ABSTRACT

Kenya has a mean rate of 23.5% open defecation. In Meru County, inadequate sanitation causes financial loss and high rates of diarrheal diseases, especially among children. Poor sanitation costs the Meru County government 816 million KES annually, with only 60% pit latrine coverage. Diarrhoea and related illnesses account for 16% of deaths among the children below 5 years and stand second only to pneumonia in Meru County. Despite being declared open defecation free, residents in its Tigania East Sub-County, still practice open defecation, which increases the risk of diarrheal diseases that cause 16% of deaths in children under 5 in the county, second only to pneumonia. The main objective of the study was to assess the determinants of sanitation practices in rural settlements by focusing on the following specific objectives; to assess the effects of opportunity determinants on sanitation practices, to identify the effects of ability determinants on sanitation practices, and to determine the effects of motivational determinants on sanitation practices in rural settlements of Tigania East in Meru County. The study employed the SaniFOAM model to capture three main determinants of behaviour change (opportunity, ability and motivation) which led to desired behaviour. A descriptive study design was used with a sample size of 170 households calculated using Arsham (2019) formula. Cluster sampling technique was used to categorize Tigania East Sub-County into its respective wards and simple random sampling technique was used to select households from the clusters. Questionnaires, group discussion guide, and observation checklist were used for data collection. Data was analysed using Statistical Package for Social Sciences (SPSS) version 26 using descriptive while qualitative data was presented thematically. This study revealed that the respondent rate was 88.8 %, with 58% males being the majority indicating the head the family plays major roles in toilet construction where 90% had above primary education and 34.7% were self-employed. Findings revealed that opportunity, ability and motivation determinants influenced sanitation practices. From the research, 68% of the respondents were not satisfied with using sanitation facilities and 72.7% of respondent believed that beliefs limited sanitation adoption. This study also indicated that 60% of the residents practiced open defecation either due to inaccessibility of sanitation facility and poor status of latrine superstructure. There was significant positive correlation between opportunity determinants and sanitation practices (r = 0.303, *Pvalue* = .000), and there was a positive significant correlation between ability determinants and sanitation practices (r = 0.249, *Pvalue* = .002). In addition, motivational determinants were weakly but positively correlated to sanitation practices and the weak positive correlation was significant (r=0.191, p value=0.19).The determinants used were highly correlated to each other in relation to the sanitation practices. Knowledge alone did not influence avoidance of poor sanitation practices. Besides, inadequate skills on latrine construction, defined gender roles and poverty promoted adoption of unimproved toilets. The study recommends the need to address opportunity, ability and motivation determinants as they influence sanitation practices in rural areas. The study also recommends government collaboration with sanitation-related bodies coupled with health promotion activities by Public Health Officers to support the construction of improved toilets in the area. Since this study was conducted in a rural setup, there is need for more future studies on the determinants of sanitation practices in low-income urban areas.