Ebola Virus Disease Outbreak Complicated by Patients' Efforts to Avoid Diagnosis – Nigeria, 2014

Author: Deborah Hastings
Date: Monday, April 20, 2015
Time: 8:35 am/et
Location: Ravinia Ballroom

Summary: Two contacts of an Ebola patient nearly ignited a huge outbreak in Nigeria. As it was, their actions extended the outbreak by a month and directly endangered 575 people.

Abstract:

Background: On July 20, 2014 an ill airline passenger from Liberia arrived in Nigeria. He was confirmed to have Ebola Virus Disease (EVD). The importation led to 20 cases and 8 deaths. Certain contacts actively sought to conceal disease. We evaluated the impact on EVD containment of contacts who intentionally evaded monitoring during the 21 day risk period.

Methods: The contact tracing team (CTT) from the Nigeria emergency operations center (EOC) investigated every EVD case to identify all contacts. We identified evasive contacts, defined as contacts who hid their illness, and interviewed the contact, or family and friends. We determined the resulting additional contacts.

Results: We identified two evasive contacts. Patient A developed symptoms but refused to speak with the CTT; he traveled by air for privately arranged care in a hotel room, and returned home by air while symptomatic. The physician who treated Patient A, the physician's wife and sister, and a patient hospitalized with the physician contracted EVD; the physician and hospitalized patient died. An additional 530 contacts were identified as a result of this patient. Patient B, a physician, omitted his name from the contact list provided to the CTT. When he fell ill he sought care at 3 facilities but was refused entry; he died at home. When his wife developed EVD Patient B's illness became known. Forty-five additional contacts were identified as a result of this patient. Interviews revealed patients' concerns about stigma.

Conclusions: The Nigerian outbreak was extended by more than a month, and 575 additional people were put at risk by the actions of these patients. Public health authorities should address stigma in their planning and communications