African Population and Health Research Center

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Exploring the Capabilities, Motivations and Opportunities for Handwashing with Soap in the Low-Income Settlements of Mombasa, Kenya

Findings and Recommendations

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Introduction

Low-income areas face numerous challenges that hinder the practice of Handwashing with soap (HWWS). These challenges include limited financial resources, forgetfulness to purchase or use soap for handwashing, insufficient water and soap, and perceptions and beliefs that there are no health risks associated with inadequate hand hygiene [1 - 3]. Yet, handwashing with soap remains a crucial preventive measure against the spread of infectious diseases such as diarrhoea.

This learning brief summarises findings from a larger study aimed at assessing the effect of community interventions on improving handwashing with soap. It builds upon a previous quantitative study that examined the determinants of access to basic handwashing facilities and of proper handwashing with soap in low-income areas across four main cities in Kenya (Nairobi, Mombasa, Nakuru, Kisumu. The findings from this quantitative study revealed that residents from Mombasa were less likely to have basic handwashing facilities and to wash their hands with soap compared to residents in low-income areas of other cities in Kenya. The study recommended further qualitative study to explore the contextual factors that hinder access to handwashing facilities and handwashing with soap behaviour.

This brief thus, summarises the barriers and enablers of handwashing with soap in the low-income settlements of Mombasa County, Kenya using the Capability-Opportunity-Motivation for Behaviour (COM-B) framework and additionally proposes intervention strategies for improving handwashing with soap in these communities.

Approach

This qualitative study was guided by the Capability-Opportunity-Motivation for Behaviour (COM-B) framework (Figure 1), which has been used to understand determinants of behaviours and to identify intervention strategies[4]. The model identifies three determinants of behaviour that can be addressed through specific interventions. The components of the COM-B framework are:

- **Capability (C)** - an individual's psychological and physical capacity (knowledge, skills, and abilities) to engage in a behaviour
- **Opportunity (O)** - the physical and social factors external to an individual that make the performance of a behaviour possible
- **Motivation (M)** - the internal brain processes that influence behaviour (emotions, habits and decision making) [4]

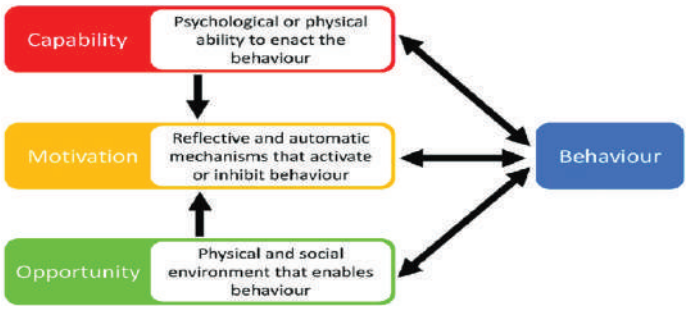

Figure 1: The Capability-Opportunity-Motivation for Behaviour (COM-B) model

Study Site:

The study was conducted in Mshomoroni area, in Junda Ward of Kisauni Sub County in Mombasa County. Junda ward, which has an estimated population of 100,615 people[5] was selected after consultation with stakeholders from the Mombasa County Government.

Data Collection:

Data was collected through In-depth interviews (IDIs) and Focus Group discussions (FGDs) with community members. Discussions were guided by the COM-B Model and focused on opportunities (water and sanitation services shared with other households, sources, cost, and use of water, and maintenance of handwashing facilities), capabilities (handwashing knowledge and practices and challenges of HWWS), and motivations for and improvement of HWWS.

Key Findings

A. Handwashing Behaviours and Availability of Handwashing Facilities

The most common facilities used for handwashing were basins that were sometimes used with jugs. Other respondents used customised HWFs, bowls, tins that were used for ablution, taps connected to tanks, and sinks.

Photo 1: Available hand washing facility (bucket and container in the bucket), and soap used for handwashing

From the interviews, respondents reported that they used soap during handwashing. However, they believed that any contact with water was adequate handwashing, and upon further probing, several respondents admitted that they did not always use soap during handwashing.

"I only wash hands with soap after using the washroom. When doing house chores, we do not wash hands with soap." - Female respondent.

Hands were washed mainly under running water by using the basins and jugs. Where the facilities were not available, improvised handwashing methods were used.

"One holds the jug as the water pours down and the other washes hands." - Male respondent.

Respondents also reported washing hands from the same basin or container without replacing the water.

"We have a container of water, and everybody washes hands from there." - Male IDI respondent.

B. Physical and Psychological Capabilities that Enabled or Hindered Handwashing with Soap

Most of the respondents had knowledge of HWWS received from local organisations, the local government, hospitals, individuals such as Community Health Promoters (CHPs) and village elders, the media (TV and Radio), and from posters placed at strategic public places such as shops and restaurants.

As such, community members understood that they could set up HWFs. However, some residents expressed a lack of knowledge of critical times for HWWS and how hands should be washed.

"Hands should be washed... Just when you want to eat. Else, why would you wash your hands?" - Male IDI respondent.

Other capabilities that enabled and hindered handwashing with soap are summarised in Table 1.

Table 1: Physical and psychological enablers and barriers to handwashing with soap

Definition	Enablers	Barriers
Physical: Physical strength, skill, or stamina	• Residents could improvise HWFs using containers available in the household.	• Residents lacked skills to improvise or maintain handwashing facilities, thus used household items such as bowls.
Psychological: (Knowledge/ psychological strength, skills or stamina)	• Residents had some knowledge on how to make HWFs using locally available materials, and that HWWS should be practiced as it prevents diseases.	• Residents had inadequate knowledge of the benefits of HWWS, of proper handwashing practices and effects of lack of handwashing, and of critical handwashing moments.

Main highlight:
Residents had general knowledge on setting up handwashing facilities and about handwashing with soap but lacked adequate skills and in-depth knowledge on handwashing with soap.

C. Physical and Social Opportunities that Enabled and Hindered Handwashing with Soap

There were two main sources of water in the community; municipality supplied water, and water obtained from boreholes within the community. These sources were within reach, with most respondents reporting an average round trip time (inclusive of waiting and queuing) of up to 5 minutes. Bar, liquid, and powder soap were available but locally made liquid soap was affordable and commonly used for handwashing. Some respondents mainly washed hands because of religious practices, and within the community, there were clearly defined roles and responsibilities for men, women, landlords, tenants and community leaders. These opportunities are summarised in Table 2:

Definition	Enablers	Barriers
Physical: Opportunities provided by the environment, e.g. time, location, and resources.	• Various sources of water are available and close to households • Borehole water is cheaper and can be used for handwashing. • Liquid, bar, and powder soap are available and liquid soap is affordable. • Respondents have facilities such as basins, jugs and improvised containers as HWFs.	• Municipality supplied water is not always available, and its price fluctuates due to unavailability. • Residents generally lack basic HWFs and use items (e.g. bowls) that are used for other purposes • Soap is used for multiple purposes. • Small spaces limit setting up HWFs in houses. • Risk of theft/vandalism if HWFs are located outside the compound.
Social: Opportunities due to social factors, e.g. cultural norms and social cues	• Religious beliefs and practices encourage handwashing. • Men are decision makers and providers e.g. in purchase and repair of HWFs. • Women are responsible for hygiene practices. • Leaders in the community can encourage HWWS (e.g. landlords and elders). • Handwashing containers are placed near shared toilets, which promotes washing after toilet use. • Some members are willing to cooperate in compound activities (e.g. in maintenance) and in promotion of HWWS.	• Religious beliefs may emphasize HWWS only at specific times. • Locating HWFs next to toilets may discourage HWWS at other critical times • Risk of failure in cooperation among tenants e.g. in maintenance of HWFs.

Main highlight:
Key elements such as water, soap, and improvised containers may be available within the community; and social structures may promote handwashing with soap. However, these opportunities can also hinder adequate handwashing with soap if not used positively.

D. Automatic and Reflective Mechanisms & Motivations that Enabled or Hindered Handwashing with Soap

The availability of water, soap and handwashing facilities reminded residents to wash hands, and thus, residents installed or made use of improvised handwashing facilities. Since residents had general knowledge of the health risks of the lack of handwashing, the risk of and prevention of disease was the most common reason why hands were washed. On the other hand, respondents did not always wash their hands with soap because they were busy/in a hurry, they forgot, believed that handwashing with soap was not necessary, or that there was no health risk associated with the lack of handwashing with soap.

"I know my hands are clean and I can't pick soap and wash my hands all the time."

- Male IDI respondent.

Table 3: Automatic and reflective enablers and barriers for handwashing with soap

Definition	Enablers	Barriers
Reflective: Reflective processes e.g. making plans and evaluating things that already happened	• Handwashing at religious times, i.e. three times a day-was more of a routine • HWWS due to the presence of HWFs and soap. • Handwashing at specific times, e.g. before food (i.e. food is a main motivator for handwashing).	• Impression that one must be given something tangible in order to wash their hands, e.g. food or a HWF. • HWWS was only done when hands are visibly dirty. • Belief that handwashing is important after coming from outside the house.
Automatic: Automatic processes e.g. desires, impulses and inhibitions	• Motivation to wash hands to maintain cleanliness • HWWS to prevent ill-health • Desire, especially among women, to maintain health of their children and of their families. • Handwashing because of seeing someone else do the same (taking up behaviour from others)	• Little importance is given to HWWS • Busyness or being in a hurry leads to forgetting HWWS. • Belief that any contact with water is HWWS. • Soap is not always used during handwashing. • Belief that handwashing is not necessary/important. • Little motivation to wash hands because there is no 'threat'. • General 'laziness' to wash hands

Main highlight:
The capabilities and opportunities (such as handwashing facilities and soap, and social structures) motivated handwashing with soap, but inadequate knowledge and beliefs also hindered adequate handwashing practices.

Implications for Policy and Practice

1. The results of this qualitative study highlighted that there are various physical and social opportunities that can be harnessed to promote handwashing with soap. However, limited knowledge and beliefs about handwashing are barriers to proper and adequate HWWS.

2. Possible interventions-Interventions should strengthen the enablers of handwashing with soap and reduce the barriers that hinder the practice. For instance, ensuring the accessibility of water, soap and appropriate hand washing facilities. Additionally, these interventions might include empowering the residents to set up handwashing facilities and increasing their understanding of the importance of handwashing with soap.

3. Interventions on messaging – Hygiene promotion messaging need to be context specific and from the findings of this study, they should consider the capabilities, available opportunities and motivation of the target audience.

4. Engaging diverse stakeholders in the WASH sector – It is important to involve diverse stakeholders including County, Sub- County, and community leaders in handwashing promotion initiatives to create a supportive environment for adequate handwashing practices.

5. WASH Infrastructure-There is need to advocate for the development and maintenance of infrastructure to ensure the provision of safe, clean and consistent water supply to the low-income areas.

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