68. Influence of gender in toilet access on performance of shared sanitation facilities in slums: a case of Nanyuki slums, Kenya

Joseph Irungu Maina^{1*,} Lilian Mukiri Kirimi¹, Elijah Walubuka¹, Grace Kasiva Eliud¹

¹Meru University of Science and Technology

Corresponding author email: irungusan@gmail.com

Subtheme: Engineering - Sustainable Infrastructure Solutions for climate resilience; Sustainable Sanitation Systems for climate-responsive urban environments.

Abstract

This paper examined the influence of gender in toilet access, on performance of shared sanitation facilities in Nanyuki slums. The article was based on afield research that employed a convergent research design where simultaneous collection and analysis of quantitative and qualitative data was used. A sample of 98 participants calculated using Yamane's formula was used. Quantitative data was collected using structured questionnaires from household heads who were selected using cluster and simple random sampling techniques. The number of household heads per cluster was determined using proportionate-to-size formula. The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 26 in descriptive statistics and presented in frequencies, percentages, means and standard deviations and in inferential statistics like correlations and logistic regressions to unveil relationship between variables. Qualitative data was collected using focus group discussion guides from a purposively selected group consisting of women, men, landlords, Community Health Volunteers, a Public Health Officer and a sanitation representative. The data was analyzed in themes and presented in a narrative way. Findings revealed that females were the most users of shared toilets compared to men (Adjusted OR=1.14, 95% CI: 0.05-1.92, P=0.009<0.05) because they were left at their households due to commitments of carrying out household chores when men could use toilets in their places of work. Toilets were 0.76 times less acceptable and 0.75 less preferable for females than for males. Toilet location far from households, use of toilets at night for females, access to toilets with gapped super structures, unsafe and contaminated toilets significantly reduced the odds of toilet use (P<0.05). Adequacy of toilets (adjusted OR 4.95, 95% CI: 0.98-4.40, p= 0.032<0.05), and ability to meet user needs (adjusted OR 5.73, 95% CI: 0.70-4.15, p = <0.001) increased the chances of use of shared toilets. The odds for preference of toilets significantly increased by 4.95 and 2.09 when toilets adequately addressed user needs and when they were separated by gender respectively (p < 0.05). The study concluded that sanitation was among the critical issues that affected slum dwellers and its impact was disproportional to gender. The study recommended the need for provision of gender segregated data in sanitation service delivery, strengthening the role of women in leadership, the need for advocacy, community cohesion and gender mainstreaming in sanitation policies to promote gender-responsive sanitation facilities in slums.

Keywords: Gender, toilet access, shared sanitation, performance, slums

74