

Abstract:

This study assesses risk factors for food-borne gastrointestinal illness indicated by diarrhoea and/or vomiting using 14-day recalls among children and young adults. The study was set in Isiolo, a rural town of Kenya, inhabited mainly by pastoralists of different ethnic groups. The preparation methods of milk at the household level were also investigated. The study was cross-sectional and involved 900 participants from randomly selected households. They were interviewed using a structured questionnaire. An unmatched nested case-control study was constructed by randomly selecting three controls for each case. Potential risk factors for gastrointestinal illness were analysed using both univariate and multivariate logistic regression models with random effect on ethnic groups. The study results showed that consumption of mutton, carrots, Irish potatoes, raw camel milk, boiled camel milk and fermented camel milk were important risk factors for diarrhoea and/or vomiting, whereas the consumption of boiled goat milk, boiled cow milk, spinach, washing of hands with soap and the presence of proper drainage system had protective effects (odds ratio < 1). We conclude that in this setting, primarily vegetables and the camel milk market chain pose the greatest risks for symptoms of food-borne gastrointestinal illness.