

Fighting a Deadly Disease

China provides assistance to West African countries in the battle against Ebola
By Liu Jian

As the deadly Ebola virus spreads across the African continent, China has sent three teams of disease-control experts and medical supplies to Guinea, Liberia and Sierra Leone—the three West African countries most affected by the virus.

There are a total of nine medical personnel across the three teams, each of which includes one epidemiologist and two specialists in disinfection and protection from the Chinese Center for Disease Control and Prevention (China CDC) and other institutions. Their duties involve disinfection and protection training for local medical workers, as well as helping to deliver relief goods and medical supplies donated by China.

On August 11, three Chinese cargo planes carrying 80 tons of medical supplies, donated by China at a cost of 30 million yuan (\$4.9 million), arrived in Guinea, Liberia and Sierra Leone.

"The supplies mainly consist of epidemic control items, including protective suits, disinfectants, thermometers and medicines," said Wang Shengwen, Director General of the Department of Foreign Assistance of China's Ministry of Commerce.

"The West African nations, lacking certain medication and disease prevention skills, are in urgent need of material support and expertise as the epidemic has not yet been brought under control," said Wang Yu, Director of China CDC.

As part of the international response, China sent its first batch of relief goods to

four African countries—Guinea, Liberia, Sierra Leone and Guinea-Bissau—in May, with each country receiving goods valued at 1 million yuan (\$162,600).

Facing the disease

In addition to the nine newly arrived disease-control experts, 38 medical personnel in the three Chinese medical teams that had been working in Guinea, Liberia and Sierra Leone are staying put to continue their valiant efforts to stop Ebola from further spreading.

Stationed in Guinea, Cao Guang likens the fight against Ebola as a "war." Cao touched an Ebola patient's eyelids with his bare hands during a treatment session. After spending 21 days in quarantine, Cao was confirmed as affected.

As one of the first Chinese medical staff exposed to Ebola in West Africa, Cao said that from the moment they were enrolled in the medical team two years ago to work in Africa, they were prepared to face and overcome any difficulties accompanying their tasks.

Guinea was the first West African country to suffer an Ebola outbreak, and the first patients infected in its capital Conakry were treated in March in the Sino-Guinean Friendship Hospital where the Chinese medical team is based. Nine medical staff in the hospital were infected, and six of them died.

"Two of our team members, including Cao, who had contact with the first patient, were put in isolation. Fortunately, they tested

negative," said Kong Qingyu, leader of the Chinese medical team in Guinea. "Now, we continue receiving patients and are working as normal."

The Chinese Government has provided medical assistance to Guinea since June 1968; the current team is the 23rd, with 19 members from Beijing Anzhen Hospital.

"There is a high risk of becoming infected after having contact with Ebola patients. However, the virus rarely goes airborne, or spreads through water and food," Kong said, adding that besides formulating an emergency plan to cope with Ebola outbreaks, one thing his team is focusing on is to help local people learn how to prevent Ebola from spreading.

The nine-member Chinese medical team in Liberia said they would remain in the country to assist the local government, which has announced a national state of emergency following their outbreak.

"There used to be doctors from other countries at the hospital where we are working in Monrovia [capital of Liberia]. But shortly after the Ebola outbreak, some have left, including those from the United States and Egypt," said medical team leader Zhou Yongjun. "But our staff have stayed."

The medical team, which came from northeast China's Heilongjiang Province, first arrived in Liberia in 2013. This April, they



DOCTORS NEEDED: A security officer measures the body temperature of Xu Daomiao, a Chinese medical expert who arrived at Freetown Lungi International Airport, Sierra Leone on August 17



gave lectures on Ebola control and prevention to local medical workers, and the team went on to spread knowledge about the disease to locals in Monrovia, Zhou said.

The Ebola virus began to spread in Sierra Leone in May. The 16th Chinese medical team to work in the country has 10 members who are now helping at the Kingharman Hospital of Freetown.

"All our team members are still working," said team leader Wang Yaowen. "Though the Sierra Leone Government has taken measures to control the virus, it is still hard to say how the epidemic situation will evolve. As doctors, it is our duty to help whenever and wherever an emergency occurs. We will stay here and do our job."

Global support needed

On August 8, the World Health Organization (WHO) declared that the Ebola outbreak in West Africa is a "public health emergency of international concern," which requires an extraordinary response to stop it from spreading.

WHO Director General Dr. Margaret Chan called the outbreak "the largest, most severe and most complex" in the nearly 40-year history of the disease. She urged the international community to provide support on the most urgent-need basis as soon as possible, as "countries affected to date simply do not have the capacity to

manage an outbreak of this size and complexity on their own."

The WHO also said inexperience in dealing with Ebola outbreaks and misperceptions of the disease, including how it is transmitted, "continue to be a major challenge in some communities."

"We need many more contributions from the international community, from governments, NGOs, academic institutions, anyone who can provide us with doctors, nurses, health staff, and other public health staff," said WHO spokesperson Gregory Hartl.

In dealing with the epidemics of Severe Acute Respiratory Syndrome (SARS) in 2003 and the H7N9 bird flu virus in recent years, China has accumulated valuable experience in the control and prevention of public health emergencies. This experience can also be applied to West African nations in the fight against Ebola, according to Dr. Keiji Fukuda, WHO Assistant Director General for Health Security.

Aside from Chinese medical teams, a number of international organizations such as Doctors Without Borders/Médecins Sans Frontières (MSF) have been working in the field to bring the Ebola epidemic under control since March. Currently, its 66 international and 610 African staff are working in Ebola case management centers, responding to the crisis in the three most affected countries, ac-

ording to Dr. Bart Janssens, MSF Director of Operations.

Dr. Janssens said the organization has reached the limits of its capacity, calling for countries possessing necessary capabilities to immediately dispatch available infectious disease experts and disaster relief assets to the region. "All of the following need to be radically scaled up: medical care, training of health staff, infection control, contact tracing, epidemiological surveillance, alert and referral systems, community mobilization and education," he said.

With no end in sight to the virus and no available cure, the WHO announced its approval on August 12 for the use of experimental drugs in the fight against Ebola—the first time the organization has given a green light for unproven, unlicensed drugs to be used on humans. Canada and the United States have provided sample doses to severely affected African countries.

While two Americans infected with the disease have reportedly seen improvement after using the experimental ZMapp drugs, the drug did not work on another infected patient. The use of experimental drugs in the fight against Ebola has spurred debate—not only on its effects and consequences, but also regarding the ethical issues.

"In the particular circumstances of this outbreak, and provided certain conditions are met. It is ethical to offer unproven interventions with as yet unknown efficacy and adverse effects," said the WHO in a statement.

The WHO has also said the epidemic will likely continue for months and has asked for more assistance such as funding and emergency medical staff from the international community. ■