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# How We'll Fight the Next Deadly Virus TED Talk Annotated Resource List

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#### **Annotated Resource List**

#### **TED Talk Information**

I chose "How we'll fight the next deadly virus" by Pardis Sabeti for my TED Talk. Pardis Sabeti visited hospitals in Kenema, Sierra Leone and Arua, Nigeria where physicians, nurses, and scientists have been battling the deadly Lassa virus. It is similar to Ebola; it can cause a severe fever and can be fatal. While working together in March of 2014, the Ebola outbreak began in Guinea. They feared the Ebola virus would make its way to Kenema. Members of her team went and helped a doctor to set up diagnostics that would pick up the Ebola virus by molecular tests. The team knew how to set up these tests because they had already done it with the Lassa virus. One day, a woman came to the Kenema hospital and the molecular tests confirmed the first case of Ebola in Sierra Leone. Since the team caught the virus early, they were able to treat the woman. By this time, the Ebola virus had been breeding and mutating for months and a wave of the virus came into the Sierra Leone hospital. Sabeti and her team decided to take the specimen from the patient's blood, deactivate it, and ship it to part of her team in Boston.

Sabeti's team worked around the clock to generate 99 genomes of the Ebola virus. The results helped the team see what kind of vaccines and therapies would work best for each mutation. Sabeti's team, unlike most scientists, doctors, and researchers, released this information immediately to help others and to get help for dealing with the Ebola virus. Viral trackers began to help Sabeti and her team over the web. Soon after, they created an app available to all health-care workers that released the predicted prognosis for the patients they had seen themselves. However, they need more data to validate their predictions. They waited for data to be released from other places, but it never came. This was unacceptable to Sabeti. Part of her team had been working hard on finding data while others were providing care. Several of her colleagues lost their lives providing care. Sabeti wants us to fight these deadly viruses together and to share our work because this is not the first or last outbreak of a deadly virus.

#### **Annotated Resource List**

#### **Book Sources:**

Willett, E. (2003). Ebola virus (Diseases and people). Berkeley Heights, N.J.: Enslow Pub.

This book explores the history of the Ebola virus. Also, it describes symptoms and treatment options available. This book also explains the hemorrhagic fever that is associated with the Ebola virus.

Garrett, Laurie. (n.d.). Ebola. Hachette Books.

This book summarizes the status of Ebola in each country. This book goes on to explain epidemiology, clinical features, and the global status of Ebola. The author uses information from peer review journals and Health Ministry to describe Ebola.

## **Scholarly Journal Articles:**

Lupton, K. (2015). Preparing nurses to work in Ebola treatment centres in Sierra Leone. *British Journal of Nursing*, 24(3), 168.

This journal article is about the need of health-care workers in Sierra Leone during the outbreak of Ebola. It describes what the volunteers need to know before coming to help. This article prepares volunteers and also describes the experience of working in a treatment center.

Ibrahim, A., & Lee, T. (2014). Ebola. *CMAJ : Canadian Medical Association Journal = Journal De L'Association Medicale Canadienne*, 186(15), E589.

This journal article discusses the Ebola outbreak of 2014. It describes the symptoms of the virus, such as fever. Also, the article discusses the way Ebola is transmitted from patient to patient.

#### **Reference Source:**

Ebola virus. (2010). Concise Medical Dictionary, Concise Medical Dictionary.

This reference source describes the Ebola virus. It compares the virus to other diseases, such as Marburg Disease. This reference source goes on to describe how Ebola is transmitted.

### **Web Source:**

Sabeti, Pardis. (2015, May). *How we'll fight the next deadly virus* [Video File]. Retrieved from http://www.ted.com/talks/pardis\_sabeti\_how\_we\_ll\_fight\_the\_next\_deadly\_virus?langua ge=en

This video describes what Sabeti and her team done during the outbreak of Ebola in March of 2014. Her team had a diagnostic test that picked up the Ebola virus by molecular testing. Her team also generated 99 genomes of the virus to help find the best way to treat the virus.