

# *Ethical Problems about Epidemic Prevention and Control for Covid-19 Pandemic Situation*

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**Abstract:** The COVID-19 outbreak in Wuhan in December 2019 is a public health emergency, which is characterized by unexpected, complex, clustering and staged characteristics. COVID-19 has had a significant impact on China's economic and social development, caused a huge burden on people's lives and health, and triggered a series of social and medical ethical problems. The main ethical problems include the restriction of personal freedom, social discrimination, clinical ethics, drug research ethics and so on. The government and society should pay attention to the ethical problems about epidemic prevention and control for COVID-19 pandemic situation. They should understand the causes and processes of these contradictions, and take scientific and effective measures to reduce the overall burden of prevention and control for COVID-19.

## **1. Introduction**

Since December 2019, a number of viral pneumonia cases have been concentrated in Wuhan, Hubei province. On January 8, 2020, the pathogen was identified as pneumonia caused by novel coronavirus by the way of gene sequencing[1]. On February 8, 2020, State Council Joint Prevention and Control Press Conference announced the novel coronavirus pneumonia named as novel coronavirus pneumonia, abbreviated NCP[2]. On February 11, the WHO announced its official name as Corona Virus Disease 2019, abbreviated COVID-19[3]. COVID-19, with its rapid spread and high risk, has exerted a significant impact on China's economic and social development and people's health. In order to maintain social order and protect people's health, we must pay attention to a series of ethical problems caused by this public health emergency. Therefore, this paper will explore the characteristics of this public health emergency and discuss the related ethical issues.

## **2. Characteristics of the Public Health Emergency**

### **2.1 Unpredictability and Complexity**

A public health emergency refers to an outbreak of a major infectious disease, a mass disease of unknown cause, a major food or occupational poisoning, or any other event that seriously affects public health that occurs suddenly and causes or is likely to cause serious damage to public

health[4]. The complexity of social environment, natural environment and human physiological state makes the occurrence of public health events difficult to predict. It is hard to control the degree of danger, the scope of influence, the vulnerable groups and the final loss in advance, and it is difficult to make scientific and accurate prevention and control measures to deal with it. All these make the public health emergency full of unpredictability.

Most health emergencies are normally not caused by a single factor, but by a combination of different factors. Because of the complexity of the health emergency, researchers are unable to pinpoint the exact cause of the disease in a short period of time. The failure to find out the causes leads to the failure to take appropriate and effective prevention and control measures, and the subsequent research on scientific research drugs cannot be carried out. Failure to implement prevention and control measures causes the health emergency to get worse, which spread to a large number of people and eventually become public health emergency.

## **2.2 Agglomeration and Staged Development**

Public health emergencies are characterized by agglomeration. The size of cities in China is divided into five categories and seven categories according to the number of permanent residents in urban areas. Mega-cities refer to cities with permanent residents of more than 10 million[5]. Infectious diseases are diseases that continue to spread in agglomerated populations. High density and high mobility of the population provide opportunities for the occurrence and development of infectious diseases. Mega-cities, represented by Chongqing, Shanghai, Beijing, Chengdu and Wuhan, have large populations and high population mobility, which are the most suitable places for the deterioration and escalation of public health emergencies.

Public health emergencies are characterized by staged development. In 1986, Steven Fink proposed a four-stage life cycle model, which divided emergencies into incubation period, occurrence period, spread period, and decline period[6]. This staging method is the most classical and the most recognized method. According to the characteristic of public health emergencies, different emergency actions and prevention measures can be taken in different stages to minimize the harm of public health emergencies as far as possible.

## **3. Ethical Problems about Epidemic Prevention and Control for Covid-19 Pandemic Situation**

Since December 2019, COVID-19 has continued to spread in different regions and ethnic groups. In nearly a year and a half of the time to fight the epidemic, the government and the people have made great efforts. Some ethical contradictions have emerged during the epidemic prevention and control. In this paper, we will discuss the restriction of the right of personal liberty, social discrimination, clinical ethical problems and ethical problems in drug research.

### **3.1 The Restriction of the Right of Personal Liberty**

The Wuhan Prevention and Control Headquarters issued a notice on January 23 that said: “Starting from 10 o'clock on January 23, 2020, the city's buses, subways, ferries and long-distance passenger traffic will be suspended. Citizens are not allowed to go to the airport or railway station to leave Wuhan without special reasons. Departures are temporarily closed until further notice. “[6]These measures had completely stopped people taking public transport in Wuhan and basically blocked the way people could leave the city. Objectively speaking, these measures had succeeded sealing the city. The movement of people in Wuhan has been significantly restricted after the city was locked down for epidemic prevention and control. The closure of the city was an emergency

measure taken under the background of the public health emergency, but the relevant measures had some legal and ethical disputes.

The Constitution of the People's Republic of China (amended in 2018) clearly stipulates in Article 37 of Chapter II that the right of personal liberty of citizens of the People's Republic of China is inviolable.[7]In China, individuals enjoy basic rights equally, including the right of personal liberty. However, compared with the public interests, individual freedom rights need to be limited to a certain extent. Sealing the city was the necessary emergency measures taken by the government for the prevention and control of the epidemic, which involved the restriction and reduction of personal freedom of Wuhan citizens. Although the measures was controversial, but also had corresponding legal basis as the support. The Law on the Prevention and Treatment of Infectious Diseases stipulates that in the event of an outbreak of an infectious disease, local people's governments at or above the county level shall immediately organize forces to carry out prevention and treatment in accordance with the pre-plan for prevention and control and cut off the transmission of infectious diseases. When necessary, the matter shall be reported to the people's government at the next higher level for decision, after which emergency measures may be taken and made public.[8]When the freedom of the individual infringes on the rights of others, we need to think of the larger picture and formulate reasonable emergency measures for the benefit of the majority.

The quarantine and movement restrictions imposed by China in the early stage of the epidemic, even if supported by legal basis, would inevitably lead to moral conflicts. Under the circumstances of the outbreak of the epidemic, quarantine and travel restrictions had indeed affected individual citizens' right of personal liberty. However, considering the stability of social order and the safety of public life, this approach was understandable. From the ethical point of view, the final implementation of isolation and travel restrictions was the result of weighing individual freedom of action against the interests of the whole society. Therefore, we should always put people first and implement scientific and reasonable prevention and control measures according to our national conditions.

### 3.2 Social Discrimination

In the early stage of epidemic prevention and control, since the specific cause of COVID-19 had not been accurately identified, and the targeted drugs and vaccines had not been developed, it was normal for the public and many grassroots organizations to be flustered during this period. It is natural to feel panic and self-preservation in the face of disasters, but many people have developed excessive fear and hostility towards innocent people in epidemic areas. Many residential communities were explicitly denied entry by hubei people; Many hotels were strictly prohibited from Hubei residents; Many companies asked employees to provide information on whether they had had recent contact with people from Hubei; Many regions even publicly released the personal information of returnees from Wuhan. Society's fear of the virus had led to discrimination against the people of Hubei.

Large infectious diseases often cause serious consequences, such as serious physical damage such as injury or death. Therefore, it is a normal psychological reaction for the general public to stay away from the source of infection out of self-protection instinct. Human society has long been accustomed to explain the origin of diseases in terms of guilt or fault, which has also led to the misunderstanding and prejudice of suspected infectious disease patients in the whole society. It is human nature to seek self-protection in the face of disaster, but it is not consistent with our national spirit of unity to discriminate against our fellow citizens based on self-interest.

In the face of social discrimination, the government needs to adopt effective anti-discrimination policies on infectious diseases, and more importantly, it needs to carry out long-term health publicity and education on infectious diseases related knowledge among the public. The most important thing is to adhere to ethical education and the ethical principle of respecting equality. The moral spirit of equality of life should be spread in the whole society, which is an important guarantee to solve the social discrimination of infectious diseases. Eliminating social discrimination is not a simple issue, which requires the long-term joint efforts of the government and the whole society.

### 3.3 Clinical Ethical Problems

In the early stage of epidemic prevention and control, since the main battlefield was in hospitals, hospitals were the place where the most ethical problems occurred. The first problem was the fairness of resource allocation. At the beginning of the epidemic, the number of confirmed cases and deaths in Hubei province was far more than that in the rest of the country combined, but Hubei had only its own medical and health resources. The increase in the number of beds and patients also directly led to a sharp increase in the demand for medical personnel. However, at that time, the national support for medical personnel in Hubei Province was far from enough, so a large number of patients still could not be treated effectively.[9] At that time, all parts of the country sent medical personnel and supplies to Hubei on the premise of ensuring the normal operation of necessary medical and health services in the region. Even so, due to the imbalance in the allocation of medical resources, there was a severe shortage of hospital beds and suspected patients could not be treated, even with external reinforcements. At the same time, there were non-COVID-19 patients who did not receive treatment and care. They had been allocated fewer medical resources and had difficulty accessing medical services. How to divide the limited medical resources among different patients was a complex ethical issue for medical staff.

The second was the conflict between the patient's right to informed consent and emergency treatment. This is essentially a question of conflict between law and morality. With the transformation of medical service mode from disease-centered to patient-centered, the right of informed consent to protect the rights and interests of patients becomes more and more important. Under normal circumstances, patients should have the right to be informed about treatment options and outcomes. However, when major health emergencies occur, the number of hospital visits will surge in a short period of time, making it difficult for doctors to solicit the opinions of patients or their families in a limited time. In such cases, autonomy for the patient or family creates more ethical confusion and work burdens for the already stressed health care workers. The most appropriate approach is for the doctor to quickly formulate emergency measures and choose the best treatment plan. It can be seen that when patients encounter major public health events, their informed consent rights will conflict with emergency treatment.

During an outbreak, the number of decision-making bodies should be reduced and more medical decision-making power should be given to medical personnel. When time is urgent, professionals can make professional judgment quickly, which can reduce redundant procedures and improve the efficiency of medical treatment. Of course, the leadership of medical personnel should be established in accordance with local conditions, so as to allocate medical resources and take emergency measures according to the type and severity of the disease, on the premise that medical personnel can uphold their conscience and impartiality. Professional medical teams master the whole treatment process, which is the most effective medical emergency measures during major epidemics.

### 3.4 Ethical Problems in Drug Research

The COVID-19 outbreak has caused a lot of rumors. For a period of time, rumors spread in the society that radix isatidans could prevent COVID-19, Shuanghuanglian oral solution can inhibit novel coronavirus, and amoxicillin capsule can treat COVID-19. A lot of news about specific medicine spread among the people, and every news could cause social fluctuations. People lined up overnight at pharmacies and snapped up the drugs. Illegal merchants also took advantage of the opportunity to jack up drug prices and cheat consumers. Social panic and the public's urgent need for effective medicine had led to rumors and inaccurate information appearing and fomenting. Therefore, the whole society urgently needs to develop scientific and effective drugs to control the epidemic.

After the outbreak of COVID-19, there is an extreme lack of targeted therapeutic drugs in clinical practice. A number of laboratories across the country are stepping up research and development of drugs for prevention and treatment of COVID-19, including traditional Chinese medicine, chemical drugs and biological agents. It takes a lot of time and expense to develop new drugs, which cannot meet the current situation of urgent control of COVID-19 and urgent clinical needs.[10] Under normal circumstances, drug research is full of contingency and uncertainty, and there are a variety of ethical and moral risks in the process. Under the special circumstances of this outbreak, the outbreak is urgent and the public is concerned about it, which undoubtedly brings greater pressure to scientific researchers. It also leads to more ethical and moral problems, such as the difficulty of implementing informed consent in selecting subjects and the difficulty of organizing effective ethical review in time. On the one hand, researchers should speed up time to develop effective vaccines and drugs, and on the other hand, they should consider and abide by various ethical norms. The conflict between efficiency and morality inevitably leads to various ethical problems in scientific research.

Even so, basic research ethics should be observed with as little delay as possible. Without morality as the basis, the development of science would not be humanized, and would violate the original intention of scientific research serving human beings. China should formulate strict scientific research procedures, abide by the ethical norms represented by the Helsinki Declaration, and adhere to the principles of respect, benefit to the people, equality and no harm. During the epidemic period, we need to ensure that the drug research is scientific, effective and ethical in the whole process, and do not do anything contrary to the drug research procedures.

### 4. Conclusion

Emergent COVID-19 has the characteristics of unexpected, complex, clustering and staged public health emergency, which has caused a huge impact on China's economic and social development, and also led to many social and medical ethical issues. These ethical issues involve medical staff, COVID-19 patients and the general public, as well as legal, medical, psychological, social and other disciplines. In order to maintain social order and people's health, we must pay attention to a series of ethical problems caused by public health emergencies. By understanding the causes and development process of these contradictions, corresponding scientific and effective measures can be developed to reduce the overall burden of COVID-19 epidemic prevention and control. At present, the COVID-19 is still ongoing. The US and Europe are facing severe epidemics, and the domestic epidemic has also seen a partial rebound. All departments must enhance their awareness of potential dangers and risks, fully understand the current situation of the epidemic at home and abroad, and be well prepared to fight a protracted war.

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