthy coping strategies. Additional investments are needed to provide improved WASH installations in all health care facilities, particularly in government-run facilities. Specific strategies to address the sanitation and hygiene issues of seasonal migrant populations are also required.

## MAJOR PROBLEMS REPORTED BY WOMEN WHO:

### USE LATRINES

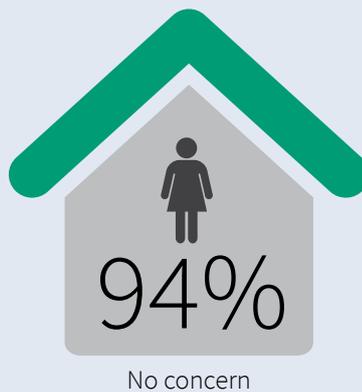


### PRACTICE OPEN DEFECACTION



## PERSONAL SAFETY CONCERNS REPORTED BY WOMEN WHO:

### USE LATRINES



### PRACTICE OPEN DEFECACTION



---

## FURTHER EVIDENCE GAPS

---

The findings of this study are not representative for the situation across India as marked differences in economic, social and cultural determinants exist. Thus, comparative studies in other representative societies are required to validate or qualify the findings, e.g. in urban areas, among communities where open defecation is more prevalent and in more traditional and conservative states.

The study documents a certain level of stress among adolescent and adult women that is linked to the sanitation situation, particularly the absence of sanitation infrastructure at home and in public areas. However, the real level of stress might be higher as the respondents might have adapted to the prevailing situation and do not fully realize – and thus also do not report – the full extent of their chronic stress. Similarly, the reported coping strategies might represent only a part of their approach to adapt to the prevailing situation while more subtle and less obvious evasive or adaptive strategies were not reported. Also, the physiological health effects of the reported coping strategies of delaying relief and reduced food and water intake merit further study and quantification.

The part of the study that focused on the WASH installations in health facilities is not representative for larger hospitals, and more in-depth studies on the community perception of health facilities that lack basic WASH installations would be warranted given the finding that the respondents clearly expect such installations to be present. The impact of WASH installation upgrades on the use of and satisfaction with health centers should also be studied, e.g. impacts on the number of prenatal visits and institutional delivery.

Data related to menstrual hygiene are being analyzed and scientific publications summarizing key findings are being prepared.



15 chemin Louis-Dunant,  
1202, Geneva, Switzerland  
wsscc@wsscc.org | www.wsscc.org



London School of Hygiene and Tropical Medicine,  
Keppel Street, London, WC1E 7HT  
contactshare@lshtm.ac.uk | www.shareresearch.org