

# *A Comparative Study of Governmental and Societal Measures to Prevent Neocrown Pneumonia in Various Countries—Taking China, Korea, the United Kingdom and the United States as Examples*

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**Abstract:** Since the first major outbreak of Newcastle Pneumonia in Wuhan, China on 31 December 2019, it has been sweeping across the world. The outbreak has affected countries all over the world, from the daily lives of their citizens to the safety of their lives and economies. At the same time, countries have taken different measures to deal with the epidemic. In this paper, we take China, South Korea, the United Kingdom and the United States as the main subjects of our study, and compare and analyse the measures taken by governments and societies in each country to prevent the outbreak. It is hoped that countries around the world can learn from the practices of countries that have achieved better control and control, and that the pandemic and further development of New Coronavirus can be effectively controlled as soon as possible, until people around the world can return to normal social life.

## **1. Introduction**

### **1.1 Background to the development of the Newcastle pneumonia epidemic**

Since the first large-scale outbreak of Newcastle pneumonia in Wuhan, China, on 31 December 2019, it has been sweeping across the world. The outbreak has affected countries all over the world, from the daily lives of their citizens to the safety of their lives and economies. As of today, the outbreak is still very serious in some countries. Although the international community was quick to implement preventive and control measures in the early stages of the epidemic, and governments took measures such as limiting mass gatherings in their countries to control the spread of the epidemic, the epidemic is still spreading around the world, and many countries are experiencing a surge in the number of infections and overwhelming their healthcare systems.

### **1.2 Significance of the study**

A comparative study of the control and prevention measures of the New Coronation epidemic in

different countries is intended to provide a reference for countries that are fighting the epidemic with a more appropriate response plan to achieve early control of the epidemic. The measures taken by each country to prevent and control the NCC epidemic can be used as a reference for future countries in their fight against NCC, as the focus of the fight against NCC differs from country to country depending on their national circumstances and strengths. By stopping the further development and spread of the epidemic as early as possible, countries around the world can learn from the practices of countries that have achieved better control and control, and effectively control the pandemic and further development of NCCV as soon as possible until people around the world can return to normal social life.

## **2. Current status of the epidemic in each country and response to measures**

### **2.1 Statistical data on the current situation of the epidemic**

As of 19 October 2022, Germany ranks first in the world in terms of the number of new confirmed cases, even up to 150,000 on a single day, followed by Japan, Switzerland, South Korea and the United States, but the number of confirmed cases on a single day is significantly lower than that of Germany. China is not in the top 10 countries in terms of new diagnoses (Source of the above data: World epidemiological data from public reports of authoritative agencies, WHO, official national communications).

In contrast, when comparing the world trend of new confirmed diagnoses from 25 July 2022 to 18 October 2022, there is a clear overall downward trend, which also implies that the prevention measures in each country are producing positive results.

### **2.2 Measures and reactions of the public and governments of various countries to the epidemic**

#### **(1) Measures and reactions of the United Kingdom and the United States**

In order to control the outbreak, the British and American governments took measures such as restricting entry, grounding flights and evacuating expatriates. Reports on the outbreak also focused on the impact of the Newcastle pneumonia outbreak on the country's economic operations, tourism, sports exchanges and academic exchanges. At the same time, the national government's response to the outbreak was evaluated. For example, the Washington Post reported on the rationale for the Trump administration's overreaction to the potential risks of the virus, while noting that the virus threatened the supply of Chinese manufacturing [1].

Medical research into the condition has also intensified in the UK and the US. For example, on 20 January 2020, the US National Institutes of Health announced that it was working on a vaccine against a new coronavirus. The US press reported on 30 January that the US was working to shorten the time it takes to develop a new vaccine and to increase production [2]. However, in the UK and the US, the main efforts to reduce interpersonal transmission and cross-infection have been through the issuance of non-mandatory guidelines, including advice to citizens to maintain a safe social distance outdoors, wear masks and wash their hands regularly, and other similar measures to improve personal hygiene. In the United Kingdom and the United States, there are limits on the number of people who can gather in public places outdoors, but there are no follow-up penalties for violating these limits, and medical resources are focused on treating the most seriously ill instead of the less seriously ill. How to evaluate the "herd immunisation" policy adopted in the UK and the US, which is the exact opposite of the "interdiction policy" adopted in China and Korea, is analysed below.

#### **(2) Measures in Korea**

Korea's epidemic prevention and control work is carried out both internally and externally. Internal prevention and control. In the early stages of the epidemic, the Korean government first set up a financial programme to provide financial support for the epidemic prevention work. According to the Chosun Ilbo newspaper, the Health Insurance Office, the national government and local governments will share the full cost of isolation and treatment of patients with Newcastle pneumonia [3]. Secondly, South Korea is actively promoting and popularising quarantine and protection for the public. According to Yonhap News Agency on 7 February, the public can be tested for NCCV at 124 health stations nationwide from that day onwards, and the government will continue to expand the number of medical institutions where NCCV testing can be conducted [4]. The government will continue to expand the number of health care facilities that can test for the new coronavirus [4].

At the beginning of the epidemic, the main measures taken by the Korean government to prevent the epidemic were the restrictions on entry and exit. The Ministry of Foreign Affairs issued a travel advisory for Hubei Province [5] and took measures to withdraw expatriates from Wuhan [6] and restrict the entry of foreigners visiting the country[7]. Recently, with the liberalisation of domestic policies, Korea's foreign policy has been gradually relaxed, with the opening of tourist visas to many countries and the abolition of the mandatory home quarantine policy.

### (3) China's measures

China's epidemic prevention policy has always been based on the concept of normalisation of epidemic prevention, which can be summarised as "internal prevention of rebound", "external prevention of import" and "dynamic zeroing". As an internal epidemic prevention strategy, the focus of "internal prevention" is to strengthen monitoring and early warning, "human" and "material" prevention, and to achieve "Early detection, early reporting, early isolation and early treatment". The specific approach is to encourage people to get vaccinated, and to introduce systems such as health codes to strictly monitor whether there are confirmed cases in each area and whether there are people in close contact, so that they can be treated or isolated in a timely manner, and to conduct strict screening through daily nucleic acid in areas where there are confirmed cases; "external prevention of importation" is to cope with the entry into normalisation. The "external prevention of importation" is a prevention and control strategy to deal with cases imported from abroad and imported goods carrying the virus that have emerged in many parts of the country since the beginning of normal control. This includes strict control and quarantine of foreigners entering the country, as well as strict screening of foreign goods, with the objective of "dynamic zero".

## **3. Comparative analysis of epidemic prevention measures in different countries**

### **3.1 Strengths and weaknesses of epidemic prevention measures in the United Kingdom and the United States**

In the United States, the freedom-first philosophy and diversity of voices in society are fundamental to the general environment. Whether or not to wear a mask, whether or not to go out and whether or not to party is a fundamental right of individual choice for Americans. American society is accustomed to freedom, to listening to different voices, and to criticism of the government as a daily routine. The quarantine is ultimately a disruption to normal life. From a humanistic point of view, the US epidemic prevention policy has been adapted to its specific national circumstances to the maximum extent possible. In addition, the advanced medical technology within the United States led to the rapid development of vaccines in the early stages of the epidemic, which benefited several countries.

In addition, the UK has adopted a policy of "herd immunity", whereby large numbers of people are allowed to heal themselves after infection in order to gain immunity and then concentrate their

medical efforts on treating the critically ill in the population, i.e. not spending money on preventing "infection" but on preventing "death". This means that instead of spending on "infection", we spend on "death". In other words, we are not spending money on preventing "infection" but on preventing "death". We are controlling the epidemic without sacrificing social vitality and economic development through strict control measures, and minimising the cost of fighting the epidemic, which is undoubtedly effective in the UK where the number of new diagnoses is currently zero.

But at the same time, the cost to countries such as the UK and the US cannot be ignored. The US has so far led the world in total deaths, and with such high numbers of new cases and deaths, the performance of the US government and society in the fight against the new crown epidemic has seriously damaged the international image and global influence of the US, and greatly reduced American pride. The UK and the US did not take mandatory control measures, but merely advised the public to be as socially distant as possible and to reduce unnecessary outings, which did not make the epidemic any better, but rather more severe [8]. The UK has also paid a huge price in the midst of the epidemic, with the ninth highest cumulative death toll in the world to date. Moreover, the fight against the epidemic is a common human task, and the overly liberal style of action of the UK and US has hindered global efforts to combat the epidemic.

### **3.2 Strengths and weaknesses of Korea's epidemic prevention measures**

South Korea is one of the more prominent countries known for its epidemic preparedness, and its efficient detection of new crown outbreaks and vigorous promotion of vaccination during the outbreak undoubtedly laid a solid foundation for the timely identification of cases and prevention and control of the epidemic. The Korean government's epidemic prevention policy was not influenced by political factors, and the public health crisis management system was adjusted and improved in a timely manner, and a proactive response was initiated at the beginning of the outbreak to avoid a situation that would have gotten out of hand, as was the case in Europe and the United States. The public health crisis warning system was activated in a timely manner, all departments responded in accordance with the emergency plan, and the epidemic prevention command system was complete and functioning well. Thanks to this, Korea was able to control the spread of the epidemic relatively effectively in the face of unfavourable factors such as religious and political constraints [9]. Korea's active epidemic prevention policy has made an outstanding contribution to the safety of its citizens and to the prevention of epidemics worldwide. At the same time, however, the country's unemployment rate recorded its highest increase during the first and second half of the campaign. The high intensity of the control measures had a significant impact on the country's economy, even though the spread of the epidemic was well contained [8]. At the same time, the rigorous prevention and control measures have overwhelmed the overall health care system. As a result, the country has recently abandoned intermittent vaccination and has gradually relaxed its policies, with the consequence that the number of confirmed cases continues to rise and the epidemic continues to recur.

### **3.3 Strengths and weaknesses of China's epidemic preparedness measures**

China's policy has always been one of interdiction, as it was the first country to discover a new epidemic and its rapid response and proactive handling of the epidemic bought the world valuable time and provided many valuable lessons. China's scientific and rapid response to the epidemic, the collaboration of all departments, the timely dissemination of information about the epidemic and the unity of all Chinese people in the fight against the epidemic have made it possible to keep the number of confirmed cases low in such a vast country with a population of 1.4 billion. China's proactive approach to the epidemic has also provided a great deal of support to the world's epidemic

prevention efforts. There are advantages as well as disadvantages, as day-to-day nucleic acid testing, static controls, quarantines, travel restrictions and other measures have had a serious impact on people's work and lives, and the national economy has faced significant challenges in terms of economic development, a significant drop in the incomes of the middle and lower income groups, a rise in unemployment, and difficulties in finding jobs for university graduates. In addition, if emergency measures remain in place, they will severely deplete the government's medical resources and reduce the public's trust in the government. At the same time, excessive travel restrictions and various tightening policies have also had an impact on people's mental health, and it has been reported that the number of people suffering from various psychological problems during the closure period has increased, which many people now refer to as the “epidemic syndrome”.

#### 4. Conclusions

In summary, this paper has compared the epidemic control measures of China, South Korea, the United Kingdom and the United States and assessed their strengths and weaknesses. Therefore, countries around the world can choose to learn from the practices of countries that have achieved better control and choose specific measures that are appropriate to their own national conditions, in the hope that they will be able to effectively control the pandemic and further development of the New Coronavirus as soon as possible.

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