

ABSTRACT

Background: Poor latrine conditions, structure, and design may deter latrine use and provoke reversion to open defecation (OD). Statistics show that only 18% of the households in Turkana County, Kenya, have access to a latrine facility with most of these facilities in poor structural designs and poor hygienic conditions, which encourages rampant OD practices.

Aim: This article reports on quantitative aspects of a larger cross-sectional survey to assess latrine structure, design, and conditions, and the practice of OD in Lodwar.

Methods: An observational study was carried out to examine latrine conditions, structure, and design in Lodwar, Kenya. A standardized questionnaire was also used to collect quantitative data. Stratified random sampling technique was employed to select respondents for this study with the sample drawn from 4 administrative units of Lodwar town covering the low-, medium-, and high-income households. Data were managed using Statistical Packages for Social Science (SPSS) software.

Results: Nineteen percent of the sampled households did not possess a latrine facility at their homesteads with 73% of the latrines constructed using poor materials (mud, mats, polythene bags, and grass). Twenty percent of the respondents were scared of using a latrine with the main reason being loose soils that do not support strong constructions. Eighty-seven percent of the respondents agreed that the presence of feces on the latrine floor encouraged the practice of OD and 321 (80%) respondents stated that the latrine construction materials influenced latrine ownership and its subsequent use.

Conclusions: Respondents attributed rampant OD practices to poor latrine structure, design, and conditions. In addition, rampant cases of latrine sharing result in latrine filthiness, which eventually encourages OD practice. Inequality in sanitation, among counties, should be addressed in Kenya. The government should take charge of provision of good-quality communal latrines to the less-privileged societies like Turkana. Community empowerment and introduction of a small fee for cleaning and maintenance of these facilities will also improve their conditions. Ending the practice of OD will lead to increased positive public health and environmental outcomes in the study area.

Keywords: Latrine structure and design; improved sanitation; latrine condition; open defecation; sanitation access.