

ABSTRACT

In the urban areas of the world, cockroaches constitute a public health threat in the ready-to-eat food premises because they spread diseases and contaminate food. Globally, food borne diseases transmitted by pests affect 600 million people annually with 48million in the USA. Developing countries have more cases but are underreported due to poor diagnostic facilities. In Botswana, more than 40% of cockroach population is in urban areas due to inadequate waste disposal and poor housing. In Kenya cockroach infestation is a neglected public health issue. Cockroaches are of significant epidemiological significance yet levels not known in Kisumu City. Assessing the level of cockroaches' infestation, awareness and control practices helps in getting empirical data necessary for instituting effective control practices. Limited studies have been conducted on cockroach infestation levels in RTEs in Kisumu City yet the city leads in occurrences of gastroenteritis spread by cockroaches. The City has a high population living in poverty and dense housing favoring pests. Using a cross-sectional design, this study assessed the level of cockroach infestation, established the vendors' awareness and the control practices in the RTE food premises. Researcher administered structured questionnaires; Key Informant Interviews, observation tools and photography were used to collect data. Sticky traps were installed overnight within the sampled premises. The study population consisted of 201 vendors of RTE premises. Some 145 respondents derived by Fisher's sample determination formula calculated at 50% picked by stratified random sampling proportionately from each of the 4 designated City's Public Health Zones was interviewed. The County Public Health Officer and the Zonal Public Health Officers were purposively enrolled for Key Informant Interviews. Data analysis was done by Chi-Square and descriptive statistics at a C.L=0.05%. Quantitative data was presented in frequency tables and percentages while qualitative data results were presented as descriptive texts. Cockroach infestation in Kisumu City was high at a mean of 16.13 on Wang and Bennet scale. Many respondents 62(56.9%) were aware of cockroach infestation dynamics. Chemical control method was the most preferred for control of cockroach infestation in Kisumu City at 67(49.5%), followed by physical and biological methods of control at 45(33%) and 14(10.1%) respectively while cultural control methods least preferred at 9(6.4%) at $p=0.027$. As a recommendation, the Department of Public Health should ensure improved sanitation of the external environment and sensitize vendors on the public health impacts of cockroaches' infestation and advice on appropriate cockroach infestation control practices.