

Household Drinking water contamination by Escherichia Coli and prevalence of diarrhoea in children under five years in Baringo County, Kenya.

Abstract.

Escherichia Coli (E. Coli) is widely used as an indicator of microbial water quality. Normally domiciled in human intestines, contamination of drinking water by this bacteria occurs through inappropriate sanitation and poor water handling practices. While some strains of E. Coli are harmless, others are pathogenic and can lead to diarrhoea of varying severity both in children and adults, characterised by abdominal cramps, vomiting, bloody diarrhoea. Diarrhoea remains a major cause of death among children below 5 years. This study evaluated the extent of household drinking water contamination by E. Coli and its relationship to diarrhoea incidences in children <5 years in Mogotio and Marigat sub-counties of the largely semi-arid Baringo county in Kenya. A cross-sectional survey was used to randomly select 178 households with children below 5 years and information sought on water sources and diarrheal occurrence. Water samples were collected at the point of use and analysed using the field based Compartment Bag Test (CBT). Findings show a significant relationship between E. Coli presence and diarrhoea in under-fives. Water samples from households using water from surface water sources were more likely to have a higher E. Coli MPN/100ml count compared to those from protected sources. There is need provide improved sources of water in the community and sensitise it on treatment and safe handling of water at point of use.