

## County, Kenya

Globally, approximately 2.5 billion people lack access to improved sanitation that is, more than 35% of the world's population. In Turkana County, the practice of open defecation remains a major challenge despite various efforts to combat it. This study was carried out in Lodwar town to assess the factors that are associated with the practice of open defecation. A social survey study design was used in this study. A stratified simple random sampling technique was chosen to select participants for this study. The sample was drawn from administrative units of Lodwar town covering the low-, medium-, and high-income households. Structured questionnaires containing both open and closed ended questions relating to the objectives of the study were administered to the participants representing the household heads within the study area. Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) were conducted to obtain further information relating to the practice of open defecation in the region. The obtained information was analyzed using descriptive statistics, that is, frequencies and valid percentages. Pearson Chi Square Tests were also used to determine the influence of the various factors on open defecation in the study area. Thematic analysis was also used to analyze data from the KIIs and the FGDs. Significance level for all the tests were pegged at  $\alpha \leq 0.05$ . The results obtained from this study showed that the occupation of the household head was significantly associated with latrine ownership and consequently the open defecation practice ( $\chi^2=74.52$ ;  $p<0.05$ ). Similarly, education level of the household head was significantly associated with the practice of open defecation ( $\chi^2=107.32$ ;  $p<0.05$ ). 20% of the respondents stated that lack of strict laws that govern sanitation practices also influenced open defecation practices and lastly, whereas 44.4% of the study respondents stated culture as a highly influencing factor to the practice of open defecation. This study revealed that poverty as indicated by the occupation of the household heads, low levels of education and culture are the major contributing factors to the practice of open defecation in the study area. Provision of fecal disposal facilities as well as sanitation campaigns are recommended as this will reverse the sanitation situation in the study area.

**Keywords:** Open defecation, Sanitation, Latrine, Fecal Sludge Management, Sanitation access.

