

Abstract

A significant proportion of the population living along River Njoro depend on direct river use to carry out domestic activities. Antibiotic pollutants in wastes of treated farm animals that have not undergone any disinfection and sewage treatment processes pose a significant environmental health risk. The current study investigated the presence of total antibiotic resistant bacteria to a range of antibiotics used in the treatment of infectious diseases that may find their way into water and sediments in the river. This was done by culturing samples on nutrient agar media amended with various types of antibiotics. The study showed significant ($P < 0.05$) spatial variations in total bacteria resistant to chloramphenicol, tetracycline, ampicillin and streptomycin antibiotics. Faecal pollution in river Njoro can transmit various diarrhoea pathogens as well as being a reservoir for antibiotic resistant genes that can be transmitted to consumers through water.