

Antibiotic resistance represents a serious problem for clinicians, veterinarians, community and government at large. This involves cost implications as far as treatment is concerned. Multiple drug resistance as a result of empirical treatment have rendered most drugs ineffective. In view of the above, this descriptive cross-sectional study, aimed at isolating resistant entero-bacteria *E. coli* from food-handlers working in both high and low budget hotels. Specimens in the form of stool were collected from 297 food-handlers in their respective hotels were considered and analyzed for resistant *E. coli* bacteria at KEMRI-Centre for Microbiological. Research (CMR), in Nairobi. Besides, questionnaires were administered in order to assess health-seeking behaviour of the study subjects prior to medical examination. Antibiotics used in this study were amoxicillin-clavulanic acid, co-trimoxazole, ampicillin tetracycline, kanamycin, gentamycin, cefuroxime and chloramphenicol. These antibiotics were chosen on the basis of their use in the management of enteric bacterial infections. The results from high budget hotels (i.e. three, four hotels ( i. e two stars and below) indicates high frequency of resistance in both hotel categories was seen in co-trimoxazole and five stars) and low budget resistance. The highest level of 66.3% in high budget hotels and 66.4% in low budget hotels. Resistance difference between high budget hotels and low budget hotels was not statistically significant ( $P=0.56681$ ). This was followed by ampicillin showing resistance of 55% in high budget hotels and 46% in low budget hotels, ( $P=0.8235$ ). Tetracycline showed a resistance level of 34% in high budget hotels and 58% in low budget hotels, ( $P=0.2835$ ) and co-amoxyclav showed resistance of 37% in high budget hotels and 38% in low budget hotels, ( $P=0.5074$ ). The P-value results clearly indicate no significant relationship between taking medication by food-handlers prior to medical examination and the pattern of antibiotic resistance. Comparatively, the resistance pattern for the antibiotics tested is somehow the same for low and high budget hotels, indicating that, irrespective of the hotel category, if those working in hotels are potential carriers of drug resistant *E. coli*, then the category of hotel is irrelevant and either has a potential of transmitting resistant *E. coli*.