

History of Transmissible Diseases and Its Impact on Human Survival

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ABSTRACT

Transmissible disease is an infectious disease caused by a virus and can be transferred to other healthy people. This study aims to describe the development of infectious diseases that are changing human life in the world. This research method uses a library with data collection through documents—data analysis techniques through reduction, display, and concluding. The research results illustrate that viruses that cannot be seen directly can change human order into chaos; viruses have disrupted (fundamentally changed) human civilization. Humans must change the habits of these interactions. Conducted for a while, until the pandemic ends. Every time an infectious disease pandemic occurs, new ways of human interaction emerge to avoid direct communication. An attack of infectious diseases for each period can change the world order to a new normal or a new normal order.

Keywords:

history, infectious disease, human, survive, Indonesia

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Introduction

Infectious diseases can pass from one organism to another, both in humans and in animals. Infectious diseases are caused by biological agents such as pathogenic microorganisms (viruses, bacteria, fungi) and parasites. Their presence on or on the body's surface may lead to infection or infestation. Transferring an infectious agent or parasite from a sick person to a healthy individual may cause the disease to spread (Fraser et al., 2004).

Epidemiology suggests that the disease can occur due to interactions between three elements: the agent, the host, and the environment. These three components are part of the epidemiological triangle. The relationship between the causative agent and the host in a supportive setting can lead to illness (Anonim, 2012). A disease agent moves from one place to another in a chain of infection or infection cycle. The chain of infection begins by migrating the disease agent from the reservoir through the "exit portal," then moving using transmission, and crossing the appropriate "entry portal" to infect a susceptible host (Anonim, 2012). In the meantime, non-communicable diseases have significance; that is, the forms of diseases that cannot be transmitted from person to person by some means of communication (Risksedas, 2018). The causes and risk factors can see the distinction

between communicable and non-communicable diseases. There are several types of infectious and non-communicable diseases that people are at risk for. Infectious and non-communicable diseases affect millions of people all over the world every year (Dalal et al., 2011). However, each type of disease is manifested differently. To decide the best treatment, it is necessary to understand the distinction between communicable and non-communicable diseases, distinguishing between communicable and non-communicable diseases from several causes (Schneider et al., 2009). The distinctions between communicable and non-communicable diseases revolve around the origin, the healing process, time span, and much more.

On this basis, we need to consider the historical history of this infectious disease, which has changed the order of human life. Since human civilization, it has become known to plant crops, live permanently, and create communities. The scale of the threat of infectious diseases or epidemics has risen. The construction of empires further encouraged the spread of new diseases along the routes of trade and war. Since human civilization, it has become known to plant crops, live permanently, and create communities. The scale of the threat of infectious diseases or epidemics has risen. The construction of empires

further encouraged the spread of new diseases along the routes of trade and war. Pest movement correlates with global interconnectivity. The spread of the COVID-19 virus, which is now a global pandemic, is one of the consequences of infectious diseases that have ravaged the environment and affected human life. The findings of this analysis will identify several outbreaks of disease that have directly or indirectly changed human civilization.

Research Method

Researchers used library research, namely, research conducted using literature, notes, and reports of previous research results. Sources of research data use secondary data sources in books, journals, encyclopaedias, magazines, papers, articles, and others relevant to the problem. Data collection techniques are carried out by reading, studying, and recording various literature or reading materials following the subject matter, then filtered and put in a theoretical framework. Data processing by weighing, filtering, organizing, and classifying. Data analysis using a descriptive method by describing a symptom, event, incident that is happening now.

Result and Discussion

Black Death Plague (14th century)

The Italian plague of 1629-1631 is a series of bubonic plagues that have struck northern and central Italy. This outbreak also referred to as the Great City of Milan, took one million lives, or around 25% of the population (Hays, 2005). This occurrence is known to be one of the later outbreaks of the centuries-long bubonic, bubonic plague that started with the Black Death. The disease has contributed to a downturn in the Italian Government's economy relative to other Western European countries (Hays, 2005).

The high mortality rate from the bubonic plague is astounding in Europe. And though it took many lives, many humans have also survived the bubonic plague (Duncan & Scott, 2005). Many live to form a powerful immune system to make it more difficult to catch; this condition lasts a long time. This epidemic is well known in European medical history and leaves behind a profound trauma (Spyrou et al., 2016).

At the beginning of the 20th century, there was almost no news of the East Indies' bubonic plague in the Netherlands. It was confirmed in 1905 that there were many bubonic plague cases on the East Coast of Sumatra, but it did not take long for it to vanish. There is no indication that the disease is coming back. The bubonic plague did not spread to Java in the same year. When the Dutch East Indies government imported rice from Rangoon in 1910-1911, it turned out that rats were infected with fleas in the rice. Importing rice was one of the Dutch East Indies government's policies to save the population from the food crisis that occurred in and around East Java. In particular, Surabaya residents, who experienced a crop failure due to a pest attack, had damaged food crops in the region (Fidiyani, 2013).

Cholera Outbreak

The first cholera pandemic occurred between 1817 and 1824, also known as the first Asian cholera pandemic of Asian cholera (Kaper et al., 1995). The disease started in the City of Kolkata and spread quickly through South East Asia to the Middle East, Eastern Africa, and the Mediterranean Sea coast. Cholera spread across India and spread to China and the Mediterranean Sea until it eventually collapsed. The cholera epidemic was the first of many cholera pandemics that affected Asia and Europe in the 19th and 20th centuries. This first pandemic has spread widely and has reached almost all Asian countries (Carter, 2017).

The second cholera pandemic, which entered Europe and America, started in 1829. This cholera epidemic has arrived in Moscow and St. Petersburg. St. Petersburg proceeded to Finland and Poland in 1830. In 1832, the epidemic spread quickly from Canada to the United States, destroying major cities' lives along the east coast and violently reaching New Orleans, Louisiana, leaving 5,000 people dead. Mexico and Cuba met the pandemic in 1833 (Barua, 1992).

The Spanish Flu

The Spanish flu, also known as the 1918 flu pandemic, was a devastating flu pandemic caused by the H1N1 influenza A virus. From February 1918 to April 1920, 500 million people, about a third of the world's population at the time-infected the virus in four consecutive waves (Trilla et al., 2008). The death toll is generally estimated at

between 17 million and 50 million, probably as high as 100 million, making it one of the deadliest pandemics in human history (Phillips, 2014).

The Spanish flu is caused by influenza type A virus with an H1N1 subtype. It is estimated that the Spanish flu has been the most virulent influenza virus in health history. In the Netherlands East Indies, the spread of the Spanish flu occurred in two waves. First, July 1918-September 1918. Although it spread in some areas, such as *Pangkat* (North Sumatra), in June 1918, the virus was strongly suspected of being transmitted by ship passengers from Singapore. In the meantime, the eastern areas, such as Borneo (Kalimantan), Sulawesi, and Maluku, were still free from the Spanish Flu during the first wave. The second wave of the Spanish flu occurred between October and December 1918. Although in some places, it lasted until the end of January 1919, particularly in the eastern part of the country (Mansyur, 2020).

Ebola Virus Outbreak

As of 2014, the most severe Ebola virus outbreak (EVD) has occurred in some West African countries. The plague killed a lot of people, with a confirmed death rate of 71 percent. The outbreak began in Guinea in December 2013 and then spread to Liberia and Sierra Leone. A less extensive outbreak, around 12 cases, also occurred in Nigeria and one in Senegal. After a 42-day waiting period, the last two countries were declared epidemic-free on 20 October 2014 (Pourrut et al., 2005). Secondary infections of medical workers have occurred in the United States and Spain, but they have not been common (Li & Chen, 2014). There was also one event in Mali. An Ebola outbreak that was not linked to the main outbreak was also recorded in the Democratic Republic of Congo (Murray, 2015).

The Ebola virus was first discovered in Sudan in 1976. This virus belongs to the family of Filoviridae, the Ebolavirus gene. There are 5 types of Ebolavirus, 4 of which cause human disease, namely: Zaire ebolavirus, Sudan ebolavirus, Côte d'Ivoire ebolavirus, and Bundibugyo ebolavirus (Jacob et al., 2020). The fifth type of virus is the Ebola virus that affects the primates: Reston ebolavirus. The spread and propagation of the Ebola virus in humans are still uncertain, although it is believed that it is an animal-borne disease,

including bats. The human-to-human transmission of Ebola is simple. According to experts, the Ebola virus can be transmitted by contact with body fluids such as blood, urine, semen, saliva, and vomiting. Viruses can reach the human body through the skin or mucosa (Tseng & Chan, 2015).

Corona Virus Disease 19 (COVID-19)

The world today is shocked by the spread of the disease.

Coronavirus Diseases-19 (COVID-19) is a new type of disease that has never been previously reported in humans. Popular signs and symptoms of infection with COVID-19 include acute respiratory distress symptoms such as fever, cough, and shortness of breath. The average incubation period is 5-6 days, with the longest incubation period being 14 days (Astini, 2020). This epidemic's origin is still a matter of debate among experts at least until now-to determine the cause of the outbreak; some said that due to a laboratory leak, some said that the bat virus was from the black market in Wuhan City (Amtiran, 2020).

COVID-19 can be quickly transferred to other people invisibly. Because in fact, COVID-19 transmissions occur through behaviours that can be underestimated by most humans. Among other things, the transmission of COVID-19, namely via air splashes while coughing, sneezing, or even talking; physical contact with a person infected with COVID-19, in this case, can be interpreted through touching body parts or shaking hands; touching the mouth, nose, and face with hands that are exposed to the virus (Razi, 2016).

Conclusion

Infectious diseases are classified into three groups: 1) Diseases that are severe because the mortality rate is very high; 2) Certain infectious diseases may cause death and disability, but the effects are less significant than the first; 3) Infectious diseases that seldom cause death and disability but can pose a risk of loss (Amtiran, 2020). History of infectious diseases faced by people with outbreaks that affect all sides of their lives. In the modern period, with the outbreak of COVID-19, social contacts are often carried out virtually. The pandemic that has taken place has produced new patterns that have missed what we normally do. A lot of things we've been free to do before, we can't do now. The

COVID-19 epidemic currently gripping the world has forced people to adjust to new patterns in their lives. Like a job, they must do research and worship by keeping a distance away. Humans are becoming accustomed to a healthier lifestyle, such as washing their hands regularly. Restrictions on distance when communicating with others. The duty to wear a mask is the first thing that needs to be done before leaving the building. For each time, human pandemics have led to greater concern about hygiene and insist on adherence to health protocols to prevent its spread.

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