Challenges of Biopolitics Caused by the COVID-19 Pandemic

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ABSTRACT
The complex of social, political and economic challenges generated by the coronavirus pandemic is a reference example of the practical realization of the concept of biopolitics proposed by M. Foucault. The actual type of biopolitical paradigm dictated by the pandemic is understood as the implementation of bio-power by the state thus increasing its presence in all aspects and spheres of society to ensure the biological security of citizens. Modern biopolitics is a combination of forms of social control and state strategies aimed to ensure the survival (biosecurity) and to preserve and develop key social institutions. The key feature of the implemented state biopolitics is the inversion and variability of the strategic discourse. The degree and direction of economic and social damage directly depend on the industry structure of the economy and of the employment structure on small and medium-sized businesses. Biopolitics measures as a set of legal regimes to counter the ongoing COVID-19 coronavirus pandemic, which regulate all spheres of society, should, among other things, provide for their gradual activation when certain disease thresholds are reached. A critical condition for a successful state strategy to counteract the pandemic is the balance of the state's anti-epidemic measures. While proclaiming the main priority of biopolitics to preserve the health of the population and ensure maximum survival of victims, the state also faces the need to protect the processes of economic production and exchange.

Keywords: Biopolitics, covid pandemic, state policy, anti-epidemic measures

1. INTRODUCTION
The complex of social, political and economic challenges generated by the coronavirus pandemic is a reference example of the practical realization of the concept of biopolitics proposed by M. Foucault. The actual type of biopolitical paradigm dictated by the pandemic is understood as the implementation of bio-power by the state thus increasing its presence in all aspects and spheres of society to ensure the biological security of citizens. Modern biopolitics is a combination of forms of social control and state strategies aimed to ensure the survival (biosecurity) and to preserve and develop key social institutions. The key feature of the implemented state biopolitics is the inversion and variability of the strategic discourse. The degree and direction of economic and social damage directly depend on the industry structure of the economy and of the employment structure on small and medium-sized businesses.

For State governments, biopolitics is becoming a popular paradigm of their activities, since a whole range of factors determines the increase in state presence in the sphere of personal life support, well-being and health of residents of modern countries. The main reason that the state authorities cannot afford to avoid solving problems of life support and maintaining health is the growing struggle of the modern state for human capital in the context of the globalization of social communications, the expansion of people's interaction with each other and with the natural environment, and a new round of economic development of natural space.

2. REVIEW
Today, the new COVID-19 coronavirus infection has manifested itself in 216 countries around the world, confirming its pandemic status that was assigned by World Health Organization (WHO) on March 11, 2020. According to WHO, as of October 10, 2020, the number of confirmed cases of COVID-19 infection in the world was 36,361,054, the number of deaths reached 1,056,186. The efforts made by States and international organizations to contain the disease spreading and to minimize its consequences have a certain impact on the situation. Moreover, in a number of countries, the targeted policies and consistent measures are highly effective. A typical example is Vietnam, where the total number of coronavirus tests performed was 1,009,145, but the number of detected cases was only 1,024, despite the proximity of China from where coronavirus originated.

The social consequences and policies of countering the COVID-19 coronavirus pandemic are actively discussed in analytical reviews and works by various authors. The author suggests a paradigm shift in the approach of States to
developing compensatory measures to maintain and restore the economy and social sphere in comparison with recent economic crisis. Most countries were not sufficiently prepared for the new threat to human health and life from a new coronavirus infection. Moreover, researchers point out that there is a clear link between the level of health care costs and the death rate from COVID-19: savings on health care costs correspond to higher morbidity and mortality. In some cases, the authors draw attention to the fact that the world’s developing coronavirus epidemic reveals systematic problems of health development, especially clearly demonstrating that socially vulnerable groups of the population (migrants, refugees, asylum seekers, the elderly, etc.) are the first to be hit, for which gaps and problems in the functioning of public health in practice result in lack of guarantees and discrimination in obtaining medical and social assistance, even if it is constitutionally established otherwise. It is noted that the most affected countries are those with a high proportion of the elderly population that did not introduce restrictions in a timely manner due to the COVID-19 pandemic, or whose residents did not comply with these restrictions. Along with the recognition of the significant risk of the COVID-19 coronavirus pandemic, there are also claims that the scale of the problem, highlighted by WHO, national governments and a number of researchers, is largely exaggerated and does not correspond to the actual situation. Moreover, the “intimidation” of the coronavirus threat is used as a pretext for introducing means of controlling society by the state, restricting people’s rights and freedoms, and promoting the commercial interests of medical companies.

3. KEY FACTORS INFLUENCING THE FORMATION OF PANDEMIC BIOPOLITICS

State management of the dynamics of the country’s population from the point of view of the impact on biological processes in the human population cannot be considered something fundamentally new. The idea that considers the inhabitants of the country as the population – specific object of the state management – points to the lifecycle processes that are biological in its basis, and based on Malthusian analysis companies, for over two centuries is one of the key for the formation of public policies. But today, given the growing global connectivity of humanity and the mutual dependencies of regional human communities (and States), it acquires additional properties. 1) People today live in an growing man-made environment, and its impact on population is becoming more diverse. As of 2019, 54% of the world’s population lived in urban areas, and its share of the total population is growing from year to year. In Russia, the share of the urban population is even higher than the global average and is 74.6% of the total population of the country as of January 1, 2020. The human body “collects” from this environment an increasingly significant pathogenic load that weakens the immune system or provokes atypical immune responses, for example, an excessive response of the body to stimulation. 2) Human involvement in the turnover of an increasing number of biomes that exist on Earth, the creation of new ones and, at the same time, the transformation or destruction of the regular ones. This means, in particular, the extraction and distribution of viruses and micro-organisms from enclaves that never contacted with the human population, including pathogens. Most of them are not aimed at a person as a carrier. However, they can change, which is clearly seen in the example of the COVID-19 virus. And in this case, they become a new, frequently significant, threat to human health. The globalization of human society also means the “globalization” of the evolution of diseases, including the development of not only micro-organisms, pathogens in humans, but also diseases of domestic animals. This also leads to increased risks of adaptation of pathogenic microorganisms that originally live in animal populations to inhabit and reproduce in the human body. In 1997 – 1998, massive fires that engulfed thousands of square kilometers of rain forests in Sumatra, Sulawesi, Kalimantan, Papua new Guinea and other Islands in Indonesia "smoked" local fruit — eating bats from the forests of Malaysia, forcing them to search for food on mango farms. Pigs on the farm were fed the remains of the mango, which also eat and bats. The Nipah virus, which was originally carried by bats, passed through a simple chain of host carriers: bats, pigs, and humans, causing encephalitis with a 40% mortality rate among hundreds of ranchers. Devastating fires have been common in the Amazon since the 2010s. Not the last reason for them is human activity: this is how loggers hide the traces of deforestation, which is becoming more extensive every year, and agribusinesses clear the land for pastures and soybean plantations. People are moving deeper into the Amazon forests, and settlements are growing on their borders. The tanks that local residents use to store water create excellent conditions for breeding mosquitoes that become carriers of diseases: feeding on the blood of both animals (for example, macaques) and people, mosquitoes become natural carriers of chikungunya, dengue fever, yellow fever, zika virus, Hantavirus, leptospirosis and many other infections. Malaysia and the Amazon are only partial examples of how human activity contributes to the widespread spread of new types of viruses that would otherwise exist locally, within well — defined geographical boundaries. It can be reasonably argued that urbanization, intensive agriculture, industry, mining, hunting, and deforestation are among the most important, if not the most important, factors in the emergence of emergent diseases. In addition, human activity creates favorable conditions for the reproduction of pathogens that never exist in nature. For example, Chinese "wet" markets: wild animals intended for food are kept crowded, in cramped cages and in unsanitary conditions. In Russia, ixod mites, carriers of typhoid, encephalitis and borreliosis, have been actively developing in urban parks in recent years. West Nile fever, previously considered as a
disease of rural residents, now increasingly affects urban residents, not only because the citizens bring the infection from tourist trips to hot countries, but also due to the multiplication of fever vectors – mosquitoes of the genus kuleks in urban ponds, basements of houses and puddles along roads. Outbreaks of this disease occurred in 1999 in Volgograd and Astrakhan regions, in the Krasnodar territory.

These trends are only part of the picture. A more "familiar" and much more dangerous process for medicine and human health is the constant mutation of viruses and microorganisms, which causes, in particular, the ongoing "arms race" between pathogens and developers of antibiotics.

4) Increase in the survival rate of patients, and increase in the number of chronically ill people, and increase in life expectancy exacerbate the issue of maintaining an appropriate level of public health in relation to permanently growing categories of people WHO require constant medical attention. This means an unstoppable increase in the burden on health systems.

5) Risks for humanity are not only diseases with a high life risk, but also epidemics, pandemics with a relatively low mortality rate, causing serious consequences for all spheres of public life. At the same time, the diversity and severity of consequences for human society are growing, mainly because society as a system is becoming more complex. On average, the quality of life has increased significantly (more in developed countries, less in underdeveloped countries), so its relative decline is felt more acutely even in the most prosperous countries.

6) The growing competition between States intensifies rivalry between management practices and basic concepts of public policy, including biopolitics. Despite the concern about the increasing interference of the state in the life of society, it has become generally accepted that state structures are responsible for a huge layer of public life in the sphere of ensuring the life of people and preserving their health and overcoming the negative consequences of epidemics and pandemics. The state naturally turns out to be "extreme", since it has both significant resources for solving such tasks, and a centralized mobilization apparatus, and an apparatus of coercion.

The dynamics of the formation of protective anti-pandemic mechanisms and population immunity is a key factor in biopolitics and coronacrisis and the basis for making strategic decisions. A critical feature of this pandemic is its long-term nature with a wave course due to the large number of carriers of hidden forms of the disease. This complicates the implementation of quarantine measures and makes the occurrence of recurrent waves of morbidity inevitable.

Modern society is familiar with examples of state biopolitics as a response to the development of an epidemic threat. As an object for comparison, we will take the cholera epidemic in the USSR in 1970, the smallpox epidemic in Yugoslavia in 1972, and the Ebola epidemic in Africa in 2014, and compare it with actual events in the current pandemic.

### Table 1 Factors and tools of anti-epidemic biopolitics

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<td>Channels of dissemination</td>
<td>Fecal-oral transmission of Vibrio cholerae</td>
<td>Airborne transmission pathways</td>
<td>Fecal-oral, airborne transmission pathways, in some cases sexual transmission pathways</td>
<td>Airborne pathway of infection</td>
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<td>Territorial coverage</td>
<td>A significant part of the territory of the USSR, the Black sea and Caspian, territorial formations suffered the most</td>
<td>A significant part of the territory of Yugoslavia, Kosovo and Metohija are more affected</td>
<td>Territory Of West Africa - Guinea, Sierra Leone, Liberia.</td>
<td>Almost the entire territory of the Russian Federation.</td>
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<td>Timeline and dynamics of the epidemic.</td>
<td>The first outbreak was detected in Indonesia in 1961, then the infection spread to the territory of Indochina and in 1965 the first outbreak was registered in the Karakalpak ASSR, the disease reached its maximum by 1970.</td>
<td>Imported to Yugoslavia from Saudi Arabia in 1972, by pilgrims from Kosovo. A total of 173 people were affected during the epidemic.</td>
<td>December 2013 — December 29, 2015, the number of registered cases is 28640.</td>
<td>The beginning of the epidemic on January 31, 2020 Number of reported cases 1 167 805</td>
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<td>Features of the spread of the disease.</td>
<td>High morbidity, fast incubation period (within 24-48 hours), the most active cases of infection were observed in resort areas with a high concentration of tourists.</td>
<td>It is transmitted through contact with an infected person, contact with things, household items, and bodily fluids.</td>
<td>The reasons for the rapid spread of the epidemic were poor hygiene and sanitation, local funeral customs.</td>
<td>Long incubation period, high degree of virus transmission, asymptomatic course in the early stages.</td>
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<td>Mortality</td>
<td>Preventive actions</td>
<td>Restriction of freedom of movement</td>
<td>Other forms of social control</td>
<td>Medical action</td>
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<td>If the disease is moderate or severe, and there is no medical care, the risk of death is high.</td>
<td>Mass promotion of personal hygiene - washing hands with soap, boiling water before use, etc., distribution of antibiotics to the population, quarantine measures in affected cities.</td>
<td>Creation of quarantine and observation zones, restriction of access to these zones (prohibition of passage of tourist cruise ships, cancellation of vouchers, railway and air tickets to infected territories, control of movement on highways). Departure from blocked localities only after a bacteriological examination and a five-day observation (isolation with observation). Official quarantine was introduced only in the centers of infection themselves, namely in Kerch, Odessa and Astrakhan. All other resort cities of the Crimea, the coast of the Azov and Black seas tried to get rid of visitors as much as possible.</td>
<td>The appearance of so-called sanitary patrols, social censure of vacationing &quot;savages&quot;, food merchants on the beaches of Soviet resorts.</td>
<td>Mass preventive therapy with antibiotics.</td>
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<td>36 deaths were registered</td>
<td>Total vaccination against smallpox.</td>
<td>Complete closure of borders, prohibition of movement between cities, prohibition of staying away from home.</td>
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<td>Total vaccination.</td>
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<td>11315 people died</td>
<td>Tekmira Pharmaceuticals of Canada received a $140 million grant from the United States to develop a vaccine called &quot;TKM-Ebola&quot; and permission from the U.S. food and drug administration for limited human trials of the vaccine. On August 25, 2015, the head of the Japanese government Secretariat, Yoshihide Suga, announced that Tokyo is ready to provide a drug for the treatment of Ebola, which was approved by the Japanese authorities as a flu medicine, but has not yet been approved by the world health organization – favipiravir (T-705). The drug was developed by Toyama Chemical, a subsidiary of Fujifilm. Earlier, its representatives claimed that the drug reserves will be enough for more than 20 thousand infected people</td>
<td>The termination of air communication with the States with reported outbreaks of the disease, the cancellation of mass events. Introduction of quarantine in Sierra Leone.</td>
<td>Promotion of quarantine and isolation measures in the state media. Attempts to introduce travel passes in cities.</td>
<td>The fight against the epidemic is complicated by the fact that at the moment there is no specific treatment or vaccine for either humans or animals. Several vaccines are being tested, but there are no vaccines ready for clinical use. Seriously ill patients need intensive symptomatic therapy. In severe cases, intensive maintenance therapy is required. Patients often suffer from dehydration and need intravenous infusions or oral rehydration with solutions containing electrolytes.</td>
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<td>20545 deaths</td>
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<td>Restrictions on flights, railway messages, and city travel.</td>
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<td>At the moment, therapeutic measures are limited to symptomatic and preventive therapy, and there is a widespread need for the use of ventilators due to lung damage. The Sputnik-V experimental vaccine has been developed. Limited vaccination of the population with this vaccine is carried out.</td>
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4. STRATEGIC BIOPOLITICS MEASURES TO COUNTERACT THE DEVELOPMENT OF THE PANDEMIC

An actual strategic approach to the development of state biopolitics has become a necessity today. Research measures, administrative and organizational measures, systematic investments in the creation of a network of institutions to counter the pandemic threat and in the formation of strategic stocks of medicines should become an integral part of this approach. The measures taken should be proactive and promote, among other things, the formation of a mobilization mechanism.

1. It is necessary to construct a nationwide network of medical and social institutions that can be transformed into infectious diseases hospitals and quarantine centers. The main task, is to stop resource optimization in medicine and, in general, social services, promptly determine the need for such institutions to develop a territorial layout of these centers, their equipment and planned to fill the links in the network. At the same time, excessive centralization should be avoided, giving priority to decentralized forms of placement.

2. It is important to create strategic stocks of medical equipment and protective equipment, both within the framework of equipping medical centers and using geographically distributed storage facilities.

3. It is vital to develop our own national industry for the production of medical equipment and protective equipment, which can be mobilized in a short time for the accelerated and large-scale production of necessary medical products. At the same time, it is necessary to provide for increasing the export potential of such an industry.

4. Formation of a specific policy to promote the development of the pharmaceutical industry:

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<th>The extension of the health system.</th>
<th>Deployment of quarantine centers and hospitals in school buildings.</th>
<th>Establishment of quarantine and vaccination centers.</th>
<th>WHO and other partners are mobilizing and deploying additional specialists to provide assistance. The necessary material and logistical resources are also being mobilized for supporting patient management and for all aspects of outbreak management.</th>
<th>Conversion of medical centers to infectious diseases hospitals, as well as redirecting a number of doctors to fight coronavirus infection.</th>
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<td>International cooperation.</td>
<td>No.</td>
<td>The WHO Donald Henderson mission to Yugoslavia.</td>
<td>Doctors without borders, and a number of other Organizations are sending specialists to infected areas.</td>
<td>In the early stages - volunteer movement of doctors in China, Europe and the USA. Supplies of protective equipment and medical equipment.</td>
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<td>Affected sectors of the economy.</td>
<td>Primary direct damage: tourism, agriculture (crop destruction in the region due to fears of spreading cholera), trade.</td>
<td>The Council of Ministers of the USSR ordered to extend business trips and vacations with the preservation of wages for all those WHO are forced to stay in the quarantine zone.</td>
<td>Benefits for families with children under 16, an increase in unemployment benefits, benefits and support for volunteers, a moratorium on the payment of penalties for housing and utilities services, credit holidays.</td>
<td>In one way or another, almost all sectors of the Russian economy were affected - air and railway transportation, retail and WHOlesale trade, in view of the quarantine closure - enterprises of various industries, the educational process, the sphere of medicine, and much more.</td>
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<td>Compensation of losses for the population.</td>
<td>The Council of Ministers of the USSR ordered to extend business trips and vacations with the preservation of wages for all those WHO are forced to stay in the quarantine zone.</td>
<td>Benefits for families with children under 16, an increase in unemployment benefits, benefits and support for volunteers, a moratorium on the payment of penalties for housing and utilities services, credit holidays.</td>
<td>Tax deferral for small and medium-sized businesses, support for micro-enterprises, tax deferral, a moratorium on bankruptcy, direct financial support for a number of industries at no cost, a moratorium on business verification.</td>
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<td>Compensation for the economy.</td>
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domestic pharmaceutical corporations and promoting the introduction of AI technologies;
4.2 Develop a system for timely review and adaptation of the state order with changes made to the list of vital and essential medicines for medical use, taking into account the received anti-epidemic practice. It is important to establish a mechanism for rapid assessment and approval of proposed changes to the lists;
4.3. Introduce mass production of universal anti-epidemic first aid kits (analogous to the cold war AI-2 first aid kit), which will dramatically reduce the burden on the health system by implementing self-treatment protocols in patients with mild to moderate forms of the disease. This measure should be supported by an appropriate awareness-raising campaign.
5. Creation and/or financing of research centers and research in the field of epidemiology, Virology. The collection of the Russian Institute of Virology currently contains 2,800 strains and more than 600 species belonging to 18 families. At the same time, according to one estimate, there are at least 320 thousand species of mammalian viruses. "Preventive" research activities aimed at identifying potential epidemiological threats and anticipating the development of measures to counter them are important.
6. Further development of "contactless" communication technologies in society that do not require personal "physical" contacts of people. Actual information technologies already provide significant opportunities for remote communication and the implementation of many significant actions, that involves interaction between people. The existence and spread of the Internet, the emergence of new standards for wired and wireless communication helps to achieve more or less the effect of presence, reliably identify participants in communication and guarantee the authenticity of communication. The development of AR, VR, and robotics technologies gives reason to hope that in the future even those interactions that require direct physical contact (haircuts, medical manipulations, etc.) can be performed remotely without loss of quality.

5. CONCLUSION

Biopolitics measures as a set of legal regimes to counter the ongoing COVID-19 coronavirus pandemic, which regulate all spheres of society, should, among other things, provide for their gradual activation when certain disease thresholds are reached. A critical condition for a successful state strategy to counteract the pandemic is the balance of the state's anti-epidemic measures. While proclaiming the main priority of biopolitics to preserve the health of the population and ensure maximum survival of victims, the state also faces the need to protect the processes of economic production and exchange.

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