

## Abstract

A poorly constructed toilet may deter its use and provoke open defecation. Globally, 2.5 billion people do not have access to improved sanitation facilities. In Kenya, over 5 million people are forced to defecate in the open due to inadequate or lack of sanitation facilities resulting in high prevalence of water, sanitation and hygiene-related diseases such as diarrhea. This study therefore sought to profile the sanitation practices on containment and disposal systems among households in Tigania West with a view of yielding insights on promotion of safe disposal of human waste. Questionnaires, interview guide and observations were used to collect data in a mixed study design. Cluster sampling technique was employed to select respondents and the data analyzed using SPSS version 21.0. The results showed that 95.2% of the respondents had access to a toilet, whereas 4.8% did not (n=236). Out of those with toilets (n=225), 54.3% had pit latrines without a slab. With regard to construction materials, 72% of the households had their latrines constructed using timber and iron sheet; 9.3% with concrete; 8.4% with mud and grass; whereas 10.3% had theirs constructed with polythene materials (n=225). The majority of the households had toilets in poor hygienic conditions with 149 (66%) with faeces on the floor, exposing users to the risk of getting into contact with the faeces. 120 (53.2%) of the households did not empty latrines when full, instead they opted for a new one. Latrines did not offer any privacy in 45 (20%) of the households, therefore discouraging their use. 71.8% of households disposed of children's faeces in the latrine, whereas 6.4% did so in the environment (n=225). 53.2% (n=225) of the residents had no detergents and disinfectant to clean the toilet. 37.7% (236) of the respondents never washed their hands with soap and water after using the latrine/defecating in the open. Sanitation practices had a significant positive correlation with cultural practices (0.119 ( $p=0.003<0.05$ )), sharing of toilets (0.142;  $p=0.48<0.05$ ), space availability in the household (0.098;  $p=0.011<0.005$ ) and financial challenges (0.074;  $p=0.004<0.005$ ). Innovative approaches to toilet construction using locally available materials, training and subsidies together with behavioral change sensitization could improve sanitation among households of Tigania West Sub-County.