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Cholera Research Poster

By: James Sowards and Mac Duffield



Background

Cholera kills 142,000 on average a year, each of these lives being equally important. In Haiti a huge outbreak of cholera occurred. So many people died it made the population unable to recover from such an epidemic. Cholera might not be as important to people that do not live near the area affected but it has changed the lives of many people around the world (WebMD LLC, 1994-2015).



Cholera has killed millions people over the years. Historians believe that this disease began in Calcutta, India in the 1800s. Those living in this region did not have healthy or safe living conditions, and were not given access to clean water. Drinking the unpurified water combined with poor living conditions made the breeding ground for this disease very contagious. The first pandemic occurred during 1817-1823 in all the following countries; India, Southeast Asia, Central Asia, the Middle East and Russia. This cholera disease can be traced back to 450 B.C. (WebMD LLC, 1994-2015).



Cholera is an infectious disease that is usually transferred in a third world country that does not have clean water to drink. Due to this water not being properly treated it infects their digestive system and enters their intestines making this disease deadly. The disease begins by causing you to vomit, and also have water diarrhea (WebMD LLC, 1994-2015).

References available upon request.

Infection/Disease

Cholera clearly passes through the first line of defense. The first line of defense is composed of skin or mucous membranes as physical barriers. After it has passed through this line of defense which is picked up by drinking water that is polluted the person's body cannot determine whether it is clean or not. When pathogens, a bacteria or virus, enters the first line of defense, the leucocytes kick in. A leucocyte tries to prevent the pathogen or virus, before it harms the body. They appear to be inconspicuous and the body is unable to realize what it is. The third line of defense is when antibodies come in and go to the specific substance it needs to go to. At this point the antibodies have entered your body and destroyed it enough to spread through your entire body. At this point the only way the disease can be cured is to hydrate the victim infected and attempted to gain ability to take the correct drugs for the sickness (Leung, 2012).



The first step of getting cholera is drinking dirty water. After this the disease can remain in your body for 4 to 7 days. Within 12-24 hours it will begin to make your body ill and start getting symptoms such as stomachache or nausea. Following these symptoms you will also begin to experience diarrhea, vomiting, dehydration as well as muscle and stomach cramps. If the person infected with the disease continues to consume salt without water they will die from dehydration. The prognosis of cholera is getting hydrated as soon as you start showing the symptoms listed above. A way to prevent this disease is to seek medical attention immediately and be very careful to drink as much fluids and water as possible. (Leung, 2012).

Treatment

To fully treat cholera after contracting the infectious disease is not very hard for us in our lives but is fairly hard for people that don't our privileges. It is important to hydrate anyone infected with this deadly disease and get fluids into your body fast. It is very important to make sure that the water being consumed is properly treated and does not contain the same level of dirt or other particles (CDC, 2008).



This step is very important because as the patient or person infected is throwing up, when they drink water they are rehydrating their body with the fluid lost. Salt helps to fight off the infection and water helps to cleanse it from the person that is infected (CDC, 2008).



Treatment emerging to prevent polluted water is prevalent in many continents such as South America and Africa. Churches all around the nation donate money to foundations to give those continents technology to achieve clean water. One of the newest treatments is a LifeStraw. The LifeStraw cleans 99.9% of bacteria and parasite. This is a great way to prevent cholera in foreign countries such as Haiti (CDC, 2008).