

Abstract

This study was conducted in the western region of the island, in the parishes of Hanover, Westmoreland, St. James and Trelawny, among 102 selected primary health care workers. It was conducted at a time when there were great concerns about the West Nile Virus in the United States. The study therefore sought to conduct a KAP study of the mosquito control programs in the western region of Jamaica, to determine if the region was at risk of entry of exotic mosquito-borne diseases and to examine what measures were in place to prevent the entry of such diseases.

Methods used were a cross-sectional survey, utilizing a self-administered questionnaire with open and close-ended questions. Two focus groups interviews were held in a peri-urban township and rural district in Hanover. Pertinent health records were perused and trapping for adult mosquitoes was also carried out in selected communities and sites.

The respondents indicated that the most common species of mosquito found in the western region of the island were *Aedes aegypti* (100%), followed by *Culex* species (82.7%), and *Anopheles* species (80%). Dengue fever was identified as the most important mosquito-borne disease that affected Jamaica previously (85%) and the most important mosquito-borne disease the country. However, West Nile Fever was identified as the main mosquito-borne disease, that now pose a threat to Jamaica.

The majority of the respondents (71%) said they were aware of the measures taken at the ports of entry and 96% were aware of measures taken at health departments.

Source reduction was also identified as the main measure taken at the ports, while oiling was identified as the main measure throughout the western region. Source reduction was also identified as the most effective aspect of the mosquito control programs. The majority of the respondents (66.6%) felt that "staff commitment" was the main strength of mosquito control programs, while majority felt that "government commitment" was the main weakness. Of the respondents, ninety one percent (91%) felt that mosquito control was not a priority of the government. It was also felt by the majority of respondents (97%), that residents should take responsibility for mosquito control on their premises and that mosquito control programs would be more effective if there were more community involvement. Most of the respondents also thought that mosquito control should be taught in schools and that the media should play a greater role in mosquito control efforts. It is evident that the western region is at risk of the introduction of mosquito-borne infections, given the prevalence and presence of important vector species, a high Aedes index (15%), the alleged failure of some airlines to observe the requirement for disinfestation of aircraft, the apparent lack of any comprehensive mosquito control programs and the lack of pro-activity shown by the authorities.