

Ebola-free in Africa's most populous nation

When 40-year-old Patrick Sawyer collapsed on the floor of the Lagos airport on July 20, 2014, he became patient zero for the Ebola epidemic in Nigeria. Many worried the presence of the highly infectious disease in Africa's most populous nation would be a tipping point in the spread of the epidemic. Those fears were never realized; within three months, by Oct. 20, the World Health Organization declared the country Ebola-free.

Nigeria, with an estimated population of 178 million, had 20 confirmed cases of Ebola, including eight deaths; all but four were in Lagos State. That's a tiny number compared to the toll in adjacent countries. How did Nigeria contain the infectious disease?

Dr. Olajide Idris, the Lagos State commissioner of health, explained the country's multidimensional approach, ranging from building isolation units to texting citizens about Ebola symptoms, at the recent American Public Health Association conference.

Previous crises, including two plane crashes, a pipeline explosion, cholera and H1N1 had primed Lagos State, to handle emergencies. Six months before the first case, the Lagos State Government held a conference on disaster preparedness.

When Ebola hit, Nigeria developed a series of "right steps," Dr. Garba Safiyanu, health specialist for the United Nation's Children's Fund (UNICEF) Nigeria country office, told *CMAJ* in an email.

The federal government provided US\$11 million to support the effort. An Ebola Emergency Operations Centre (EOC) was set up to direct resources to Ebola's containment. Surveillance was increased at airports, seaports and land borders. Fact sheets were sent to health workers and the public. A virology lab was staffed to diagnose cases quickly. Isolation units were built and health facilities were designated as Ebola treatment centres. Eighty beds were set aside specifically for Ebola cases in anticipation of a high incidence rate. This never occurred.

According to Idris, most of the 20 patients with Ebola were between the



Courtesy of Olajide Idris

A multidimensional approach helped Nigeria contain Ebola, said Dr. Olajide Idris, Lagos State commissioner of health.

ages of 20 and 49 and more than half were health workers; 70% were infected after direct physical contact with an Ebola-infected individual and 20% after contact with body fluids.

Aggressive contact tracing was an integral part of the response. With the help of WHO, UNICEF, the US Centers for Disease Control and Prevention and others, 894 contacts were identified through 18 500 face-to-face visits. When a patient was identified, decontamination teams were deployed. UNICEF also provided psychosocial support including counselling of patients, contacts and families, as well as training other mental health providers.

The government and its partners in public health also raised community awareness in "every nook and cranny of Lagos State, and eventually the whole of Nigeria," Idris said.

Home-to-home and community campaigns used local actors to debunk circulating myths about Ebola. Community development organizations, mosques, churches, traditional leaders and schools were all involved in the campaigns. The state government developed radio jingles, circulated leaflets and sent bulk text messages to alert people about the symptoms and infection control measures.

Their concerted efforts were effective, but as long as there is still an epidemic in West Africa, Nigeria is still at risk. Idris said, "We are still not out of the woods. We have to remain vigilant." — Moneeza Walji, *CMAJ*

CMAJ 2015. DOI:10.1503/cmaj.109-4961