



African Population and  
Health Research Center

This study was implemented  
with funding from the:

Reckitt Global  
Hygiene Institute

**LEARNING BRIEF 1A**  
JANUARY 2025

# Access to Basic Handwashing Facilities and Handwashing with Soap in Low-Income Areas in Kenyan Cities:

## Findings and Recommendations

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## Introduction

Goal six of the 2030 Agenda for Sustainable Development seeks to ensure the availability and sustainable management of water and sanitation for all. The targets within this goal focus on achieving global access to Water, Sanitation and Hygiene (WASH) facilities.

Handwashing with soap is a key public health measure against the spread of diarrhoeal and respiratory diseases. Access to handwashing facilities and soap is necessary to facilitate the practice of handwashing with soap. Handwashing facilities can be fixed, or mobile facilities and they include sinks with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing<sup>1</sup>. Washing agents that qualify as soap include bar soap, liquid soap, powder detergent, and soapy water<sup>1</sup>.

Access to handwashing facilities is classified into three categories: '**None**', '**Limited**', and '**Basic**' facilities.

Households with 'basic' facilities are those with a handwashing facility with soap and water on the premises, while households with handwashing facilities but lack water and/or soap are classified as 'limited' facilities<sup>1</sup>. There are disparities in access to handwashing facilities between urban and rural areas, with urban areas generally having better access than rural areas.

In Kenya, approximately 33% of the urban population had access to basic handwashing facilities by 2020 compared to 24% of the population in rural areas<sup>1</sup>. However, further studies revealed that poor households in urban areas are less likely to have basic handwashing facilities at household level<sup>2-4</sup>.

Majority of the poor households in urban areas live in low income areas, yet there are limited studies that have focused on access to handwashing facilities or on handwashing with soap in these areas<sup>5,6</sup>.

The aim of this study was to assess the determinants of access to basic handwashing facilities and of proper handwashing with soap in selected low-income areas from four main cities in Kenya (Nairobi, Mombasa, Nakuru, Kisumu). This learning brief summarises findings from a [larger study](#) aimed at assessing the effect of community interventions on improving handwashing with soap in low-income areas of Kenya.

## Approach

### Study Sites:

We conducted a cross-sectional survey with a sample of 1347 respondents (302 in Kangemi in Nairobi, 350 in Junda-Mombasa, 403 in Manyatta and Obunga in Kisumu, and 292 in Kaptembwo and Rhonda in Nakuru). Site selection for the study was done after detailed literature review, and consultation with County stakeholders.

### Data Collection:

Data was collected using a structured survey tool that contained questions on access to and types of Water, Sanitation and Hygiene facilities, and handwashing practices. Field staff also observed if there were any handwashing facilities at the household and asked the respondents to show where and how they normally washed hands. Field staff recorded the types of observed and reported handwashing facilities, if soap was observed, and how hands were washed (i.e. whether soap was used or not).

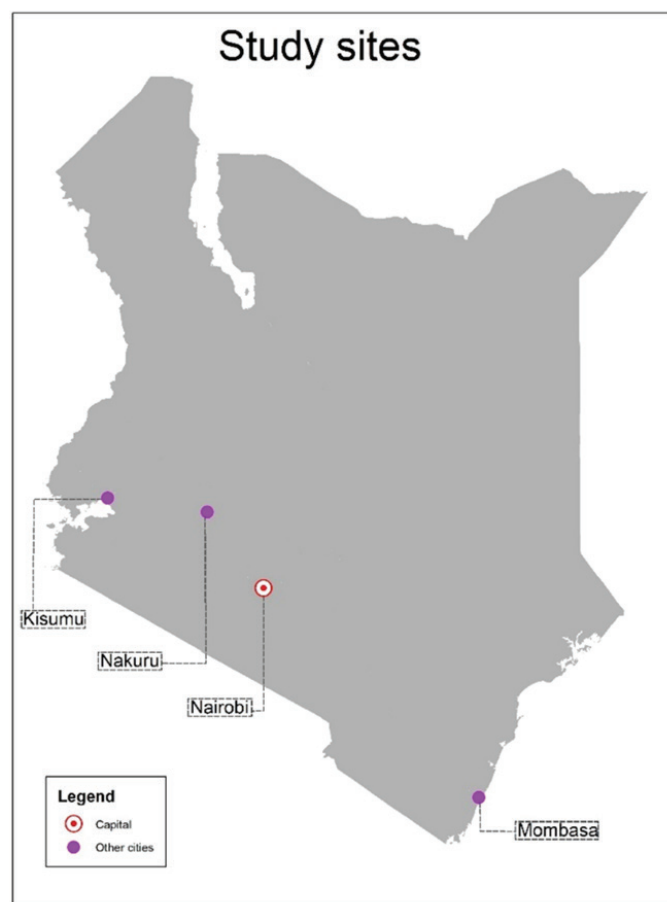


Figure 1: Study sites

## Key Findings

### A. Socio-Demographics and Living Conditions

The average age across the four cities was 35 years, (18-86), and up to 42% of the respondents had a secondary level education. Mombasa city had the lowest levels of education across the four cities as shown in Figure 2.

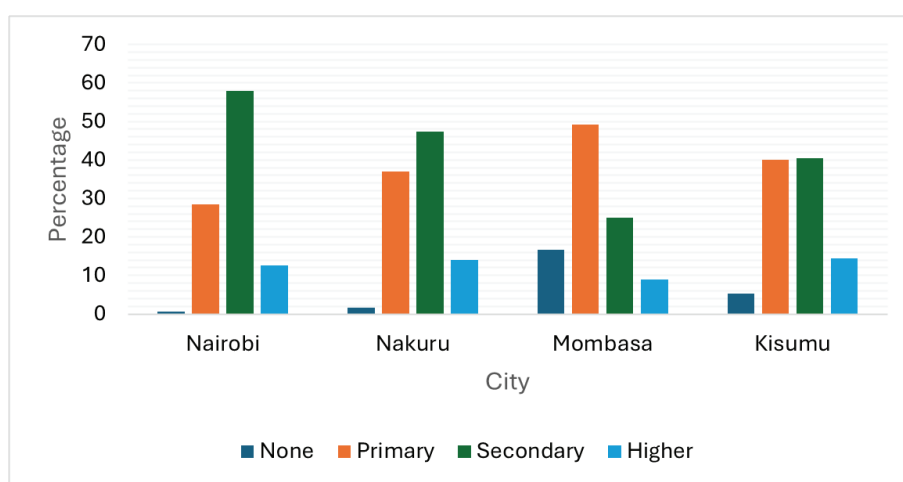


Figure 2: Level of education among respondents in low-income areas in Kenyan cities

The majority of the respondents lived in residences that were shared with other households, including a shared compound (45.4%) or a housing block/unit with several rooms occupied by different households (34.5%). A large number (74%) of the respondents rented the houses they lived in. Respondents used various water sources, including taps that were within the compound (41.2%), inside the house (5.6%) and public taps (39.5%). Most (73%) of these water sources were within 5 minutes round trip for the residents.

## B. Handwashing Facilities and Practices

Most respondents reportedly washed their hands from a basin or bucket, and from within (45%) or outside their houses (33%). Less than half (40%) of respondents reported that they always used soap during handwashing, and 59% reported that they sometimes used soap. Common types of soap reportedly used were bar soap (69%), liquid soap (24%), and powder soap (6.2%), and these soaps were also used for other purposes such as cleaning dishes (28%) and for bathing (21%). From the observations, over 77% of the handwashing facilities observed were basins/buckets. The other types of handwashing facilities used were sinks (6.5%), buckets or jerrycans fitted with taps (7.2%), and leaky tins/tippy taps (2.7%).

From the observation of handwashing facilities and of soap used, 67% of the respondents were classified as having basic handwashing facilities (i.e. a handwashing facility and soap were observed), 28% had limited handwashing facilities (i.e. only a handwashing facility or soap were observed), and 5% lacked basic handwashing facilities (neither a handwashing facility nor soap were observed). Nairobi and Kisumu had the highest access to basic handwashing facilities as shown in figure 3.



Photo 1,2,3: Handwashing facilities observed in the households within the study area

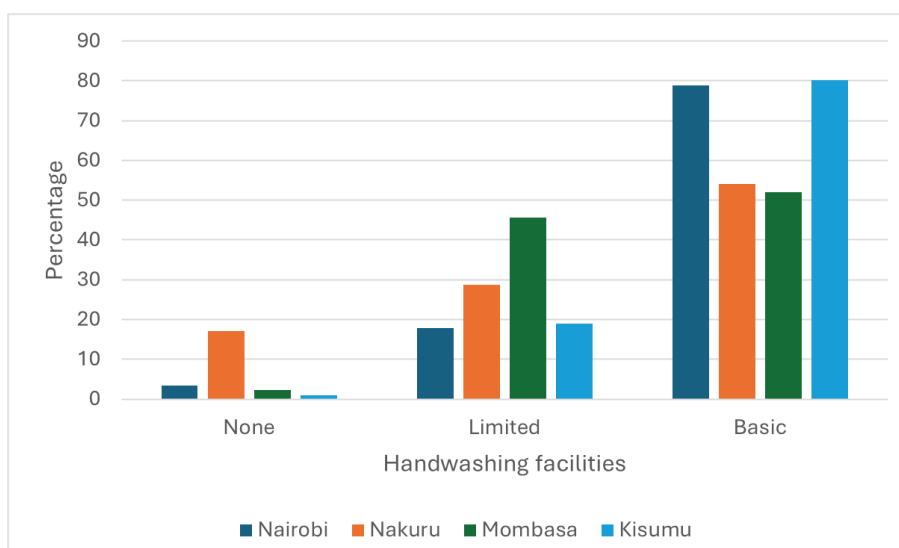


Figure 3: Access to handwashing facilities in low-income areas in Kenya

## C. What Influences Access to Basic HWFs and Handwashing with Soap?

Regression results showed that respondents with a secondary level of education were more likely to have basic handwashing facilities compared to those who had no formal education (AOR=1.92,  $P=0.02$ , CI 1.14- 3.24). Moreover, residents from the low-income areas of Nakuru (AOR=0.32,  $P=0.00$ , CI 0.22-0.49), and those from the low-income areas of Mombasa (AOR=0.47,  $P=0.01$ , CI 0.28-0.80) were less likely to have basic handwashing facilities compared to their counterparts from Nairobi.

Access to handwashing facilities greatly increased the odds of handwashing with soap (AOR=69.52,  $P=0.00$ , CI 42.88-112.73). Respondents who had access to a water point in their compounds had 2.4 times higher odds of washing their hands with soap compared to those without a water point in their compounds ( $P=0.00$  CI: 1.43-3.98). Across the cities, residents from the low-income areas of Mombasa were less likely to wash their hands with soap compared to residents of low-income areas of Nairobi (AOR=0.19;  $P=0.00$ ; CI 0.08-0.42).



Photo 4: A Respondent demonstrates how they wash their hands



# Key Highlights & Implications for Policy & Practice

- 1. Availability of basic handwashing facilities in low-income areas:** Residents in low-income areas have various types of handwashing facilities, most of which are mobile (i.e. basins). The available soap and handwashing facilities were used for other household chores, therefore, the lack of dedicated handwashing facilities and soap at household level may hinder adequate handwashing with soap. Interventions should prioritise the provision/availability of a dedicated, functional handwashing facility equipped with soap within the living spaces e.g. at household or compound levels.
- 2. Disparities in access to handwashing facilities:** Across the cities studied, Nairobi and Kisumu had better access to basic handwashing facilities and better handwashing with soap practices compared to Mombasa and Nakuru. In order to achieve the SDG 6 targets of equity and access to handwashing facilities for all, hygiene interventions in Kenya could prioritise the low-income areas of Mombasa and Nakuru.
- 3. Further research to understand contextual factors that affect access to handwashing facilities:** Further qualitative work needs to be conducted to identify contextual factors within the low-income areas that hinder access to handwashing facilities and handwashing with soap. These findings can ensure that interventions are evidence-based, inclusive, sustainable and tailored to the local context.
- 4. Developing Sustainable Handwashing interventions:** Interventions in resource constrained settings such as low-income areas should consider the 'what', 'when' 'why', 'where' and 'how' when designing sustainable handwashing interventions. The interventions need to consider the cultural context, economic constraints and local infrastructure available to the residents.
- 5. Targeted hygiene promotion and tailored messaging:** The development of messaging to promote handwashing with soap in the low-income areas should consider the context and access to communication channels. Messaging must be developed to ensure that it is easily understandable and disseminated to reach a wide audience.
- 6. Role of stakeholders and policy makers:** The successful promotion of handwashing with soap requires that the necessary conditions for practising handwashing with soap - that is availability of water, handwashing facilities and soap - are met. Government authorities and other implementing organisations should work together to ensure a constant, safe and accessible supply of water within the low-income areas.
- 7. Development of guidelines and policies for handwashing:** Local level guidelines should be developed to define the minimum requirements for handwashing with soap. These guidelines, combined with hygiene promotion activities should outline practical and achievable standards for the design and accessibility of handwashing facilities in low-income areas. The guidelines could lead to development and implementation of policies that support the development and management of WASH infrastructure in the low-income areas.

## References

1. WHO & UNICEF. Progress on household drinking water, sanitation and hygiene 2000 - 2020: Five years into the SDGs. (WHO and UNICEF, 2021).
2. UNICEF. Hygiene market analysis in Kenya. (UNICEF, 2022).
3. Kisaakye, P., Ndagurwa, P. & Mushomi, J. An assessment of availability of handwashing facilities in households from four East African countries. J. Water, Sanit. Hyg. Dev. **11**, 75 - 90 (2021).
4. Brauer, M., Zhao, J. T., Bennitt, F. B. & Stanaway, J. D. Global access to handwashing: Implications for COVID-19 control in low-income countries. Environ. Health Perspect. **128**, 57005 (2020).
5. Sustainability and Resilience. Final Evaluation for Safe Pair of Hands Project in Kisumu City, Kisumu County, Kenya. (2021).
6. Joshi, N. et al. Employment and business disruptions, water access and hygiene practices in Nairobi's informal settlements. Soc. Sci. Med. **308**, 115191 (2022).

## Acknowledgement

The team acknowledges support from all partners that were involved in the project (County Governments of Nairobi, Mombasa, Nakuru and Kisumu, the Community Health Promoters, administrative leaders in each of the study sites, and the field staff)

The study was implemented with funding from the **Reckitt Global Hygiene Institute (RGHI)**