Investigation on the prevalence of antimicrobial residues in milk obtained from urban smallholder dairy and non-dairy farming households in Dagoretti Division, Nairobi, Kenya

Abstract:

To assess the prevalence and the level of awareness of the risk posed by antibiotic residues among the urban dairy and non-dairy farming households using a household survey and laboratory analysis of milk samples. A cross sectional study. Urban small holder dairy farming and non-farming households in Dagoretti division, Nairobi. The prevalence of antibiotic residues in dairy household milk samples was 4% (11/259) and in milk samples from non-dairy neighbouring households the prevalence was 0.07% (1/136). One sample was detected to belong to beta lactam and one to the tetracycline group of antibiotics. The remaining 10 were not categorised. Approximately 20% of dairy and non-dairy respondents were unsure of the risk that may be posed by the presence of antibiotic residues in milk. A high proportion of the respondents said they would be able to protect themselves from risk posed by antibiotic residues by following advice given by veterinary officers on the withdrawal periods after treatment of animals. Education of the farmers, continuous surveillance and understanding of the socio-economic incentives that would be traded off at farm level would help to reduce or eliminate the risk posed by the residues in marketed or consumed milk.