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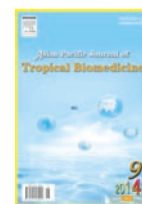


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Ebola in West Africa: an international medical emergency

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ABSTRACT

West Africa is facing the worst Ebola outbreak with 3 685 cases and 1 841 deaths reported from Liberia, Guinea, Senegal, Sierra Leone and Nigeria. There is no vaccine or direct treatment available to treat the patients with Ebola. World Health Organization (WHO) has approved the use of experimental drugs for Ebola patients. Health workers are at high risk. The governments and WHO are responsible to provide necessary protective equipment to health workers dealing with Ebola. There is a strong need to identify the invisible chains of virus transmission. World Bank pledges \$200 million to fight against Ebola, while WHO said \$430 million are needed to control the Ebola outbreak. Ebola can be contained by early detection and isolation of case, contact tracing, monitoring of contacts and adaptation of rigorous procedures for virus control.

1. Introduction

West Africa is hit by the most unprecedented outbreak of Ebola virus caused by the most lethal strain from Ebola virus family. The World Health Organization (WHO) declared it as an International Medical Emergency. As of 31st August 2014, the numbers of Ebola cases are 3 685 with 1 841 deaths reported from Liberia, Guinea, Senegal, Sierra Leone and Nigeria[1]. WHO director general said that the actual numbers of cases are more than the reported cases[2].

Guinea, Sierra Leone and Liberia are the poorest countries of the world with scruffy healthcare system. Even their hospitals lack the basic public health facilities and they are facing the terrible Ebola epidemic[2].

2. Health workers at risk

Ebola is not an airborne virus. Transmission mainly occurs by close contact with the body fluids of infected person, even after death. Healthcare workers are more prone to diseases because they are the first port of call for somebody who is feeling sick. Even with the full protection against the disease, they are still at risk[3]. The World Medical Association reported that many of its junior doctors were not provided the essential protective equipment while dealing with Ebola outbreak. The situation is not acceptable. The WHO and governments are not only

responsible to provide staff for dealing with Ebola but also responsible to provide necessary protective equipment while dealing with this deadly virus[4].

More than 120 healthcare workers have already been died with Ebola[5] including doctor Sheikh Umar Khan, who has treated more than 100 patients with Ebola. The healthcare staff is also leaving the hospitals after watching their colleagues capitulate the virus. The situation is particularly dire in Liberia, where more than 40 health workers have contracted Ebola. Most of city's hospitals are closed and people are protesting against government's delay in collection of Ebola victim bodies[6].

3. Invisible chains of transmission

There is a strong need to identify the invisible chains of virus transmission. The disease has a high fatality rate and many people prefer to take care of their beloved ones at home or they take help from the traditional healers. These patients overthrow the tactics for virus containment[7].

There is also need to discourage the traditional burial in some rural areas, which are further strengthening the chains of transmission. Burial can be dignified by the involvement of healthcare agencies that will decrease the grief of affected families[7].

Medical teams in West Africa are educating the people to protect themselves from Ebola. They are also advising to restrict the consumption of bush meat, believed to be the main cause of this outbreak. The bush meat is widely removed from the market of main towns of Guinea. But in villages, people are not ready to restrict their tradition of bush meat hunting[8].

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“We will die if we must, but abandoning our traditions is out of the question. It is true that we have lost many relatives. That’s fate,” said Guéckédou resident Mamadi Diawara[8].

4. Population movement

The West African countries have fluid population movement with porous borders. Cases are occurring in densely populated cities as well as difficult to reach rural areas[7]. On 9th August, 2014, Guinea has closed its borders with Sierra Leone and Liberia. The Liberian government has launched “Operation White Shield” to restrict the movement of people from infected areas[6]. Zambian government has also banned the entry of people from affected West African countries[9].

Nigerian President’s office requested from the political and religious groups, spiritual healers and other bodies to discourage the mass gathering activities which can promote close contacts, aiding in viral transmission[10].

The epidemic is also affecting the region’s economy. Different international companies have evacuated their employs from West Africa. British Airways cancelled its flights and London Mining cut back non-essential travel to the region[11].

5. Treatment

There is no vaccine or direct treatment available for Ebola victims. The virus can be contained by early detection and isolation of case, contact tracing and monitoring of contacts and adaptation of rigorous procedures for virus control[7].

WHO has recently approved the use of experimental drugs for Ebola patients. The two American Aid workers treated with experimental serum, ZMapp, are released from the hospital. The drug was available in short supply and it will take months to produce new stock. Canadian health minister has announced that their government can donate 800–1000 doses of experimental drug VSV-EBOV to WHO. The drug has showed good results in animals but not yet tested in humans[12].

6. Funding

World Bank pledges \$200 million for the West Africa to fight against Ebola[13]. The European Commission said on 8th August, that it will provide an additional €8 million aid for the fight against Ebola. They will also send trained staff to establish mobile diagnostic and testing facility in Sierra Leone[2]. The Nigerian President has announced \$11 million as national emergency plan, including the building of isolated wards for Ebola patients and buying of necessary protective equipments[10]. African Union Commission pledge \$1 million for the fight against Ebola[14]. On 26th August 2014, WHO said that \$430 million are needed to control the Ebola outbreak.

The outbreak is spreading at a faster rate than the efforts to overcome it. If the authorities will fail to control the spread of virus then the consequences will be more catastrophic and the number of affected countries will be increased. The health care infrastructure of affected West African countries is weak, they is a strong need for additional funding from international donors. In a more interconnected world, global efforts are needed to fight and win the battle against this deadly pathogen.

Conflict of interest statement

I declare that I have no conflict of interest.

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