Analysis of COVID-19 Based on the Theory of Risk Society

Qianting Yu *

School of Economics, Renmin University of China, Beijing, China

* Corresponding Author Email: author@abcd.edu

Abstract. One of the most significant societal occurrences of the twenty-first century is the COVID-19 epidemic, which still affects many people around the world today, from all developing to developed countries. This paper connects the COVID-19 epidemic to German sociologist Ulrich Beck's theory of risk society. This research is beneficial to the management of future epidemics. This paper examines COVID-19's manufacturing and distribution, management and influence using a case study methodology based on Beck's theory. This research found the COVID-19 pandemic can infect any person, eliminating the boundaries of social inequality. But the COVID-19 pandemic has also widened the boundaries of inequality, because in developing countries or regions, people's vaccination rates are low. Meanwhile, vulnerable groups such as the poor or the elderly are not adequately protected and have a greater risk of being infected. So it is important to take action at the global level and pay greater attention to vulnerable groups.

Keywords: Risk Society; COVID-19; Production; Distribution; Management.

1. Introduction

The COVID-19 pandemic, which started in 2019 and is a coronavirus disease pandemic caused by coronavirus 2, is one of the most significant societal events of the twenty-first century. Some persons may develop a serious sickness as a result of this coronavirus's production of severe acute respiratory syndrome [1]. A person with COVID-19 produces respiratory droplets and aerosol particles when they cough, sneeze, sing, talk, or breathe that are easily transferred from one person to another [2]. The World Health Organization (WHO) Emergency Committee met on January 30, 2020, Geneva time, to decide that the new coronavirus outbreak in China is a Public Health Emergency of International Concern (PHEIC) [3].

Researchers have studied the COVID-19 epidemic from the aspects of epidemiology, immunotherapeutic strategy, vaccine development, government management, policy, media and communication, education, and future prevention, but the sociological analysis of the whole chain of the COVID-19 epidemic event itself is still insufficient. Some researchers have focused on analyzing specific COVID-19 response cases in specific countries or organizations, universal response analysis is insufficient.

Next, this paper will take Beck's theory, the social theory of risk, as a starting point and use case analysis methods to analyze COVID-19 from the aspects of its production and distribution, management and impact, and makes clear recommendations for the management of future epidemic diseases.

2. Theoretical Foundation

Risk society theory elaborates the production and distribution of risk in modern society. Such as pollution, newly discovered illnesses, nuclear contaminations and crime are produced and distributed by societies. According to Beck, risk that are commonplace have a "boomerang effect," meaning that those who create risks will also be exposed to them. Because risks are not missed and can harm anyone, regardless of socioeconomic class, they do not simply affect members of specific social groups or geographical locations [4]. Risk society eliminate class inequality to some extent, but Beck argues it also intensifies inequality [5].

3. Case Study

3.1. Case Description

COVID-19 is an “invisible risk”, only sophisticated testing can determine who is infected, and has spread around the world, from all developing to developed countries.

Over 6.6 million new cases were recorded across the globe in the week of July 18–24, 2022. Over 12 600 new deaths occurred each week. Globally, more than 6.3 million fatalities and over 567 million confirmed cases have been documented as of July 24, 2022 [6].

The World Health Organization (WHO) has given advice on protecting people's health and preventing the spread of COVID-19, for example, get vaccinated, avoid crowds, frequently wash hands with an alcohol-based hand rub or soap and water, wear a well fitted mask when physical distancing is not possible and in poorly ventilated settings, which has also provided data on people infected with COVID-19 in different region of the world, as shown in Table 1 [7].

Table 1. Covid-19 distribution table.

By WHO Region	Cases -cumulative total	Deaths-cumulative total	Total vaccine doses administered per 100 population
Western Pacific	70,984,366	244,984	227.14
Americas	169,953,836	2,786,222	188.98
Europe	240,211,364	2,048,153	171.5
South-East Asia	59,300,849	792,246	150.78
Eastern Mediterranean	22,579,139	344,809	109.36
Africa	9,209,133	173,974	36.2

Groups that are socially disadvantaged are more impacted by COVID-19. For example, people with lower incomes and educational levels have very low immunization rates [8]. People with low earnings who work in critical vocations like grocery store employees, delivery drivers, or home health aides may be more susceptible to catching the coronavirus than those who can stay home and adhere to social distancing rules [9].

3.2. Case Analysis

3.2.1 COVID-19’s Production and Distribution

The risk society's sickness is COVID-19. Risk society, according to German sociologist Ulrich Beck, is "a systematic manner of dealing with hazards and vulnerabilities created and brought by modernization itself." Risks are dispersed among globalized industries, according to Beck. And Beck stated that although there has always been a certain amount of risk for humans, such as from natural disasters, these have always been seen as being caused by outside forces. However, modern civilizations are vulnerable to hazards like pollution, newly discovered diseases, and crime as a result of modernization itself [10]. After SARS-COV and MERS-COV, the novel betacoronavirus is the third zoonotic coronavirus, but it seems to be the only one with pandemic potential. Epidemiological evidence connected the outbreak to Wuhan's Hua Nan wholesale market for seafood and wet animals [11]. In the risk society, people's worries are redirected away from natural calamities and toward the dangers brought on by human activity, which are frequently global and pervasive [12]. The COVID-19 virus spread quickly across numerous traveler groups. From all developing to developed countries, this uncontrollable border fading is clearly discernible [13]. According to Beck, risks that are commonplace have a "boomerang effect," meaning that those who create risks will also be exposed to them. It is difficult to distinguish between the spreader of the virus and the infected. Therefore, COVID-19 is a byproduct of modern civilization and a result of societal progress, regardless of where it came from, and it is having an effect on everyone. About 588 million individuals had contracted the disease and 6 million had already passed away before this piece was ready for submission. [14].

3.2.2 COVID-19's Management and Effect

The fact that COVID-19 is a "invisible risk" and that only specialized tests can determine who is sick makes it extremely difficult for people to realize the true scope of infections. Although science is important, it is frequently ambiguous and inconclusive. In relation to COVID-19's epidemiological traits, there is a great deal of uncertainty, for instance, how a disease spreads, who it affects, how common it is to die, and so on [15]. Therefore, policymakers are forced to make choices despite the fact that scientific knowledge is still developing and changing quickly. As vividly proven by COVID-19, this makes it more difficult politically to regulate risk because containment efforts have high financial, social, and human implications. Politicians must decide how these costs should be dispersed after weighing trade-offs and other factors [16]. For example, at first, in an initial suppression phase, many countries such as Australia, Singapore, Scotland and so on, use aggressive public health measures to eliminate the virus. Due to issues with the enhanced transmissibility of the Delta variant and Omicron variant as well as the introduction of COVID-19 vaccinations in late 2021, the majority of governments gave up on their zero-COVID initiatives [17].

Beck emphasized how risks in contemporary society reduce the significance of social class, but he also made it clear that risks can sometimes lead to inequalities. More specifically, Beck stated that the distribution and growth of risks afflict certain people more than others, which causes social risk positions to increase, and that people must not be misled by growing socioeconomic inequalities within the risk-afflicted population by the global equivalence of risk situations. Reiterating Beck's contention that socially disadvantaged populations are more susceptible to contemporary risks. More people with chronic illnesses, older people, and members of lower socioeconomic strata are impacted by COVID-19. Because they are less likely to be able to work from home, lower-income households are more susceptible to negative income shocks [18]. People who live in poverty have less access to resources, are more prone to choose hazardous lifestyle choices like smoking, and may endure chronic stress. The hygiene precautions may also be difficult for those who are poor to maintain. Due to their inadequate response capabilities, third world countries, in particular, end up being the pandemic's epicenter, for example, countries of Africa's health systems are terribly unprepared to handle present problems, let alone a coronavirus pandemic. The WHO estimates that there is a 3.6 million physician shortfall in Africa. Modern healthcare services are inaccessible to half the population. Viral pneumonia is the death cause in Covid-19. The region's capacity to address the Covid-19 is demonstrated by the fact that more than four hundred thousand young Africans succumb to pneumonia every year as a result of their inability to receive basic healthcare [19]. The elderly and those with chronic illnesses are especially susceptible to the virus, for example, the Covid-19 pandemic "drastically reinforced prevalent ageism," according to a report by Claudia Mahler, the independent United Nations specialist on older people. According to the research, there has been prejudice in the provision of healthcare services, inadequate attention has been paid to nursing homes in the fight against the virus, and lockdowns have made senior citizens more susceptible to abuse or neglect. Over 60-year-olds make up about nine out of 10 Covid-19 deaths in Europe and eight out of ten in the US. In places where people congregate, such as nursing homes, the toll has never been more severe [20]. Therefore, COVID-19 increases not just the chance of infection for socially disadvantaged groups (the poor, the elderly), but also their risk of extended morbidity and mortality.

4. Guidelines for Managing Pandemics in the Future

According to Beck's conception of the risk society, the issue at hand is how risks are created, distributed, and managed rather than whether the precautions actually stop the virus from spreading. The effectiveness of quarantines has been demonstrated in the management of previous pandemics. However, it appears that in order to respond to upcoming pandemics or the effects of hazards, societies need to thoroughly analyze the possible risk from societal advancement and discuss strategies for making it more obvious, calculable, under control, and preventive.

To achieve this effectively, science ought to be guided by societal demands and reason, and people ought to follow science. More public health protection measures should be added.

It's important to address structural social inequality and greater attention should be paid to vulnerable groups. While not all nations require their own vaccine production facilities, it is nonetheless important to guarantee that developing nations have adequate manufacturing capacity that can be quickly expanded.

Another illustration of a risk society is expertise, because it is a product of social progress yet it may be improved by cooperating with social reason. Long-term planning is essential for nations if they want to engage its populace in decision-making and give them the scientific resources, they need to protect their families, communities, and themselves.

The COVID-19 epidemic has also highlighted the necessity of international response. It might be time to consider developing a new global compact on pandemic readiness, similar to the one for climate change, in order to assure shared commitment regarding pandemic preparedness.

5. Conclusion

This research found the COVID-19 pandemic can infect any person, eliminating the boundaries of social inequality. But the COVID-19 pandemic has also widened the boundaries of inequality, because in developing countries or regions, people'vaccination rates are low. Meanwhile, vulnerable groups such as the poor or the elderly are not adequately protected and have greater risk of being infected. So, it is important to take action at the global level and pay greater attention to vulnerable groups.

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