



Understanding the epidemiology of Ebola Bundibugyo virus (EBV) in selected populations: a cross-sectional study in Buhendera and Bwamba counties, Bundibugyo district.

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Abstract

Background:

Bundibugyo district has an estimated population of 224,387 people. Ebola Bundibugyo was first identified in 2007, leaving over 150 people infected and over fifty-six deaths recorded, giving 40% fatality rate.

Methodology:

A cross-sectional study was carried out in the six study sites, selected from each county. Risk factors, distribution, endemicity, and mode of action and transmission of this strain were examined. Risk factors, distribution, and endemicity were assessed using systematic sampling, mode of action, and transmission, and the anatomy was examined using the WHO standards of Automated or semi-automated nucleic acid tests (NAT) and antibody-capture enzyme-linked immunosorbent assay (ELISA).

Results:

This research examines the general epidemiology of Ebola Bundibugyo among selected populations in Buhendera and Bwamba counties in Bundibugyo district. Bundibugyo had high cases, although these were not from the place where the first case was reported. The virus spread through movements, followed by Kasitu, who is believed to have reported the first case, Harugale, Busaru, Bubukwanga, Nduguto, and Karugutu. The majority of males (58.6%) said that they were involved in activities like collecting fruits from the forests, including hunting 41.4% were female who remained home waiting to cook what their male counterparts had brought from the forest. 72.2% reported that their relatives did not have access to the medical facilities. This indicates that healthcare facility accessibility was significantly related to EBV.

Conclusion:

The Ebola-Bundibugyo strain had a high fatality rate at 40%. The study revealed that cultural risk factors were more responsible for this distribution and severity of EBV.

Recommendations:

Ebola preventive messages should be incorporated into the routine health education scripts of the Ministry of Health of Uganda and the East African countries.

Keywords: Ebola, hemorrhagic fever, Bundibugyo, outbreak, laboratory-confirmed.

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