Disease in africa essay



" The fact remains that lowland, tropical Africa may well have the most intractable disease environment in the world." (Bohannan & Curtin, 35) In order to understand diseases in Africa, one must first be acquainted with its geology. Africa is a gigantic landmass that is over 5200 miles long and 4600 miles wide. The continent is a vast plateau with five different types of physical regions. The first type of physical region is called the Mediterranean -type climates. This type of region provides Africa with nutritious land for vegetation.

Next there is the deserts and arid plains, located inland. The Sahara and the Kalahari deserts are located here. Then there is the savanna regions, which are covered with grass and trees. The savanna regions occupy the largest physical region in all of Africa.

The region along the equator is made up of thick and humid forest growth. This type of physical region is located in the Congo Basin along the equator.

It is important to understand the geology of Africa, because many of the diseases, which were born, had a lot to do with the climate and land region they were growing in. Africa has struggled with many different types of disease within their society due to their type of land, climate and weather. " Among all the diverse natural environments of the earth, tropical rain forests are the most variegated in the sense that more diverse forms of life share this kind of habitat than occupy drier, cooler regions."(McNeill, 16) Africa possesses the prefect breeding ground for many diseases.

Page 3

There were many diseases and viruses that have had an impact on Africa, however trypanosomiasis, malaria, yellow fever, AIDS, smallpox, onchocerciasis and yaws were the most destructive.

African trypanosomiasis is a destructive disease that is often called " the sleeping sickness." It is an infectious disease that is carried and distributed through two different parasites. These parasites are the trypanosoma brucei gambiense and the trypanosoma rhodesiense. Both parasites host and breed on the tsetse fly. The tsetse fly is an inset that carries the disease through its bloodstream.

When the insect bites, it injects the disease through flesh, which then spreads through the body. The tsetse fly is large and brown, making it easy to detect. The fly only usually bites during the day and does not consider humans a primary host. People who become prey, often involve themselves in areas where there is a lot of game activity.

The disease, which is also an organism, attacks the central nervous system and tissue.

This leads to a "sleep" like affect, which eventually ends in death. In the early 1900s, Uganda experienced devastating losses to its society due to trypanosomiasis. The disease ended up killing over 200, 000 people in less than 6 years. "Understandably, the new colonial powers, including Britain, France, Germany, Portugal, and King Leopold's Congo Free State, perceived sleeping sickness to be a grave threat to African laborers and taxpayers, which in turn could dramatically reduce the utility of the new

Page 4

territories."(Kiple, 556) Sleeping sickness is still a common disease that usually isn't discovered until severe symptoms set in.

Treatment is available today, only if the disease has not caused brain damage.

Another disease that has had a major impact on Africa is malaria. Malaria is ameboid-type parasites, which live in humans. Malaria parasites multiply and ingest red blood cells in order to expand through a central nervous system. Humans contract Malaria by falling victim to a mosquito that has the virus.

Once the mosquito bites its prey, the disease spreads fairly quickly. Thus resulting in extremely fast death rates among humans. The history of malaria can be traced all the way to AD 500. It is a disease that still to this day devours humans. " Malaria affects about 250 million people per year, killing between 1-2 million, mostly children."(Book Mark LEPORSEY) Malaria was a disease that seemed to have the most impact on children, because young adults start to gain an amunity to the disease and eventually only suffer minor symptoms if they are affected.

Since children were mainly infected with malaria, a nickname was brought about called " black children's grave." This nickname represented a large portion of tropical Africa.

After World War II, Africa began spraying DDT on large areas that were infested the mosquito colonies. This only worked for a short period of time, until the mosquitos developed a resistance to the chemicals. Malaria is still a threat to the people of tropical Africa, however the numbers of infected cases are dropping due to new medicine and awareness.

Yellow fever was another severe disease that affected many Africans in the past 400 years. Yellow fever has been thought to have been discovered in Africa in the 1600s. However, it is a disease that has since affected many other areas of the world including North America and South America. The United States became severly affected by yellow fever when ensalved Africans were first being brought to America. In 1939 researchers developed a vaccine for yellow fever which combated the problem.

Also because of increased sanitation and drainage of infested breeding grounds, the disease has been controlled. Yellow fever itself is an infectious viral disease that is carried through mosquitos. Mosquitos contract the disease from coming in contact with infected monkeys. Once the mosquitos are infected, they pass the virus onto humans.

A non-infected mosquito can contract the virus from an infected human and then pass it on to a human who is healthy. When a person becomes affected with yellow fever, the first symptoms include headaches, backaches and fever. These symptoms continue to increase in pain and eventually lead to nausea and vomiting. Yellow fever is a disease that sets in very quick.

In a few days after infection, ones liver starts to degenerate and sooner or later they die. The average number of days that a person who becomes infected has to live is eight. This disease, although not as severe as malaria, still had a huge impact on the people of Africa. The most recent disease to strike Africa is the acquired immune deficiency syndrome also known as AIDS.

AIDS is said to have originated in Africa, however it is not certain for sure. " Two-thirds of the cases reported so far have occurred in the United States, but the authorities believe that there is more unreported cases in Africa."(Bohannan & Curtin, 36) AIDS is transmitted through unprotected heterosexual sex. " One possible explanation for the more rapid spread in Africa is the fact that certain combinations of a gene called (Gc) have greater resistance to the virus than others do. The dangerous combination occurs more frequently among people of African descent, and the least dangerous occurs most frequently among people of European descent."(Bohannan &Curtin, 36) Thus meaning that Africans are more prone to contracting the deadly virus.

The disease itself strikes the T-4 cells, which are used to rid the body of infection and disease. The virus attacks these cells preventing ones body from combating infection. The depletion of red blood cells is a clear indicator of whether or not a person has fallen victim to the disease. To this day there is no known cure to the disease, however there are many precautionary measures one can take to surpass the virus. Some of these include protection during sex, AIDS testing and proper sanitation techniques.

AIDS is a disease that has had an enormous impact on the African society.

Smallpox, onchocerciasis and yaws all had the relatively same affect on the Africans. Smallpox was a disease that was spread through the air, bodily

contact and bodily fluid. Since it was easily transmitted, it was easy to become infected.

Symptoms included high fever, nausea and puss filled blemishes. One out of ten people who contracted this disease would survive. Eventually, a vaccine was created to prevent further transmission. Onchocerciasis was also known as " river blindness." Simulium damnosum, was the name of the fly that spread the disease. The plentiful rivers of Africa, created perfect breeding grounds for the parasites that caused " river blindness.

" Since the parasites were in the Africans water supply, many parasites found new shelter in humans. When Africans bathed, worked or drank the river water, they became infected with the disease. The disease itself was quite potent.

Parasitic worms would develop, breed and grow in the humans body through access of their blood stream. They would create gigantic lesions on the skin surface. The parasites infect parts of the eye and caused severe blindness in many humans.

Most people would die from infection, however those who survived were usually blind for life. "In Burkina Faso and parts of northern Ghana, it used to be so serious along certain rivers that as many as 50 percent of middleaged people would be blinded for life."(Blythe, www.) This was an enormous portion of society that was affected with severe disabilities. The last disease, which had a great impact on the African society, was yaws.

Yaws was a disease that was not life threatening, however it was very abundant in Africa. Due to the tropical climate and adequate breeding ground, yaws disease was quiet widespread. The disease itself was passed through humans who were previously infected. Body contact and skin surface contact were the most apparent ways of contracting the disease.

Once contracting the disease, people who were infected experienced a severe lesion that was often bright red. The lesion itched and ached on the surface of the skin. If the infected person scratched the lesion, it would become worse and spread more rapidly. The lesion if not treated, would create tissue damage, which led to a crippling affect.

The symptoms which were experienced besides the lesion, were often fever, nausea and joint aches. It would on an average take six months for the body to rid itself of the disease. However, in most cases the infected person would live the rest of his or her life with severe joint and tissue complications.

Environment and climate were not the only reason why disease had such an impact on Africans.

Medical links between disease and living conditions were seen as a possible threat to spreading and keeping disease a major problem within society. After hunter and gatherers, Africans settled in villages, which became heavens for diseases. These villages were more often than not crowded and lacked proper sanitation practices to keep infectious diseases out. In these villages, people lived within close contact to each other. Human waste was usually discarded into large lakes, rivers or ponds.

Because of eliminating human waste into these water reserves, which often did not have a current and therefore allowed for waste to sit and decay. Disease was soon spread from human waste, because these same water reserves were used for drinking and cleansing purposes.

" Large numbers of people living in close contact, thus provided a critical mass of potential host and enhanced the opportunity for infection with organisms transmitted by the respiratory and the fecal-oral routes." (Hartwig & Patterson, 5) Also, new means of food production and farming created perfect settings for parasites and disease to live and breed. The mosquito that eventually carried malaria became very abundant through land clearing processes that farmers used. The mosquito was able to breed better, since the land had been cleared.

An example of how food technology aided in disease can be seen, when farmers began cultivating rice in wet patties and soon became exposed to schistosomiasis. This is a viral fluke that caused a lot of death to farmers and those who consumed their food.

" The price Africans paid for the benefits of more efficient food production and settled village life was a more complex and threatening disease environment." (Hartwig & Patterson, 6) These types of living conditions gave disease a chance to grow and affect more people. Since new diseases were starting to be seen and spread throughout Africa, natives began thinking of ways to combat the problems. One way that diseases were observed and cured was done through tropical medicine.

Page 9

Throughout Africa's disease history, tropical medicine has always been a means to offset many diseases and illnesses. Parasitology is the scientific study of parasites and the environment they live in. The pioneer of parasitology was a man by the name of Patrick Manson. He was often called the " father of tropical medicine." Patrick Manson discovered that widespread diseases were carried and transported by the Anopheles mosquito.

This was a gigantic step in tropical medicine.

Manson believed that once a carrier of a disease could be located, than the disease could easily be terminated. He wrote many books discussing his theory that tropical diseases were mainly present in warm climates and were insect-borne. These insect-borne diseases are parasitical and have the ability to live and prosper off of a host. The parasites often hosted off animal and insects. It must be understood that before colonial expansion and influx of other people besides Africans, disease was kept to a minimum.

History shows that before exploration, Africans had the genetic ability to offset deadly and harmful diseases. This was mainly the case, because Africans had many centuries to become immune to certain diseases that were passed on from person to person.

" Early hunting and gathering peoples had millenia to achieve biological harmony with their microbal and helminthic parasite. Infection conveys long-lasting immunity against that specific viral strain to the survivors, and, since these viruses do not persist in a latent state in their hosts and have no animal reservoir, they can survive only by continual transfer from victims to https://assignbuster.com/disease-in-africa-essay/

nonimmune persons."(Hartwig ; Patterson, 5)During the beginning years of African history, tropical medicine was the basic means to survival. Also, tropical medicine was self-contained because there was simply not enough hosts during the time period hunters and gathers exited for disease strands to survive and infect people.

Tropical medicine also meant preventive medicine. Preventive medicine is a term used to describe treatment of a disease or problem before it actually occurs. The Africans saw that disease was being spread more rapidly when trading was done between different villages and other parts of Africa. Animals and food are prime examples of goods that were traded which often led to the spreading of disease.

Once the people realized that disease was being spread more rapidly, they began blocking trade routes and became more careful with goods that they did traded between each other.

Contact was the key to the spread of disease. As long as contact between people of different areas was kept to a minimum, then disease could not be spread easily. Preventive medicine, a form of tropical medicine included blocking off certain trade areas to prevent contact with others. Some merchants and traders often met is deserted lands and areas where they could inspect goods and make deals without infecting villages. This type of trade was very difficult, because merchants would have to travel by foot and could not carry to many goods. The threat of disease made it very difficult to communicate and trade with other areas of Africa.

The colonization of Africa by Europeans led to major problems with diseases and the affect it had on society. Europeans who first came into Africa experienced disease at its worst. "After the fifteenth century, when European traders began to arrive by sea along the African coast, they made the same discovery, that their death rates were astronomical."(Bohannan ; Curtin, 39) These Europeans were the pioneers from the outside world who first witnessed the destruction of disease.

Once these explorers went back to Africa and told about the rich minerals and plentiful land, Europeans prepared to go into Africa and explore it more. The Europeans did not think twice about researching the consequences of exploration. When Europeans began exploring into Africa, they were bombarded with disease, which in most cases the African people had become immune to from centuries of infection.

Tropical medicine prevented Africans from being infected with the same diseases Europeans were welcomed with.

However, once the Europeans became infected, new strands of disease were seen, which the African people were not immune to. This created a major problem for Africans who were once again infected with a new type of disease. Africa was not the only place to become infected with disease from the European colonization. America experienced many diseases along with almost every country in Europe and certain parts of Asia. Through trade and travel, diseases of Africa became familiar throughout the world.

The European troops who were located in Africa during the twentieth century were put at great risk for disease infection. The troops brought new diseases https://assignbuster.com/disease-in-africa-essay/ into Africa, which were not present there before they came. The troops who were stationed in Africa lived off the land, because military stations had not previously been setup.

This meant that troops were eating wild vegetation, hunting animals and drinking water from bacterial infested water. This was a common practice that often led to tragedy. Many people in the military had died from being in the new climate and land which they were not used too.

Military troops contract disease bacteria from the unsanitary living conditions. Once the troops contracted the diseases, they were often transmitted to others in a chain effect. Furthermore, Africans who fought against the Europeans and Africans who moved away from land that was about to become colonized, often suffered new diseases and illness. In the past, the Africans had not traveled from their village domain, since they had now moved, they experienced new diseases, which were at one time prevented.

" The expansion of trade and the rise of secondary empires provided ideal conditions for the spread of disease."(Hartwig ; Paterson, 9) The second empire referred to, is the Europeans and their colonization of Africa. Europe brought new problems to Africa, however in a way they also helped Africa.

Europeans created many new problems with diseases in Africa, however they also fixed many problems with diseases and helped Africans.

Technology is one thing that the Europeans had which gave them so much success in colonizing Africa. Technology was not only seen in weapons and

government, it was also seen in medicine and prevention of disease. It is quite obvious that Europeans did not spend an efficient amount of time researching diseases in Africa, before they began colonizing. Many colonies believed that they could combat the disease and epidemics. There were many failed attempts by the Europeans to try and control the problems they had created. The French did the most to fight the war against disease.

The French setup large facilities, which acted as hospitals and clinics to treat the sick. Many of these clinics failed because not enough research had been done to know how to combat the diseases.

The clinics became holding tanks for the sick. " Even when diseases were recognized and their ecology understood, preventive measures were often almost impossible.

"(Hartwig ; Patterson, 16) One reason why diseases could not be treated was because before the 1930s, there was no known drug to destroy microorganisms. Some colonies with medical facilities tried to use poison and bismuth to rid the body of disease. This did not work in many cases and often led to major side effects or death. One drug that did show significant usefulness was called quinine. Quinine was a drug that cured the effects of malaria. However, quinine was very difficult to obtain and supply to parts of Africa that need it.

The largest impact that Europeans had on solving the problems of disease, was organizing efficient efforts to fix the structure of society. Europeans fixed many problems of disease through government controlled cleanups. The cleanups would take place in disease infected areas. The Europeans would make places more sanitary, by disinfecting places where people lived, separating the sick, administering drugs, boiling water and establishing proper sanitation.

The Europeans instilled basic forms of sanitation and proper disinfecting techniques to prevent the spread of disease. These are measures, which were taken to stop the spread of disease. It was made possible through the Europeans ability to organize and establish practices of leadership. One effective way to combat the spread of disease took place in Africa during the 1940s. DDT, a chemical that is sprayed on vegetation and plant life to kill disease bacteria, was sprayed throughout Africa. This method of control worked very well provided travel within Africa was done in moderation.

Prevention methods were the main source of technology that Europeans tried to cure the problem of disease. Medical technology was not advanced enough to treat people suffering from disease. The largest problem that Europeans experienced with disease lied in their way of thinking. Europeans, during the 19th century often overlooked other diseases and only focused on the disease that was currently taking lives. This is considered to be called " vertical" health services, when only one disease is concentrated on instead of others that are on the rise.

Because of this, Africans and Europeans were constantly fighting disease and never could control the outbreaks.

" Although the colonial powers have departed, as recently as the 1970s the World Health Organization urged developing countries to move toward " https://assignbuster.com/disease-in-africa-essay/

horizontal" health services that take into account the multifactoral nature of disease and health."(Kiple, 556) If Europeans would have battled all the diseases and factors of disease, less casualties would have taken place and disease would have seized more rapidly. In any event, Europeans struggled along with Africans to figure out cures, remedies and medicine to fight the potent diseases of Africa.

Disease in Africa also had a large impact on the global economy and the economy of Africa.

Before the Europeans invaded Africa, Africa did not trade to heavily with other countries and was not considered a major player in the global economy. However, once the Europeans came into Africa, they planned on using Africa's vast resources to make the continent a new player in the global economy. Once the Europeans began using Africa as a trade route destination and an exporter, Africa gained a lot of attention. However, because Africa was beginning to export goods, the world began showing more signs of disease. Africa was responsible for transmitting many diseases and sicknesses.

Diseases from Africa began spreading to many countries. Diseases from Africa were most apparent in European countries, Asian countries and America.

Animals were a large cause for the spread of disease and bacteria, however they cannot be blamed for the Europeans greed. The Europeans obviously did not take the appropriate steps in dealing with the problem of disease and the obvious affects it could have if goods became contaminated and then traded overseas.

Economically speaking, the Europeans infected much of the world with disease. This slowed down economic growth by closing ports, consumer confidence fell and countries usually did not take the appropriate steps in dealing with the problem of disease and the obvious affects it could have if goods became contaminated and then traded over seas. Economically speaking, the Europeans infected much of the world with disease. This slowed down economic growth by closing ports, consumer confidence fell and countries grew skeptical of trading.

Disease transmitted from Africa and spread throughout the world, slowed the economy down and prevented globalization between countries.

Furthermore, once people began realizing that imported goods were not safe and had the possibility of being contaminated, demand fell for these products. Once demand falls for goods, supply of the good is cut back and workers are laid off. Africa was a breeding ground for disease, which eventually led to major economic problems. As was mentioned before, transportation had been cut off for several years to ensure disease would not be spread. However, once the Europeans began colonizing Africa, they expanded transportation systems and used new transportation technology as an outlet for trading.

One form of this was the train. The train aided in the spread of disease because raw goods and materials were easily transported from place to place in Africa. These goods were often contaminated which helped spread https://assignbuster.com/disease-in-africa-essay/ disease. Technology aided in the economic affect, because it often transported the disease to new hosts.

The global economy fell drastically after the Europeans began colonizing Africa.

Africa is a perfect breeding ground for disease and bacteria. The climate and geography of Africa make it a heaven widespread famine. Africa's past history of disease seems to be very complex.

It is difficult to fully understand why Africa cannot control the problems dealing with disease, however as time goes on and technology becomes more advanced, we witness less and less disease. Many factors have contributed to the brutal diseases that have plagued the people of Africa. Some of these factors are still present in today's society. These include government intervention, sanitation and general education on preventing disease. " Disease and parasitism play a pervasive role in all life.

A successful search for food on the part of one organism becomes for its host a nasty infection or disease. All animals depend on other living things for food, and human beings are no exception."(McNeill, 5) Africa is a place that has had a vast history of deaths caused by diseases.