

EBOLA HAEMORRHAGIC FEVER OUTBREAK IN UGANDA: THE MWANZA REGION EXPERIENCE

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Background

Ebola virus causes viral haemorrhagic fever and belongs to the family Filoviridae. Sporadic outbreaks of Ebola virus have been reported in Zaire now the Republic of Congo in 1976 and 1995, in Sudan in 1976 and 1979, and in Gabon in 1996. Mortality rates ranging from 50% to 90% were reported during these outbreaks (WHO, 1997).

Most of those who became infected during the outbreaks were individuals who came into contact with an Ebola patient either at home or at health facilities while caring for patients. Infections acquired at health facilities occur through contact with body fluids of an *Ebola* patient or contact with contaminated objects such as needles, syringes, etc or inadequate barrier technique especially during the early stages of the epidemic and unhygienic

practices. Also contact with body or body fluids of the dead during traditional preparations for burial is an important route of transmission (WHO, 1997). Because transmission of *Ebola* virus occurs very readily, and the incubation period may take up to 21 days, it is possible that infected individuals could travel to other areas before developing disease. Thus control measures against *Ebola* outbreak should include restriction of movement of people to and from affected areas.

Mwanza Response to the Ugandan Outbreak

Although Mwanza Region does not share a common border with Uganda, it has direct communication links either through water (Lake Victoria) or air travel, which allow easy movement of people from either side. Therefore, the outbreak of *Ebola* in Uganda put Mwanza at great risk of experiencing the outbreak. This called for establishment of control measures urgently.

Regional Task Force

Realizing the threat of Ebola outbreak for the region, a Regional Task Force was formed under the chairmanship of the Regional Administrative Secretary (RAS) to chart out strategies for prevention of Ebola outbreak. Members of the Task Force included: the regional heads of police, immigration, information, health and security, and the Directors of Bugando Medical Centre (BMC) and National Institute for Medical Research (NIMR), Mwanza Centre. Others were a consultant physician from BMC, the Health officer in-charge for the Region, District and ports, the Regional Nursing Officer, the Medical Officer of health, Mwanza City and the Head of Medical Stores Department (MSD), Lake Zone. The Regional Medical Officer was the secretary of the task force.

The Task force adopted the following strategies: provision of health education to the general public, carry out active surveillance of Ebola, restrict movement of people between Mwanza and Uganda and preparation for provision of proper management of Ebola patients if the outbreak occurred in Mwanza.

Provision of Health Education

Health education was provided to the general public informing them on the possibility of the outbreak, and to create awareness among people about symptoms suggestive of ebola especially from visitors. In case the outbreak occurs people must understand what to do especially in informing relevant authorities within their respective areas. More emphasis was put on attendants of guest-houses, fishermen and fishing communities. It was realized that these were the people who were more likely to come into contact with people from Uganda in the course of their activities. The attendants of guest-houses were warned on the possibility of having visitors who might be sick on arrival or fall sick while at their premises. If this happened they were instructed to take all necessary precautions and report immediately to the relevant authorities. Moreover, they were also warned never to hide a sick person in their premises. The health department in the Region in close co-ordination with those in the Districts prepared and distributed fliers containing the health messages and mobilized and sensitized people in collaboration with District Task Forces. Religious leaders also provided health messages in mosques and churches.

Active Surveillance for Ebola

In order to monitor closely people arriving from Uganda, a questionnaire was developed and administered to elicit

detailed information on: countries visited in the last 21 days, their health status, detailed contact address while in Mwanza, their contact person or Institution and expected duration of stay. They were also given the address of the Regional Medical Office to contact if any problems developed while in Mwanza. Guest-houses were also visited regularly to check for any visitors especially from Uganda to monitor any possibility of developing *Ebola* disease while in Mwanza. Guest-houses were also checked for likelihood of presence of unreported cases of Ebola. This was done in close co-ordination between the departments of health, police and immigration. The general public was also strongly urged to inform health personnel whenever they suspect an individual to have *Ebola* disease.

Restriction of Movement Between Mwanza and Uganda

Both Tanzania and Uganda own cargo ships plying between Mwanza and Port Bell in Uganda. These ships are very popular with petty business people for transportation of goods from either side. The Task Force realized the risk this informal route poses for possible transmission of *Ebola*. All shipping companies were informed about the consequences of their practice and were asked to stop carrying passengers using cargo vessels. The health and police departments at ports were asked to enforce the order.

Preparations for Managing Ebola Patients

Training of staff in health facilities on how to handle and manage *Ebola* patients was given by trainers from Bugando Medical Centre (BMC). BMC, Sekou Toure and all the other District hospitals in the Region identified staff that will specifically be managing Ebola patients alone and allocate dedicated sites for managing patients. The Regional Medical Office in collaboration with Zonal Office for MSD ensured that all equipment and supplies required for management of patients were available and distributed to all hospitals. As part of the preparations, the Directors for Mwanza City and all Districts were asked to identify sites where individuals who would die from Ebola disease would be buried.

Institutions within Mwanza Region were assigned specific tasks. The Regional Medical office co-ordinated all activities related to health education and procurement of supplies required, and BMC and Sekou Toure hospitals were charged with handling of all suspected cases of *Ebola*. NIMR, Mwanza Centre co-ordinated handling and transportation of specimens from

Mwanza to Muhimbili Medical Centre in Dar es Salaam as well as handling of questionnaires from ports. The information department co-ordinated the media for regular feedback by the Task Force Chairperson.

External Support

Staff from the Emergency Unit of the Ministry of Health visited Mwanza regularly during whole period of outbreak in Uganda and met members of the Task Force. Besides the supervisory role of these visits, they also provided opportunity for exchange of information and assurance of support at national level. Members of the Task Force saw this as very useful.

Problems Encountered

Most of the activities were implemented without any problems, but difficulties were encountered on restricting business persons and pupils studying in Uganda from using cargo ships when coming back for holidays or business trips. Although these people no longer used these ships for travelling from Mwanza to Uganda, they used them on their way back despite formal communications with authorities in Uganda. This was a challenge because most of them were Tanzanians returning home.

Reference

WHO, (1997). WHO recommended guidelines for epidemic preparedness and response: Ebola haemorrhagic fever (EHF). *WHO/EMC/DIS/97.7.*