Commentary

COVID-19 and collective responsibility: a lesson from the smallpox outbreak in Moscow in 1960

Yana G. Grigoryan[1*], Nikolay N. Krylov[2]

1.Associate Professor, Department of Humanities, The I.M. Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russia.
2.Professor, Department of Humanities, The IM Sechenov First Moscow State Medical University, Moscow, Russia.

***Corresponding Author**

Yana G. Grigoryan
B. Patriarchiy Per., No.3, St. No.1, Moscow 123001, Russia.
Tel: (+7) 91 65 96 56 70
Email: grigoryan.yg@1msmu.ru

Received: 19 Nov 2020
Accepted: 15 Dec 2020
Published: 28 Dec 2020

Citation to this article:
Grigoryan YG, Krylov NN. COVID-19 and collective responsibility: a lesson from the Smallpox outbreak in Moscow in 1960. J Med Ethics Hist Med. 2020; 13(Suppl.): 32.

The COVID-19 outbreak has been an unprecedented challenge for modern countries. The pandemic has spread around the world in several months and has already claimed more than 1.75 million lives (1). The most important question all countries around the world have to address is how to protect people from infection in a safe, equitable and effective manner.

Russia is among those countries that have responded to the pandemic by introducing severe restrictive measures in the country. Upon announcement of the lockdown on March 25, 2020, people were advised not to go out. Individuals over 65 stayed home and could only go to the grocery store, bank or pharmacy. Schools, universities, concert halls, libraries, cafes and restaurants closed down. It was impossible to use public and private transportation without a special electronic pass issued by the authorities. International travel control was introduced and borders were closed.

As a result of this policy, the society has been divided into two warring camps. People from one camp were in denial about the virus threat. They did not feel threatened by infection, demonstratively disregarded preventive measures, deliberately broke the rules imposed by the state and wanted to live their ordinary lives. Those in the other camp demanded strict compliance with all the restrictions imposed on themselves or others and did not allow any compromises.

© 2020 Medical Ethics and History of Medicine Research Center, Tehran University of Medical Sciences. All rights reserved.

Disputes between the two have raised the question of what measures can be taken to quickly limit the epidemic, and where the dividing line between the interests of the society as a whole and the personal rights of the individual citizen is.

Over the past few decades, public health ethics experts have come to the conclusion that "the conceptual resources for clinical ethics are inadequate for dealing with issues in public health practice" (2). Numerous studies based on Beauchamp and Childress' key text "Principles of Biomedical Ethics" have addressed to a great extent the moral issues concerning professional-patient interactions based on the principles of autonomy, beneficence, non-maleficence and justice (3). By contrast, public health programs aim to preserve and promote health at the level of the entire population, so the methods used to maintain the public good may violate some ethical principles. This is due to the key difference between public health and clinical medicine, which is the preventive nature of the former. In the face of infectious disease threats, public health often aims to impose restrictions on healthy people who are the potential victims of the disease but do not suffer when these restrictions are applied. The emerging ethical dilemmas of public health therefore go beyond the established consensus in most contemporary bioethical norms.

This article aims to reflect on what ethical constraints are permissible during an epidemic, and what these constraints are dependent on. This perspective is historical, represented by the history of the smallpox outbreak in Moscow in 1959 - 1960, in the context of which the authors analyze the principles that justify public health intervention during the COVID-19 pandemic. By comparing approaches to public health in the two epidemic situations, the authors offer arguments justifying the need to recognize the moral obligations of citizens to each other to protect the society from threats to health and safety.

Vaccination against smallpox began in 1801 in Russia, when a well-known doctor, Efrem O. Mukhin (1766 - 1850), vaccinated a boy against cowpox in a Moscow Educational Home. As in other countries, vaccination in Russia first met with resistance from part of the population, but after a while the method became widespread. Before the 1917 revolution, however, vaccination was not compulsory in Russia. The decree of the Council of People's Commissars of the Russian Soviet Federative Socialist Republic (RSFSR) "On Compulsory Vaccination", signed by Vladimir Lenin on 10 April 1919, and the new Law on Vaccination and Revaccination of 1924 made vaccination in the country strictly observed. Thanks to these measures, smallpox was considered to have been defeated in the Union of Soviet Socialist Republics (USSR) in 1936 (4), but after 23 years, a dangerous disease that everyone had forgotten about returned.

In this case, patient zero was a Soviet poster artist, Alexei Kokorekin, who contracted

smallpox in India in 1959. The contagion was caused when Kokorekin purchased the carpet of the late Indian Brahmin after attending a traditional Indian funeral (5). Upon returning to Moscow on December 23, 1959, he felt unwell. On December 27 the patient was hospitalized in the Infectious Disease Unit of Botkin Hospital, where he died on December 29. On the same day, after an autopsy, doctors suspected toxic plague. On December 31 the body was cremated in accordance with the requirements for particularly dangerous infections (6).

On January 11, 1960, doctors began to register people with natural smallpox in Moscow. Doctors could establish a connection between smallpox and the deceased artist only 13-16 days after Kokorekin's death. His medical record stated that he had received a smallpox vaccine two weeks before he left for India, but did not have a vaccine reaction.

The government decided not to inform Muscovites about the threat of the epidemic to avoid panic among citizens. Instead, all available resources in the city including hospitals, clinics, police, military and so on were immediately mobilized to combat the deadly threat. All efforts were focused on finding the people who had come into contact with potential carriers of the virus. Epidemiologists identified three foci of smallpox: the first was discovered in the artist's family, and the second in the hospital; the third source of infection, however, was the most dangerous. It included everyone who had contacted the infected people, but had not been found. The number of these people could have been huge and was growing by the minute. Everyone who was involved in the search for infected individuals worked around the clock. Between January 16 and 31, investigators found and isolated 9,342 people. Although several hospitals were designated as quarantine centers, there were not enough beds for all those who were infected.

The medics sorted all those people into two groups. The first group included 1,500 people who had personally communicated with the infected. They were isolated in hospitals in and outside of Moscow. The rest of them were locked in at home. For all 14 days of quarantine, doctors examined them twice a day. In addition, all the suspicious places in the capital were disinfected. At the same time, the authorities urgently began producing smallpox vaccines in quantities that would meet the needs of the entire population of the country. The epidemiological situation forced the Soviet government to start mass immunization of the population as soon as possible. The main stage of primary vaccination was held from January 18 to February 1, 1960. During this time, 6,187,660 people were vaccinated. A total of 46 people became sick with smallpox that year in Moscow, and three of them died. An outbreak of smallpox was fully localized by February 6, 1960. Forty-four days passed between the beginning of

the infection and the end of the outbreak.

While the case of the smallpox infection in 1960 differs from the current pandemic in a key detail, that is, the availability of a vaccine, similarities can still be traced. In 2020, the state faced a highly contagious virus that claimed thousands of human lives. On both occasions, the state took various restrictive measures to prevent the spread of the disease. A brilliant result in the fight against the smallpox epidemic in 1960 was achieved through the restrictive measures imposed by the Soviet government, the urgent comprehensive diversification of all medical resources and the creation of additional medical capacity, as well as the introduction of strict infection control not only in hospitals but also in the apartments of sick people. Soviet doctors could not manage smallpox in time for the first patient, because there had been no cases of this disease since 1936 in the USSR. However, careful monitoring and quarantine, an epidemiological check-up, contact tracing, isolation and subsequent mass vaccination of patients turned the situation around and led to a victory over the epidemic.

In 1960, the Soviet authorities refused to inform the general public about the smallpox outbreak in Moscow, which cannot be considered an appropriate measure for the fight against the pandemic in 2020. Already at the beginning of the pandemic in April 2020, over 86% of the Russian population had all the necessary information about the virus and its transmission (7). However, understanding how the infection spread did not prevent citizens from leaving the capital after the introduction of social distancing and self-isolation. This escape from the city's closed flats to the country contributed to the possible spread of infection from Moscow, which was the center of the infection, to other regions and districts. Another problem was the citizens' unwillingness to comply with the self-isolation regime after returning from abroad, where the pandemic was already raging. This made it difficult for epidemiologists to identify the outbreak of COVID-19 and reduced the ability of state services to control its spread.

To avoid the consequences of such irresponsible behavior or spontaneous and unconscious actions, in 1960 the Soviet state assumed full responsibility for measures to combat the spread of the disease and save lives. By implementing a paternalistic model of relations, the state acted as “guardian”, assuming full responsibility for the outcome of an outbreak of a particularly dangerous infection. It proceeded on the assumption that the doctor knew better than the victim of infection what was good for his/her health. In this case, the opinion of citizens was not taken into consideration, since most people had little knowledge about the disease and its dangers, no knowledge about prophylaxis and treatment, and limited ability to choose an effective method of fighting it. But these government actions deprived citizens of their rights and made them victims of a policy of diktat. Yet, this demonstration of power of the state machinery to enforce

quarantine also had the opposite effect. It deprived the population itself of the opportunity to demonstrate active citizenship, civic virtue, moral responsibility, and participation and concern for the public good. It extended mistrust, disrespect and inequality toward the very institution of the society as a community of socially responsible individuals whose personal well-being and personal values are inextricably linked to the values and well-being of others.

In 2020, COVID-19 has demonstrated the pivotal role of public values in governance (8). Many states, including Russia, have refused the toughest scenario in fighting the spread of the pandemic and shared responsibility for its spread with the society. The lack of a vaccine, high contagiousness of the virus, and the large number of asymptomatic infected people meant that social distance was crucial in combating the spread of the virus and preventing the collapse of the healthcare system.

This could be achieved through cooperation and voluntary subordination. To accomplish this, citizens must demonstrate a high level of altruism, which is the desire and ability to sacrifice their values for the benefit of others or the society as a whole. But unfortunately, this is not what has happened. Many people ignored the self-isolation requirements after returning from a COVID-19 hotspot. Many others refused to wear masks or maintain social distancing because of the inconveniences caused in their daily routine. Finally, people refused to maintain isolation because they believed that the state had no right to restrict civil liberties. As a result, we have seen a sharp increase in the number of COVID-19 patients, since such violations have triggered a new round of pandemic development (9).

Effective social distancing could also be achieved not through trust, but through coercion, for example high fines or threats of imprisonment for violators. This method has shown its effectiveness in China and other countries (10). In this case, however, it was inevitable that the state would disregard citizens' personal freedoms. Consequently, in the absence of a vaccine and other effective means to prevent the spread of the disease, any government action to combat the pandemic turns into a search for the optimal balance between strategies to lower the rate of morbidity and mortality, and severe restrictive measures imposed by the government. According to this logic, the more people ignore social distancing measures, the more intolerant the government should be of those who violate the established rules of conduct.

COVID-19 has therefore posed a complicated ethical dilemma for the society in finding the optimal balance between individual impulses and freedoms, and the collective responsibility. Should the society come to terms with restrictive measures during the epidemic? In an epidemic, are personal rights and freedoms as valuable as the lives of others?

It is the general belief that limitation or infringement of civil rights and freedoms cannot exist in democratic states, but that is not true. Danielle S. Allen believes that one of the harsh truths of democracy is that some people always give up something for others (11). It is no accident that people often find themselves in a state of disagreement with the political decisions of the state. What they will have to give up is certainly valuable to them, but they agree to give it up for something higher, that is, the common good. Therefore, one of the harsh truths of democracy is that it requires sacrifices for the sake of others (12).

The only way to deal effectively with this issue is to build a relationship based on trust among the citizens so that they can be sure that their sacrifice is reciprocated. Social distancing measures will only be effective if each citizen realizes that he/she is responsible not only for himself/herself but also for others. Individualism is a threat to human lives among members of the society as atomistic bearers of interests, preferences and desires who are expected not to seek to enter into social relations with one another during the COVID-19 pandemic. If the world states cannot cope with the pandemic, the society should not stay aside. In the face of uncertainty, collective responsibility and its limitations remain the only way to defeat the disease for now. In addition to the elaborate ethical principles of autonomy, rights, freedom and well-being or welfare of the individual, public health ethics depends on the principles of virtue, reciprocity, justice, solidarity and collective responsibility (13). However, it has become increasingly clear that the society is not prepared to make such sacrifices. COVID-19 has become a serious crisis of collective thinking about the basic values of democracy and solidarity. This is evidenced by the second wave of the pandemic and the steady increase in the number of victims of the epidemic.

The smallpox epidemic in Moscow in 1960 showed that a quick and effective response to the epidemic is associated with a restriction of civil rights and freedoms. In the case of COVID-19, the state shares responsibility for fighting the pandemic with the society, and members of the society must be prepared to sacrifice some of their individual rights and freedoms for the lives of others. The priority of collective values, responsibility and solidarity can be the most effective weapons in the fight for survival.

Conflict of Interests

There is no conflict of interests to be declared.

References

1. WHO: Coronavirus Disease (COVID-19). [cited 2020 December]; available from: https://covid19.who.int/
2. Lee LM, Heilig CM, White A. Ethical justification for conducting public health surveillance without patient consent. Am J Public Health. 2012; 102(1): 38-44.
3. Beauchamp TL, Childress JF. Principles of Biomedical Ethics, 7th ed. Uk: Oxford University Press; 2012.
4. Zhukovsky AM. [Successes of Soviet medical virology]. [Problems of Virology]. 1977; 5: 517-528. [in Russian]
5. Ivanova P. Coronavirus lockdown is nothing new for some Moscow residents [cited 2020 December]; available from: https://cn.reuters.com/article/instant-article/idUSKBN21P1N3
6. Baroian OV, Serenko AF. [An outbreak of smallpox in Moscow during 1959-1960]. [Zh Mikrobiol Epidemiol Immunobiol]. 1961; 32: 72-9. [in Russian]
7. Anonymous. All-Russian Public Opinion Research Centre (WCIOM). Russians: there is enough information about the coronavirus [cited 2020 December]; available from: https://wciom.ru/analytical-reviews/analiticheskii-obzor/rossiyane-informaczii-o-koronaviruse-dostatochno [in Russian]
8. Yang K. Unprecedented challenges, familiar paradoxes: COVID-19 and governance in a new normal state of risks. Public Adm Rev. 2020: 10.1111/puar.13248.
9. Casciani D. Covid quarantine breakers: 'It was selfish but I don't regret it' [cited 2020 December]; available from: https://www.bbc.com/news/uk-54346001
10. Semenov AV, Pshenichnaya NYu. [Born in Wuhan: lessons from COVID-19 epidemic in China]. [Infection and Immunity]. 2020; 10(2): 210-20. [in Russian]
11. Allen D. Talking to Strangers: Anxieties of Citizenship after Brown v. Board of Education. USA: University of Chicago Press; 2006, p. 29.
12. McIvor DW, Hooker J, Atkins A, Athanasiou A, Shulman G. Mourning work: death and democracy during a pandemic. Contemporary Political Theory. 2020; https://doi.org/10.1057/s41296-020-00421-5
13. Dawson A, Verweij M, eds. Ethics, prevention and public health. Bull World Health Organ. 2008; 86(1): 77.