Movie Review - Ebola: The Plague Fighters (1996)

Reviewed By: Lani Hoffmann Date: September 27th, 2007

Characters:

Stacy Keach - Narrator

Dr. William Close, Dr. Russell Coleman, Dr. Ali Khan, Dr. Peter Kilmarx, Dr. John Krebs, Dr.

C.J. Peters, Dr. Paul Reiter, Dr. Pierre Rollin - CDC doctors

Dr. Mungala Kipase, Dr. Dona Mupapa - Zairian doctors

Nicole Oganya - nurse and Ebola victim

Dr. Robert Swanepoel - South African doctor

Structure: This movie is a documentary style with inter-related scenes weaving in and out to

describe the situation as a whole.

Plot Outline: Ebola is very much a hardy virus that can live outside of the human body, unlike

HIV. It can be found in trace amounts in tears, blood, and even on the surface of the skin. The

virus operates by attacking the vital organs, causing massive bleeding internally and externally.

There is no cure, no treatment, and death usually occurs within 10 days.

A close relative of Ebola was first seen in Europe in 1967 when workers at a

pharmaceutical plant in Marburg, Germany began to mysteriously die. From the time of

headache to death was usually one week. The disease was believed to have been contracted by

handling the blood and tissue of African monkeys.

Ebola was first seen in the United States in Reston, Virginia in 1989. The breakout began

in a primate quarantine unit and spread to a nearby room through the ventilating system. The

military intervened, killing four hundred monkeys and ending the outbreak.

The last strike of Ebola to hit Zaire occurred twenty years ago in the city of Yambuccu.

During the 1976 Ebola crisis, the disease killed nine out of ten victims, leaving four hundred

dead. The outbreak ended upon the decision by the village elders to stop traditional burial

ceremonies, quarantine the village, and burn down the huts of the dead.

- 1 -

The epidemic of 1995 began at a hospital during surgery performed on a lab worker. Three nurses fell ill following the surgery, and as the hospital workers tried to take care of their kin, they too fell ill. Within weeks, thirty six workers were already dead, all survivors fled. The hospital is currently empty, with goats running through the yards.

Kikwit itself is considered a city although it is really a town with a population of 400,000. There is no running water or electricity. The diet of the Kikwit people consists of insects, monkeys, and rats, all suspected carriers of the disease. The camera crew catches a glimpse of one of the villagers making a lunch out of a rat.

The story begins as news reporters tell of the deaths occurring in Zaire. Later, it is officially diagnosed by the CDC that the deadly disease is no other than Ebola. Since the beginning of the outbreak, a military quarantine has been imposed on the area of Kikwit.

An International Medical Emergency Team assembled in Kikwit with a mission is to stop the virus and find out where it came from. The members officially greet each other with the "Kikwit" handshake – elbow to elbow in order to minimize contact. The international researchers and Zairian doctors must strategize and plan how they will respond to this outbreak. Their first priority is to find every case and isolate it.

Epidemiologists from the CDC establish the protocols for finding and documenting every case. This unfortunately entails the entire team breaking apart and fanning through the city, sometimes going door to door in order to find and secure all of the patients.

In a city with no mass media (not even a newspaper), the international team found it hard to organize a meaningful informational campaign. In the center of commerce, they draped signs saying, "The disease that makes your blood flow, this disease has no vaccine and no cure. You must protect yourself." Medical students arrived in Kikwit to begin their door to door campaign.

Villagers were wary of coming forward because of the stigma attached to the disease. The sick will be taken from their home and family to die in the hospital ward.

Ebola is thought to be carried by an animal of the rainforest, but it is unknown which one. It is believed that when we know the host, we can see where the virus will hit next.

At the 10 week mark, epidemiologists found patient zero from a timeline. The first case occurred four months prior to the first hospital death; the patient was Gaspar Minga, a charcoal worker. Almost his entire family is now dead. Epidemiologists use this data and begin to scour the area of his last work site, taking samples of insects and all other animals from the area.

A CDC Epidemiologist has coined the term "chain of death" to refer to the mode of operation for the disease. The "chain of death" begins at the primary host who then infects their caregiver, who in turn infects their caregiver, killing entire families. Due to this chain, families must be separated, affecting how the villagers take care of their sick and honor their dead as traditional burial ceremony rituals involve touching the corpse.

Various scenes depict the grim task of removing patients from their homes and later corpse disposal handled by the Red Cross. During removal of patients from their homes, one member of the Red Cross must spray down the hut of the patient while she is placed onto a stretcher and loaded into the back of a pick up truck. Corpse disposal involves mass burial of those who have succumbed to the disease. The dead are buried in sealed body bags deep in the ground. Onlookers from the community can only cover their faces with their t-shirts. Occasionally, bodies are found dead in their homes to be discovered by the medical team. One student explains that, "to them, Ebola means bleeding. If they're not bleeding, they're not sick."

In the Ebola ward, the medical team wears four layers of protective gear in spite of the soaring African heat. The only divider between the Ebola ward and the outside world is a moat

filled with bleach that is used for the medical team to walk through. Each day the medical team is sprayed down with bleach and their protective gear is burned so as not to be worn twice.

There is one ray of hope in this story, the survivors. One out of every five people has survived. They must still remain confined until the outbreak is over because they are possible carriers of the disease. It is unknown how they have survived but it is believed that they had sufficient antibodies to fight the virus.

As the outbreak began to subside, a nurse from the medical staff, Nicole Oganya was diagnosed with Ebola. She had always worked next to the doctors in full protective gear. The Zairian doctors developed a plan to transfuse Nicole's blood with that of a survivor to give her antibodies. This plan involves much risk. If Nicole does not have Ebola, she would be infused with Ebola or any other diseases the convalescent may have (E.g. Malaria, Hepititis). The international doctors do not believe in transfusion of convalescent blood. Similar methods have failed on animals in the past. In desperation and without the consent of the international team, the Zairian doctors proceeded with this once in a lifetime chance experiment after obtaining a signed consent form from Nicole. After one week, Nicole began to recover. Spurred by this result, the Zairian doctors transfused an additional eight patients. Seven of the eight patients survived, but the Western doctors remain unconvinced. Because the experiment was completely uncontrolled, they argue that we will never know that the transfusion saved the lives of those patients.

In the end, 316 people were infected, 244 died.

Opinion: Individual rights must yield to the good of the whole in Zaire during the outbreak. Those who are believed to be infected are never tested prior to going to the Ebola ward. Upon arrival to the Ebola ward, there is no further containment than a simple room lined with cots. If

someone was not sick prior to entering the ward, assuredly, they would be exposed while within the ward which is merely condemning them to death. Use of multiple isolation units would minimize contact with those who were known to be infected.

The religious practices of the people are also compromised. Through the use of mass burial instead of proper funerals, the living can no longer honor their dead in the traditional sense and must instead accept the directives of the medical team.

Informed consent for convalescent blood could also become an issue as most of the population of Kikwit is functionally illiterate. In order to obtain consent for transfusions, the nurse was able to sign the consent form however the film does not show how consent occurred in the remaining patients.

Posse Comitatus is not addressed in the film however this would be an issue in the United States in such an outbreak. The Zairian military is only used to secure the borders in this film and there is no military rule.

The film is a first hand depiction of the public health system coming together in order to contain the outbreak, and the international community working together to resolve the situation through the use of epidemiology, quarantine, new public health standards, and informational campaigns. An isolated incident and Ebola may become a devastating pandemic unless properly contained. Ebola is an extremely good pathogen for bioterrorist use. As there is a strain that appears to transmit through the air in primates, there is a distinct possibility that the pathogen could become airborne in human populations also. This hardy strain of Hemorrhagic Fever has the possibility of being a devastating weapon due to the "chain of death" that follows in its wake.

Movie Rating: