

The Consequences of the Corona Crisis will be Enormous

Siniša F*

Independent Researcher, Europe

***Corresponding author:** Siniša Franjić, Independent Researcher, Europe, Email: sinisa. franjic@gmail.com

Research Article

Volume 4 Special Issue 1 Received Date: June 08, 2020 Published Date: August 07, 2020 DOI: 10.23880/mjccs-16000S1-002

Abstract

The appearance of the coronavirus has put the issue of pandemic control and saving human lives in the first place. In parallel with the crisis, the consequences for the economy began to be considered. As the health crisis nears its end, economic issues are becoming more common. These are extremely important issues because all sectors are interconnected, so shocks are transferred from one sector to others. What needs to be done now? From a health point of view, it is necessary to find an effective vaccine and an effective medicament that will prevent the spread of the infection. From the economic aspect of view, it is necessary to prepare the best possible measures of economic policy and start with their implementation as soon as possible.

The corona crisis is happening all over the world. There is no state that is not affected. The first part of the paper discusses COVID-19 from medical and health aspects. The second part of the paper deals with its economic consequences.

The desk method allows analysis of the current situation. The current situation in each country is almost the same, which means that everyone has an unexpectedly large number of patients and that they are facing huge economic consequences.

The interest of the authors of this paper is exclusively a humane approach and a desire to end the crown crisis as soon as possible. Everyone should have the right to health, regardless of where they live. There are no hidden intentions about anything in the paper. The paper is very clear and transparent.

Given the general situation around the world, it is very difficult to say anything precisely. Data changes every day and that, unfortunately, in a negative sense. There are more and more patients, and every national economy is suffering enormous damage.

Keywords: Coronavirus; COVID-19; RNA; Genome; Disease; Pandemic; Lockdown; Economics

Introduction

Coronavirus are unsegmented single-stranded positive-strand RNA viruses [1]. They belong to the order Nidovirales, the family Coronaviridae, and the subfamily Orthocoronavirinae, which is divided into α , β , γ , and δ genera according to their serotypic and genomic characteristics. Coronaviruses belong to the genus Coronavirus of the family Coronaviridae. It is named after the wreath-shaped protrusions on the envelope of the virus.

Coronaviruses have an envelope encasing the RNA

genome, and the virions (the whole viruses) are round or oval, often polymorphic, with a diameter of 50 to 200 nm. The novel coronavirus is 60 to 140 nm in diameter. The spike protein is located on the surface of the virus and forms a rodlike structure. As one of the main antigenic proteins of the virus, the spike protein is the main structure used for typing. The nucleocapsid protein encapsulates the viral genome and can be used as a diagnostic antigen.

In the context of viruses, once these chains of DNA or RNA are released into the cell they can behave in a number of ways [2]. They may do nothing at all. They may kill the cell, having forced its machinery to make copies of itself. They may remain in the cell but redirect that same machinery to their own reproductive ends without killing it. In the case of some common viral diseases – chicken pox, measles – the virus may reactivate months or even decades later. Some viruses may so disrupt the reproductive machinery of the cell that they cause cancer. However, some may also become latent and incorporate permanently into the genes of the host. In the case of some viruses this incorporation may be harmless, or even beneficial, and as we have said, it can be passed from mother to offspring. These properties of viruses explain much of their capacity to cause epidemics. Their similarity to us, and the fact that we are partly composed of material indistinguishable from viruses, makes us sitting ducks for viral assault.

The freedom from the need to fuel and monitor their own reproduction allows viruses one much more crucial property. It permits a much greater capacity for mutation. Higher organisms that reproduce for themselves need to ensure faithful copying of their blueprint into the next generation. Defective cells will not function properly, and the animal may die as a consequence. They – we – therefore rely on a 'proof-reading' mechanism. The chances of a mutational error creeping in when your and my cells reproduce is lower than the order of one in a billion. Viruses are far sloppier. So long as they can enter a cell and reproduce they are 'happy'. A single virus may produce many thousands of offspring in a single cell.

Survive

Viruses generally can survive for several hours on smooth surfaces [1]. If the temperature and humidity permit, they can survive for several days. The novel coronavirus is sensitive to ultraviolet rays and heat. Sustained heat at 132.8°F for 30 minutes, ether, 75% alcohol, chlorine-containing disinfectants, peracetic acid, chloroform, and other lipid solvents can effectively inactivate the virus. Chlorhexidine (also known as chlorhexidine gluconate) also effectively inactivates the virus.

The survival time of the novel coronavirus 2019-nCoV at different environmental temperatures is as follows.

Genome

The basic organization of the coronavirus genome is shared with other members of the Nidovirus order (the torovirus genus, also in the family Coronaviridae, and members of the family Arteriviridae) in that the nonstructural proteins involved in proteolytic processing, genome replication, and subgenomic mRNA synthesis (transcription) (an estimated 14–16 end products for coronaviruses) are encoded within the 50-proximal two-thirds of the genome on gene 1 and the (mostly) structural proteins are encoded within the 30-proximal one-third of the genome (8–9 genes for coronaviruses) [3]. Genes for the major structural proteins in all coronaviruses occur in the 50 to 30 order as S, E, M, and N. The precise strategy used by coronaviruses for genome replication is not yet known, but many features have been established.

Despite its unique property as the largest of the known plus-strand RNA genomes, the coronavirus genome shares with those of other plus-strand RNAviruses (excepting retroviruses) the properties of (1) infectiousness [and not using a packaged RNA-dependent RNA polymerase (RdRp)] and (2) replication in the cytoplasm in close association with cellular membranes. With the advent of reverse genetics enabling site-directed mutagenesis of any part of the genome, many of the mechanistic features of coronavirus genome replication that could previously be learned only from direct manipulation of defective interfering (DI) RNA can now be examined in the context of the whole virus genome.

RNA viruses are ideal model organisms to study evolutionary genetics under selection [4]. This is due to their large population sizes and short generation times, which are characterized by rapid accumulation of mutations relative to other organisms. Given the error-prone nature of viral RNAdependent RNApolymerases, viral replication leads to the formation of a quasispecies. Rather than one virus producing identical progeny during replication, a population of viruses is produced, each differing from one another by nucleotide substitutions or deletions as a result of errors incorporated by the RNA polymerase. While the majority of these mutations will have neutral or negative effects on viral fitness, a small subset of these mutations may prove beneficial and enhance the ability for certain variants to replicate despite selective pressures of interest such as the host immune response or an antiviral drug. Forced adaptation experiments have been used to determine viral mutations that facilitate escape from drugs, monoclonal antibodies, host restriction factors, and species variation in host receptors and to elucidate various viral mechanisms of infection and replication.

Disease

The outbreak COVID-19 in our planet has been unprecedented in its scale and impact. The emergence and spread of a novel corona virus (2019-nCoV) from Wuhan, China, has become a global health concern [5]. Shortly after the detection of the corona virus in late December 2019, several countries have reported sporadic imported cases among travelers returning from China which should that human to human transmission was occurred.

Medical Journal of Clinical Trials & Case Studies

The outbreak of COVID-19 poses great challenges to China in all aspects of disaster management from emergency medical care to city logistic support [6]. The authorities are particularly aware of the need for psycho-social responses as COVID-19 demonstrated very high infectivity and its deceased rates at the beginning was very high in the congested city of Wuhan. When the city was locked down with short notice the whole community of Wuhan citizens were thrown to horror and immense anxiety. Volunteers of medical, counseling and social work background from all over the country joined to form support teams on line, though they have limited training in crisis intervention. This study derived from the records of supervising these interdisciplinary support teams analyzed the contents as well as stages of psychological reactions of the victims, including the suspected patients, patients and their family members, ex-patients, and average community residents who at any time may fell sick. Records showed that there was a prolonged "Impact Stage" as it took considerable time for central government to mobilize medical resources from other provinces to rescue. Heroic stage was almost nonexistent, for patients and their families, as they felt defeated and absolute hopeless when medical resources was totally out of reach. Disillusionment, marked by anger, depression and frustration, immediately set in.

The building of cabin hospitals brought to the victims a temporary sense of security and safety, which may be regarded as a phase of Honeymoon. However, disillusionment started to rise again when patients were discharged to the community. Ex-patients were found to have a strong sense of shame while prejudice against the sick was widely held by residents. As PTSD normally has a delayed effect, the findings pointed to the urgent need of providing community mental health services targeting at the victims and their families. Proper health education to correct misconceptions towards the recovered patients must be launched to prevent blaming the victims.

Many more people may have contracted the virus; however, because they do not develop the symptoms of the disease, they do not know that they are infected and, thus, run the risk of accidently contaminating other people [7]. On the other hand, many are fighting for their lives in hospitals. At the beginning of the pandemic, the fact that the virus is most deadly for the elderly may have imparted the impression that children and young people would not need to be as careful. However, after reports of infection and death of young patients, the mistake was realized. The pandemic is aimed at humanity, but the virus does not affect everyone the same, as it depends on biological, political, economic, cultural and subjective conditions, actions, and responses.

The COVID-19 can infect people of all ages [8]. According to the epidemiological picture so far, the elderly

and people with health complications (such as asthma, diabetes, heart disease) appear to be more susceptible to the virus. Healthcare organizations advise people of all ages to take steps to protect themselves against the virus, primarily by adhering to adequate hand hygiene and the use of precautionary measures in the event of coughing and sneezing.

Crisis

The coronavirus outbreak and crisis has a wide range and multiplicity of repercussions, not just medical, but also social (loss of loved ones, mourning, bereavement, isolation), economic (activity restrictions, sales down-turn, company close-downs, loss of productivity combined with sickabsence payments), and political (postponing elections) [9].

In a nutshell the coronavirus has a considerable (albeit not tragically high especially when compared with other epidemics and pandemics in human history) cost. It seems (or at worst is) highly contagious, it will most probably put health provision in great stress, as numbers of diseased and deaths will rise, negatively affecting therapy of others too. It will also increase the need for isolation wards, and last but not least will put pressure to personnel alongside personnel's absence due to infection itself too.

Addressing and combating both the disease and its repercussions has now on moved to state decision making level, as governments seek immediately applicable solutions which (solutions) cause further disruption (hopefully not as harmful as innaction from the policymakers side).

It is known that social distance and the use of masks can help prevent transmission and increase the number of cases, and so far, there is no cure or vaccines [10]. Therefore, public strategies were declared by governments to prevent viral spread, through lockdown or quarantine, demanding people to stay at home and streets, gyms, parks to be closed. Although they are beneficial strategies in reducing the pandemic, these measures have become a risk factor for COVID-19, as they increase physical inactivity and sedentarism. These are important factors for the potential aggravation of chronic diseases characterized by inflammation, accumulation of visceral fat and increased inflammatory markers, such as interleukin-6, culminating in systemic inflammation.

The spread of COVID-19 will create major challenges for social service provision, unless actions area taken to avoid the increase of discrimination against people with ID [11].

Persons with ID are disproportionately impacted. Persons with ID have the right to participate fully and effectively in these decisions. Therefore, this is a call for more participated actions: government, organizations, persons with ID and their families should work as partners to develop and implement measures to promote disabilityinclusive responses to the current crisis. A human rightsbased approach and a multidimensional and ethical framework for decision-making is required to ensure that persons with ID are not left behind in this period and are placed at the center of the response, as active agents. "A combination of mainstream and disability-specific measures is necessary to ensure systematic inclusion of persons with disabilities". Scientific evidences alone cannot drive decisionmaking. It is needed a balance between rights, interests and values. Reasonableness and transparency. Inclusiveness and responsiveness. Accountability, creativity and innovative solutions. Inclusive resources allocation and social stability. Community based-solutions. Work on disability inclusion is emergent to be prepared for future pandemics. Let's think about the long-term consequences of COVID-19 and others potential future pandemics, in health and wellbeing of all, without discrimination.

Pandemic

The global coronavirus disease (COVID-19) pandemic has already had an enormous impact and will surely have profound consequences for many years to come [12]. Trust is critically important during such a rapidly evolving event characterized by scientific uncertainty. Reflections focus on uncertainty communication, transparency, and longterm implications for trust in government and science. On tradeoffs, the positive and unintended negative effects of three key risk communication messages are considered (1) stay at home, (2) some groups are at higher risk, and (3) daily infections and deaths. The authors argue that greater attention to message 'tradeoffs' over 'effectiveness' and 'evaluation' over 'intuition' would help guide risk communicators under pressure. On preparedness, past infectious disease outbreak recommendations are examined. Although COVID-19 was inevitably 'unexpected', important preparedness actions were largely overlooked such as building key risk communication capacities.

The unfolding COVID-19 pandemic has closed borders, grounded planes, quarantined more than half of the world's population, triggered anxiety en masse, and shaken global capitalism to its core [13]. Scholars of the political ecology of disasters have sought to denaturalize so-called "natural" disasters by demonstrating their uneven consequences. Work in the political ecology of health similarly accounts for how risk of illness and disease are socioeconomically mediated. While this scholarship has demonstrated the need to contextualize the unequal fallout from ecological and health disasters in ways that reveal the festering wounds of structural inequality, we know much less about how hope is cultivated in moments of crisis. The current revelatory moment of the COVID-19 pandemic offers an opportunity to find hope in the rubble through the deconstruction of framings of crisis as "error" and by homing in on the current and potential role of tourism to contribute to a more socially and environmentally just society. This reframing the pandemic as an "unnatural" disaster opens new debates at the intersection of tourism geographies and political ecologies of hope in revelatory moments of crisis.

Lockdown

The lockdowns many governments have imposed cause additional stress for the mental wellbeing of both single people living in as well as people living together under cramped conditions [14]. For already disadvantaged people being required to stay at home for an unknown time span may have negative effects on a number of levels. This situation has been linked to a worldwide surge in domestic violence. Children's opportunities to continue their education also vary during lockdown. Some might get support from their middleclass parents while others lack the supportive environment needed to successfully learn from home (e.g. educated or available parents, hardware/internet access). The longer the lockdown, the more negative these effects are.

Economic costs equally have been high as social lockdown directly influences one's opportunity for gainful employment. Particularly employees in unprotected and casual work who are not system relevant and who may not be able to work from home are affected by a sudden loss of income, jeopardizing them and their families. The expected economic downturn and recession following from the closure of businesses as part of the coronavirus lockdown will have negative effects for large social groups. There are already soaring numbers of people looking for work in many countries, while there are warnings that half a billion people worldwide could be pushed into poverty by the corona virus likely to have long term effects on their overall well-being.

Considering and balancing such risks when responding to a pandemic can improve outcomes, but general sociostructural risks, which might 'silently kill' are more difficult to judge and to balance against immediate threats of an illness. Therefore, significant interventions into the social and economic life have not only immediate but also longterm negative effects for a large proportion of the members of a society important to take into account.

Travel Restrictions

International, regional and local travel restrictions immediately affected national economies, including tourism systems, i.e. international travel, domestic tourism, day

Medical Journal of Clinical Trials & Case Studies

visits and segments as diverse as air transport, cruises, public transport, accommodation, cafés and restaurants, conventions, festivals, meetings, or sports events [15]. With international air travel rapidly slowing as a result of the crisis, and many countries imposing travel bans, closing borders, or introducing quarantine periods, international and domestic tourism declined precipitously over a period of weeks. Countries scrambled to return travelers home, which in the case of important outbound markets involved hundreds of thousands of citizens in all parts of the world. As an example, on 23 March, the British Foreign Secretary urged British tourists to return home, "advising against all but essential international travel", and highlighting that "[...] international travel is becoming more difficult with the closure of borders, airlines suspending flights, airports closing, exit bans and further restrictions being introduced daily". Cruise ships soon became the worst-case scenario for anyone stuck in the global tourism system. Starting with the Diamond Princess on 1 February 2020, at least 25 cruise ships had confirmed COVID-19 infections by 26 March 2020 and at the end of March ten ships remained at sea unable to find a port that would allow them to dock. Idealized safe environments at sea turned into traps, with thousands of passengers held in cabin quarantine and facing the challenge of returning home.

Within countries, the virus affected virtually all parts of the hospitality value chain. The impact of cancelled events, closed accommodations, and shut down attractions became immediately felt in other parts of the supply chain, such as catering and laundry services. Restaurants had to close as well, though in some countries, a switch to takeaway/delivery sales allowed some to continue operations. Reports on lay-offs and bankruptcies followed, with British airline FlyBe succumbing first to market pressure, declaring bankruptcy on 5 March 2020. Major airlines including Scandinavian Airlines (17 March 2020), Singapore Airlines (27 March 2020) and Virgin (30 March 2020), as well as tour operators including German TUI (27 March 2020) have already requested tens of billions of US\$ in state aid.

The situation is unprecedented. Within the space of months, the framing of the global tourism system moved from overtourism to nontourism, vividly illustrated by blogs and newspaper articles depicting popular tourism sites in 'before' and 'after' photographs. While some commentators already speculate on "What will travel be like after the Coronavirus", with some unrealistically optimistic perspectives already having proven wrong, the general belief is that tourism will rebound as it has from previous crises. However, there is much evidence that COVID-19 will be different and transformative for the tourism sector. Governments only begin to understand that, unlike other business sectors, tourism revenue is permanently lost because unsold capacity – for instance in accommodation – cannot be marketed in subsequent years, with corresponding implications for employment in the sector.

Conclusion

Because the appearance of the coronavirus is currently the world's biggest health problem, it is necessary to help everyone, and especially the most vulnerable members of society. First of all, additional investments in medical scientific research to get vaccines and medicaments as soon as possible. In this regard, there are several serious announcements that some vaccines and some drugs are in the stages of clinical trials. The appeanance of the coronavirus virus has a very negative impact on the world economy. In order to better protect people from the risk of poverty and social exclusion, who rely on the economic assistance of their countries and to ensure the continuity of support during times of social distancing, countries should adapt their support programs.

References

- 1. Zhou W (2020) Coronavirus Prevention Handbook 101 Science-Based Tips That Could Save Your Life", Skyhorse Publishing, New York, USA, pp: 24-27.
- 2. Baker R (2007) Epidemic The Past, Present and Future of the Diseases that Made Us, Vision Paperbacks, London, UK, pp: 42-43.
- 3. Brian DA, Baric RS (2005) Coronavirus Genome Structure and Replication. In: Enjuanes L (Eds.), Coronavirus Replication and Reverse Genetics. Springer-Verlag Berlin Heidelberg, Berlin, Germany, pp: 2.
- Letko M, Munster V (2020) Studying Evolutionary Adaptation of MERS-CoV. In: Vijay R (Ed.), MERS Coronavirus - Methods and Protocols. Springer Science+Business Media, LLC, New York, USA, pp: 3.
- Ayele MW, Wirkneh BD (2020) Preparedness and Response Efforts to Fight against COVID-19 in Sub-Saharan Africa: Challenges and Opportunities. J Pediatr Neonatal Biol 5(2): 31-33.
- 6. Wong HCJ (2020) Different Stages of Disaster the Wuhan Experience during the COVID-19 Community Outbreak. EC Psychology and Psychiatry 9(7): 47-52.
- 7. Arruda DP (2020) Coronavirus, Inequality and Indifference. J Qual Healthcare Eco 3(3): 000161.
- 8. Franjić S (2020) COVID-19 in Croatia. Asp Biomed Clin Case Rep 3(2): 106-113.
- 9. Dikeos CG (2020) Coronavirus and State Actions:

Medical Journal of Clinical Trials & Case Studies

Questions by and for Policy Planners and Analysts. J Qual Healthcare Eco 3(2): 000156.

- 10. Oliveira MR (2020) The Importance of Physical Exercise in Covid-19 Pandemic. J Qual Healthcare Eco 3(3): 000163.
- 11. Santos S (2020) The Quality of Health Care and the Quality Of Life of Persons with Intellectual Disabilities: A Call for Disability-Inclusive Answers during Coronavirus Pandemics. J Qual Healthcare Eco 3(3): 1-2.
- 12. Dominic HPB, Katherine AMcC (2020) COVID-19:

Reflections on trust, tradeoffs, and preparedness, Journal of Risk Research.

- 13. Mary M (2020) Covid-19 is an unnatural disaster: Hope in revelatory moments of crisis, Tourism Geographies.
- 14. Jens OZ (2020) A monstrous threat': how a state of exception turns into a 'new normal'. Journal of Risk Research.
- 15. Stefan G, Daniel S, Michael CH (2020) Pandemics, tourism and global change: a rapid assessment of COVID-19. Journal of Sustainable Tourism.

