Viral hemorrhagic fever and ebola patients essay

Health & Medicine, Nursing



It was 1976 when the Ebola virus first appeared in the Republic of the Congo in a village situated near the Ebola River from which the disease received this name. The Ebola virus is comprised of five distinct species; bundibugyo, Ivory Coast, Reston, Sudan, and Zaire. Sudan and Zaire species have been associated with large Ebola hemorrhagic fever (EHF) outbreaks in Africa, while the Ivory Coast and Reston species have not. EHF is a febrile hemorrhagic illness which causes death in 25 to 90% of all cases. The Ebola Reston species found in the Philippines can infect humans but no illnesses or deaths in humans has been reported to date. The above virus that most of us are common with is the large Ebola hemorrhagic fever virus in which it is believed that fruit bats in the African Congo are the host species.

Transmission of the virus: The Ebola virus is introduced into the human population through close contact with blood secretions organs or other bodily fluids of infected animals. In Africa infection have been documented to the handling of infected chimpanzees gorillas fruit bats monkeys forest antelope and porcupines found dead or ill in the rain forest. Later Ebola spreads in the community through human human transmission resulting from close contact with blood secretions organs and other bodily fluids of infected people.

Burial ceremonies were mourners have direct contact body of deceased person can also play a Roman transmission of Ebola. Transmission via infected semen can occur up to seven weeks after clinical recovery. Healthcare workers have frequently been infected while treating Ebola patients this is acquired through close contact without the use of correct infection control precautions and adequate barrier nursing procedures. For example healthcare workers not wearing gloves and or masks and or

goggles may be exposed to direct contact with infected patient's blood and are at risk. Also in transmission are farmers their employees and other people that come in close contact with monkeys were pigs that are infected by the Ebola virus. Several human infections have been documented and were clinically asymptomatic. Thus the Ebola Reston virus appears to be less capable of causing disease in humans and other bola species however evidence available relates only to healthy adult males it would be premature to conclude the health effects of the virus on all population groups such as immunocompromised persons persons with underlying medical conditions pregnant women and children.

More studies of the Ebola Reston virus are needed before definitive conclusions can be made about pathogenicity and virulence of this virus in humans. But still to date EHF is still by far the most deadly strain of Ebola. Signs and symptoms of EHF is a severe acute viral illness often characterized by the sudden onset of fever, intense weakness, muscle pain, headache and sore throat. This is followed by vomiting diarrhea rash impaired kidney and liver function and in some cases both internal and external bleeding laboratory findings show low counts of white blood cells and platelets as well as elevated liver enzymes. People are infectious as long as their blood and secretions contain the virus.

Ebola virus was isolated from seminal fluid up to the 61st day after onset of illness and laboratory acquired case. The incubation period,(interval from infection to onset of symptoms) varies between 2 to 21 days. During EHF outbreaks the case Attali Wright and varied from outbreak to outbreak

between 25 to 90%. Diagnosis Differential diagnoses include, malaria, typhoid fever, shigellosis, cholera, leptospirosis, hepatitis and other EHS's. Ebola virus infections can only be diagnosed definitively in the laboratory by a number of different tests. These tests include enzyme linked immunosorbent assays, antigen detection tests, serum neutralization test, and virus isolation by cell culture. Tests on samples from patients aren't extreme biohazard risk and should only be conducted under maximum biological containment conditions this will be level four containment. There are no treatments and vaccines available for treatment of Ebola.

Severe cases require intensive supportive care. Patients are frequently dehydrated and in need of intravenous fluids or oral rehydration with solutions containing electrolytes. New drug therapies shown promising results in laboratory studies and are currently being evaluated. Several vaccines are being tested but it could be several years before any are available.

In Africa fruit bats are considered possible natural host for Ebola virus as a result the geographic distribution of Ebola viruses may overlap with the range of the fruit bat. Although nonhuman primates have been a source of infection for humans, they're not that to be the reservoir but rather an accidental host like human beings. Since 1994 Ebola have breaks from the Zaire and Ivory Coast species have been found in chimpanzees and gorillas. Ebola Reston as cause severe VHF in macaque monkeys farmed in the Philippines and imported monkeys in 1989, 1990 and 1996 to the USA and in 1992 in monkeys imported to Italy from the Philippines since 2008, Ebola

Reston virus is were detected during server are breaks a deadly disease in pigs. Asymptomatic infection in pigs has been reported in experimental inoculations can to demonstrate that the Ebola Reston cannot cause a disease in pigs. Controlling Ebola Reston and domestic animals there is no animal vaccine available against Ebola Reston routine cleaning and disinfection of pig or monkey forms with sodium hypochlorite or other detergents is expected to be effective in inactivating virus. If an outbreak is suspected premises should be quarantined immediately. The calling of infected animals with close supervision or burial or incarceration of the carcasses, may be necessary to reduce the risk of animal to human transmissions.

Restricting or banning the movement of animals from infected farms other areas can reduce the spread of the disease. As Ebola Reston outbreaks in pig's monkeys have preceded human infections, the establishment of an active animal health surveillance system to detect new cases is essential in providing early warning for veterinary and human public health authorities. In the absence of effective treatment and a human vaccine, raising awareness of the risk factors of Ebola infection in the protective measures individuals can take is the only way to reduce human infection and death. Human to human transmission of the Ebola virus is primarily associated with direct contact with blood and bodily fluids. Transmissions to healthcare workers have been reported when appropriate infection control measures have not been observed.

Healthcare workers caring for patients with suspected or confirmed Ebola virus should apply infection control precautions to avoid any exposure to the patient's blood and body fluids and or direct unprotected contact with the possibly contaminated environment. Therefore the provision of healthcare for suspected or confirmed Ebola patients require specific control measures and the reinforcement of standard precautions particularly basic hand hygiene the use of personal protective equipment safe injection practices and safe burial practices. There are no known cases of the Ebola virus in the US that have affected human beings. There have however been reported cases of the Ebola Reston virus causing severe illness and death in monkeys imported to research facilities in the United States and Italy from the Philippines. During these outbreaks several research workers became infected with the virus but did not become ill.