

Abstract

Provision of quality water continues to be a challenge in the developing Counties particularly in the informal settlements and Kenya is not an exception. This study assessed diarrhea disease attributable to water, sanitation and hygiene (WASH) among the under five in Kasarani, Nairobi County. The main objective of this study was to establish the association between diarrhea among the under five and Water, Sanitation and hygiene. To achieve this goal Kasarani was categorized into four study environs namely low density high income, Medium density middle income, high density low income and informal settlement low income. Structured questionnaire and hygiene checklist were used as data collection instruments. Association and significant differences between variables were determined using inferential statistics and Chi-square tests. To compare quantitative variables (ANOVA) test was preferred. This study determined that water consumed in Kasarani was a risk for childhood diarrhea ($p=0.019$). Tap water showed a significantly higher contamination 13.7% than household water container 7.2% for T. Coli Bacteria. The amount of water a household consumed per day was an important risk factor for childhood diarrhea ($P=0.001$). Overall, Age of a child ($P=0.046$), water treatment method ($P=0.002$), method of storage of solid waste $P<0.001$, quantity and frequencies of water supply ($P<0.001$) were also found to be the most important risk factors for childhood diarrhea. The study concluded that there was a relationship between childhood diarrhea and water, sanitation and hygiene in Kasarani. The study recommended that Nairobi water and Sewerage Company institute programs that will facilitate adequate and wholesome water supply to HDLI and ISLI residential environs respectively.