Microbial Diseases And Their Effects On Society

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Introduction

Currently, microbial diseases are a worldwide concern as they cause severe losses to the economy and human life, even today, in the 21st century. In the past, bacterial diseases were highly affecting people as well as viral infections, but there was no proper treatment for all the known diseases, and most of them caused the death of entire cities, nations, and civilizations. The microorganisms cause microbial disease, which is mostly unobserved at the very initial stages and shows their damage at the extreme stages (Madigan et al., 2017). The symptoms are always prominent, but if ignored, major damage could happen, and death is highly observed. There are many people all over the world who have died because of only bacterial diseases. They are properly analyzed and then discussed. Their documentation is available in libraries, research centres, and even on the internet for the further development of the understanding of these diseases. The main aim of the paper is to discuss microbial diseases in detail, their effects on society and how they proceed.

Discussion

History

Microbial diseases have a rich history, and a large number of people have participated in the research and development of the identification and treatment of these diseases. Well-known names are Robert Hooke (1670), Anton van Leeuwenhoek (1720s), Francesco Redi (1690s), Lazzaro Spallanzani (1730s) and Louis Pasteur (1800s). Microbial diseases, previously known as bacterial diseases, were highly infectious, and their records go back to 3000 BC. The documentation of these diseases elaborated that they were identified and have been known since ancient times, and the people were aware of the effects of these diseases. There are a number of incidents that include the involvement of the memorable pandemics that affected the cities and complete nations and used to end forever. Bacterial diseases have been discovered for centuries, but officially, diseases were diagnosed, identified, and discovered properly by Louis Pasteur between 1860 and 1864.

In the 21st century, infectious microbial diseases are among the leading causes of death worldwide. German measles, whooping cough, bubonic plague, and tuberculosis are currently highly effective and widely spread diseases spread by viruses and bacteria. There are many others, but most of them are completely closed or limited to some areas. These diseases are caused by viruses, bacteria, and

many other microbial organisms. They could be long-lasting or would have severe effects on the body. For example, TB causes damage to the respiratory organs and the overall human body's metabolism. The body's metabolism is an important figure to discuss as if the microbial cells are not discovered properly; the system will delicately start to malfunction, for which medicine would be required on an immediate basis, and death will occur if the precautions are not considered.

Overview

Basically, bacterial diseases happen when bacteria, viruses, or any other type of microbes enter the body through injury, respiration, or food. Sometimes, these organisms keep silent and don't act against the body, but as they find strength and multiply in huge numbers, they start to destroy the body. It results in the infection, which, in common words, would be explained as the damage that occurred. The eradication of these diseases is done through proper treatments (Wittrup & Lieberman, 2015). The signs and symptoms of the illness also appear, which shows that the disease is spreading and that treatments are now required. The immune system is always active, but in many cases, it is unable to protect us from diseases, which would lead to the requirement of precautions and treatments (Destoumieux-Garzón et al., 2016).

Microbial Diseases

There are some diseases that should be discussed precisely in the microbial disease discussion because of their dominance in the world for a long time period in the recent past. In the past, some of them were studied while others were new to the world. The problem is not about the cure, it's about the human behavior which causes them. No studies have properly clarified the ambiguities about how these diseases come into the human population (their proper origin and their existence). However, the later steps are discussed in detail.

Smallpox is an infectious disease that is only eliminated through vaccination. It was originally caused by two viruses, microbial and microbial. It has completely ended, and now the world is free from these diseases, as per the reports. The last identified case was in 1977, and after that case, in 1980, the World Health Organization finally certified the global eradication of the disease.

Polio (Poliomyelitis) was also an infectious disease and was infantile paralysis that was caused by the poliovirus. Its infection results in muscle weakness and inability to move. Its cure is difficult or, in the majority of cases, impossible. It is highly observed in Asian countries as well as in some other parts of the world. This disease could be prevented rather than treated, for which an early-age vaccination is provided to the children, which helps in building immunity against this virus (Mulders et al., 2017). It has not yet been properly eradicated from all over the world.

TB (Tuberculosis) is one of the most effective bacterial diseases. It is caused by a specific bacteria known as Mycobacterium tuberculosis. The bacteria have targeted the lungs mostly. It spreads widely

through the air only if a person near you has the TB issue and sneezes, coughs, or talks. In the late 20th century, a huge population was affected by this disease, and there was no proper treatment for it, which resulted in total damage to the lungs and other respiratory organs. It mostly spreads by pathogens, which could be killed by pasteurization. The treatment is now performed by isolating the people and then performing the treatment.

HIV/AIDS is one of the hottest topics in the world currently, and currently all over the world are being affected by it. It is caused by a virus that directly damages or malfunctions the immune system and exposes the whole body to other diseases (Zevin et al., 2016). This disease is new to the world and has not yet clearly opened its wings properly, so there is no past research or any parallels found yet which could defeat it entirely. If it is explained that this disease could be controlled in the population, then it is the most difficult intervention. Scientists have found it to be spread by sexual intercourse or by physical interaction. The virus keeps silent for years, but it is recognized when an individual is completely affected by it from head to toe.

Yellow fever is also one of the most effective diseases. Its old name is jaundice, but its symptoms also include nausea, vomiting, headache, muscle pain, and fatigue. It is vanquished in most countries, but since it's a mosquito-spread disease, it hasn't been eradicated from the world's population completely. Since the mosquito is unable to survive in the northern, snowy, and winter, as well as in hot southern summers, it results in no yellow fever at all. However,t in the tropic forests and some similar horizons, the climate is good for the development of mosquitoes in the wild as well as in the domestic areas, which results in a number of diseases, including yellow fever. The mosquito is just the carrier of the microorganisms.

There are some of the worst diseases which could not be eliminated but could be avoided in the population. Hemophilia and porphyria are genetic blood disorders that cause serious effects. It affected the royal families or the crown heads of all over Europe. Porphyria caused a number of royal monarchs difficulty in managing their kingdoms. This disease causes mental problems like long-lasting anxiety and paranoia. This disease is highly studied because it was also one of the main causes of the American Revolution.

Conclusion

Humans are highly unable to build a natural defence against these diseases. People from all over the world are obliged to the scientists who have been working on these terrible diseases. Microbial diseases are a threat to the human population, and in recent decades, an outnumbered number of people died of them. The above-discussed diseases are Smallpox, Poliomyelitis, Poliomyelitis, Yellow fever, Hemophilia, and porphyria. Their ways of spreading, causes, effects on the body, and the way to cure them are discussed. According to the history and overview, these diseases originated late, before the start of official documentation. It is a probability that societies will be able to find all the possible diseases that are still hidden and could also be able to cure them, but it will take centuries.

Even with the latest technology, there is no quick possibility of finding the best ways to accelerate scientists' discoveries. The expectations of the scientists are very good, but it is also confirmed that if all the existing diseases in the world could be cured and eliminated, then some new ones would come, and the research on microbial diseases would continue forever.

Works Cited

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