DOI: 10.67363/1eh0v2ns

Jeremy J. Ramsden
Hon. Professor of Nanotechnology,
University of Buckingham

Our Life After COVID-19

KEYWORDS: COVID-19, Pandemic, Lockdown, Infection, Immunity, Globalization, Brexit, Economic Impact

If the 1918 "Spanish flu" – possibly a strain of swine flu[1] – epidemic is anything to go by, pandemics eventually die or burn themselves out. The metaphor of the individual living organism is reassuring – we all know that creatures die. Similarly with the metaphor of the fire – we all know that fires run out of fuel; even stars "burn themselves out". But bacteria may be immortal. Every schoolchild knows that they "multiply by division". What happens when a bacterial cell "divides"? Does a young and vibrant daughter bud off, ready for a new life, while the old mother dies soon thereafter, or does the cell carefully eliminate defective components and bud off a senescent, moribund remnant, while going on itself to lead an ever more glorious life? With viruses the matter is even less clear – one virus infects a cell and requisitions its machinery to make many copies of itself; unless it is devoured by a lysosome or, extracellularly, by a macrophage, it can presumably continue to exist for an indefinite time into the future and, like a quantum particle, has well-defined specific qualities and a unique and immutable identity.[2]

In short, the COVID-19 pandemic may never die out. The Black Death did, of course, after hundreds of years and many repeated outbreaks – but because improved urban sanitation led to far fewer rats (the intermediate agent), and finally antibiotics against the primary agent, the bacterium Yersinia pestis, were developed. In contrast, Ebola outbreaks always remain local, because the mortality is so high; the "fuel" of susceptible people is quickly exhausted and burning out is an apt metaphor (an as yet unknown natural reservoir

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

seems to guarantee renewed outbreaks, however). But it could be that COVID-19 has just the right balance of contagiousness, mortality and nastiness (in terms of symptoms) to ensure that it will henceforth always be around and will permanently requisition large healthcare resources from its societal host.[3] Of particular importance is the persistence of immunity in individuals who have been infected. According to the classic SIR (susceptible– infected–recovered) model, almost everyone becomes infected and either recovers and is no longer susceptible to infection or dies, but if immunity is evanescent (as with the common cold) then without permanent social distancing to limit contagion, mortality will continue,[6] and could become the principal cause of death of mankind and, unless the birth rate remains higher than the death rate, would lead to the extinction of humanity.

The duration of immunity and the degree of prevalence of asymptomatic carriers of SARS-CoV-2 are presently the two principal unknown features of COVID-19. If acquired immunity is permanent, then the epidemic must rapidly die out, because it will run out of people to infect. There is a severe impact on society; without lockdown there would be many deaths, which would not only absorb large resources in itself but also deplete the ranks of the economically active. That is what happened during the 1918 epidemic. Recovery was, however, rapid ("V-shaped"). It should though be noted that World War I was just finishing and it is difficult to disentangle its effects from those of the pandemic. With lockdown, as we are now seeing, the number of deaths is far smaller (because contagion is greatly reduced) but the economic cost is severe (and given the known linkage between economic prosperity and life expectancy, mortality resulting from impoverishment could exceed that had there been no lockdown).[7] Lockdown on the scale now been practised around the world is unprecedented. The concept is that we lock ourselves down to limit contagion and, hence, mortality. Apart from the economic disbenefit (which is especially severe in the so-called leisure industries, including bars and restaurants, theatres and spectator sports), the drawback is that people do not become infected (most will anyway recover),[8] hence

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

there is no acquisition of population ("herd") immunity. The strategy is, therefore, to develop a vaccine that will allow the population to be immunized without having to contract the disease naturally and suffer its unpleasant symptoms with an appreciable risk of a fatal outcome. But developing a safe vaccine takes time, and there is no guarantee of success – vide the experience with influenza. At present the feasibility of this strategy has been called into question, because the time needed to develop a new vaccine, manufacture it at scale, and distribute it to the population would, under the most favourable circumstances, probably take at least a year whereas the measures widely introduced by governments to offset the short-term economic disbenefits of the lockdown are designed to operate for two or three months only (e.g., in the UK salary support measures etc. will come to an end on 31 May). Prolongation for one or more years would incur debt of many multiples of GDP, which is unknown territory, especially if most countries are in the same situation. The extended lockdown necessary for the vaccination strategy to work would require either a revolutionary rethink of our present global economic framework (which is not inconceivable – it happened in Russia in 1917 and in China after 1949), or radical microeconomic changes: the leisure industries are not essential for survival, nor even for civilization, and there are innumerable other types of work (including vastly expanded healthcare services) that could replace them.

Nevertheless, both government thinking and public opinion presently balk at these prospects. The objective of the lockdown strategy is therefore morphing into one of containment with respect to the capacity of health services, preventing them from being overwhelmed. This has been more or less successful, and will be even more so once various administrative and logistical bottlenecks have been overcome, and suggests that the lockdown could end rapidly, well before 31 May 2020.

That does not, however, mean that the economy will rapidly return to business as usual. Firstly, some businesses will have gone bankrupt, despite all the efforts of the government to prevent that. Many other business owners will have discovered other activities more congenial to them, or more remunerative, or preferably both.

ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

Probably most importantly of all, people, even in the relatively short interval of the lockdown, have developed new habits, a horror of crowds and mass events. It is said that the UK government has been surprised by the zeal of the public in following the lockdown rules. But the English anyway tend to social distancing. Orderly queueing is said to be a national characteristic, and all that changed in lockdown is the increased distance between the queuers, which is actually more pleasant. Contrast this with the disorderly milling around that serves the same function in continental Europe. It has been pointed out that "a hundred Italians living together in the same house and having continuously to do with one another are actually less in each other's way than a German and his neighbour who seldom see one another",[10] and in this respect the English are true to their Saxon roots. It is hard to imagine people being comfortable crowding into a theatre, concert hall, funfair or sports stadium – at least not without having been vaccinated, and we are assuming that a vaccine will not be available for early lifting of lockdown.

A similar problem arises with transport. Yet, here there is a simple solution. At least wherever fixed seats are provided, people can be spaced with at least one empty seat between them. In aircraft, people are anyway assigned to a numbered place. Passenger loading factors would fall by one third, but the fare increase to compensate would not be excessive – and journeys would become more pleasant. Similar considerations apply to long-distance trains. These solutions seem workable even in the absence of vaccination. Perhaps as a precaution face masks and goggles should be worn; they should suffice to keep any adventitiously acquired viral load within the range that can be managed by one's own immune system. But the problems seem insuperable for metropolitan railways, in which standing passengers are closely packed together in the rush hour. Perhaps even with masks and goggles the risk of infection will be too great. If it is still necessary to travel at that hour, one should walk, bicycle or use one's private car. Of course, the infrastructure – road capacity and parking spaces – will not support that if the same numbers were to travel as before the pandemic – but it seems that almost everyone whose work is desk-bound has adapted to home

ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

working and, if this mode continues even after the end of lockdown, the "rush hour" will become a thing of the past – with many concomitant operational advantages. It seems unlikely that cruise ships will survive. Since travelling in them is supposed to be a pleasurable experience, it does not seem compatible with wearing masks and goggles and keeping one's distance. One can anticipate that their owners will make strenuous efforts to persuade prospective customers that people are already booking for 2021 and thereafter, information that will be difficult to check, but nevertheless it seems that most of the few hundred ships that exist are destined for the breaker's yards.[11] They probably cannot even be converted to floating hotels. Perhaps the greatest difficulties of any industry will be experienced by hotels. How can guests ever be convinced that there is no risk of picking up the virus? Restaurants should fare better, because a minor rearrangement of tables and seats may suffice to ensure that diners are reasonably safely spaced from each other, and a disinclination to linger should compensate for the reduced number of places. But restaurants are not indispensable. As George Orwell has remarked, "Some restaurants are better than others, but it is impossible to get as good a meal in a restaurant as one can get, for the same expense, in a private house".[12] What is perhaps indispensable and cannot conveniently be replaced by any kind of online artifice are exhibitions, especially trade fairs. But they usually take place in vast halls and admission is strictly controlled, hence a safe density of occupation should be achievable.

The goal, finally, becomes one of avoiding infection. This will become even more important if it turns out that immunity is transient. In that case, either lockdown has to be continued indefinitely, or appropriate precautions need to be taken. The pragmatic course of action is to steer a middle way – to continue sensible restrictions of activities that are associated with high risk, such as those mentioned in the previous paragraph, but to allow as much of the economy as possible to resume normal operations, provided that crowding is strictly avoided, and to encourage personal habits that diminish the risk of infection, including the donning of masks and goggles and avoiding kisses and handshakes.[13] These

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

measures can presumably be largely left to individual initiative – just some people positively avoid catching a cold in winter.

"Smart", digitally enhanced ways of avoiding infection are being much discussed. The basic idea is to identify infected individuals and trace their contacts. Once the system is established, contact tracing should no longer be necessary because those informed to be infected should thereafter be placed in quarantine or self-isolate and avoid contacts until they have recovered and are then no longer infectious.[14] Such a system has been used to great effect in city-states like Hong Kong and Singapore. Initially those arriving from areas where outbreaks were known occurred were deemed (likely to be) infected; the next stage in sophistication is via symptoms (but 20–30% of those infected, and able to infect, appear to show no symptoms); the final stage is to carry out a mini biopsy (a sample of saliva may suffice) and determine whether the virus is present, most commonly from its characteristic genomic signature.[15] The need for isolation lapses after the patient has recovered. Initially this was assumed to be after 14 days. There is strong current interest in developing tests to identify the presence of antibodies against the virus which, it is presumed, are carried by those who have recovered. As yet, little is known about how antibodies build up in the blood during and after infection and how long they persist.

The idea behind these tests, combined with the premiss that nearly everyone has a cellphone that they carry around with them, is to move towards a system of micromanagement of the population. In China, which already has an extensive system of social credit, one's status with respect to COVID-19 is merely an additional attribute to be added to those already included in the repertoire (which, one imagines, has features such as average promptness in paying bills, and degree of respect for pedestrian traffic signals at road crossings). Assuming immunity, once acquired, is permanent, someone with that status would be allowed to do almost anything (including travelling on a crowded underground train), whereas someone who has never been infected would be much more restricted (to avoid burdening the state healthcare system). It is doubtful whether such a system of mass state surveillance would be acceptable in Europe. Furthermore, it

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

assumes that the tests are completely reliable. On the other hand, as long as a reasonably high proportion of people (as a guess, 70–80%) voluntarily adopt the measures (i.e., being tested to determine status and always carrying a cellphone) the goal of limiting the risk of contagion could probably still be achieved. This is perfectly in accordance with H.A. Simon's concept of administrative satisficing – looking for a course of action that is satisfactory or "good enough".[16]

The great advantage of the micromanagement approach is that it allows almost all the general restrictions to be lifted. It is an approach that has become feasible thanks to decades of progress in miniaturizing integrated circuits. Objections on the grounds of "digital divide" – that a small proportion of people do not have cellphones, for example, and therefore could not participate – and invasion of privacy, among others, carry little weight; as mentioned, the success of the approach does not require complete compliance and it is highly likely (based on analysis of past scenarios) that enough people would comply. Similarly, many people have no objection to posting large amounts of personal data on online social networks or using electronic means of payment linked to their names in shops, thereby allowing their buying habits to be monitored, hence it would be inconsistent to object to testing and tracking.

Testing and tracking could be discontinued once a vaccine became available. Fears of totalitarian mass medication are misplaced. As long as a sufficiently high proportion of citizens agreed to be vaccinated, population immunity would be achieved; vaccination against various typical childhood diseases is not compulsory in the UK, yet take-up is sufficiently high to be effective.[17]

It is hard to imagine that the United Kingdom, with its tradition of valuing individual liberty more than the perfection of society, would accept a highly regimented social organization akin to a military dictatorship as the price for stopping the pandemic.[18] At present there is much lively debate around this issue. Most, if not all, aspects of government policy have been debated and criticized. We can be thankful that this can be done without fear of retribution. Some may argue that by criticizing, one weakens the fight against

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

COVID-19. Were the leaders of the fight infallible geniuses there might be something to be said for that argument, but given that the reality is almost the opposite, the more diversity of intelligent thought applied to the problem, the more likely it is that a workable solution will be found.

Many have spoken of "the war against COVID-19". In a real war, the chains of command are strict and according to hierarchy and criticism is indeed inappropriate. In World War II, for example, very few possessed the overall picture. After a desert mission that had seemed to him a dismal tactical failure, Fitzroy Maclean recalled his Sergeant Instructor's admonition during training, that "we were nothing but -ing cogs in a gigantic -ing organization",[22] after having received news from HQ that strategically the mission had achieved its main object. This provides the basis for the unquestioning assent given by the individual soldier to the commands he receives. Civilians are not committed to society in the same way that soldiers necessarily are to their army. As Machiavelli so clearly saw,[23] it is an ethical choice between individual autonomy and the success of society. The English, with their intuitive and masterful sense of the middle way, have managed to create a society that is to a large degree successful while the individual retains a large degree of autonomy. Given that official policy ultimately reflects popular sentiment, one can expect a similar degree of compromise to emerge from the extremes of regimented lockdown morphing into microsurveillance and laissez faire. Ultimately it will be a matter of individual judgment and responsibility how one avoids becoming infected with the virus.

The fate of the economy cannot be so straightforwardly disposed of, for it depends on a vastly and intricately ramified network of connexions between individuals and their groups. Furthermore, while presumably everyone desires to remain as healthy as possible, people have diverse ideas for the development of the economy. There has been endless discussion in recent years about the right course between the extremes of unbridled growth and perfect sustainability.[25] The "performance economy" seeks to increase efficiency of resource use in order to achieve a sustainable

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

sophisticated economy.[27] Yet, despite increasingly aggressive advocacy, the "zero carbon" approach has gained little traction. Now, at a stroke, the economy has been severely depressed; one presumes that this is being followed by a commensurate drop in anthropogenic carbon emissions, although it may take some time before this becomes evident.[28] Clearly there are enormous vested interests striving for a return to previous levels of activity as quickly as possible. At the same time people have relished the almost empty roads and skies, and palpably cleaner urban air, and it seems almost mindless to desire a return to endemic traffic jams and the sun obscured by contrails. While traditionally the latter has been accepted as the price to pay for material prosperity, commitment to this model has been eroded in recent years by plutocratic tendencies – as now exemplified by the unwillingness of top executives of major limited companies to forego any of the remuneration to which they are legally entitled, even though it may be a hundredfold median income, at a time when many citizens have completely lost their livelihoods due to the lockdown. Hence, the economic aspects of post-COVID-19 are rather unpredictable.

One other aspect deserves mention, of particular interest to Europe, namely Brexit. The response of the central organs of the European Union (EU) to COVID-19 has been minimal. There has been no uniformity of response of member states to the pandemic. Those Eurozone countries that were already struggling before the pandemic have not been offered any meaningful support, although tortuous negotiations are continuing. Countries heavily dependent on tourism, which has always been vigorously promoted by the EU, are particularly severely hit. The transfer of medical supplies from one member-state to another has been blocked, and most frontiers have been closed other than for general merchandise. Before the Brexit referendum on 23 June 2016, it was remarked that were the UK to vote for leaving, "[the EU] may never really recover; hence, Brexit presages the ultimate breakup of the EU as a whole".[30] It may be that the SARS-CoV-2 pandemic provides the ultimate impetus for that breakup.

ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

Globalization has suddenly become unfashionable. Perhaps for the first time since 1776, when Adam Smith expounded the doctrine of absolute advantage,[31] followed by Ricardo's comparative advantage in 1817,[33] it has been widely realized that the matter is more sophisticated than the conventional economic reckoning might suggest. In the UK, for example, much medical material essential for dealing with the pandemic has to be imported from China, and is now found to be unavailable in the quality and quantities required. It has not taken long for it to be generally realized that it would be better if such materials were available from local manufacturers, and no doubt this idea will now be applied to all kinds of manufactured merchandise and foodstuffs.

ლიტერატურა ▫ References

1. M.I. Nelson and M. Worobey, Origins of the 1918 pandemic: revisiting the swine "mixing vessel" hypothesis. *Am. J. Epidemiol*. 187 (2018) 2498–2502.
2. J.J. Ramsden, Less is different. *Nanotechnol*. *Perceptions* 6 (2010) 57–60.
3. An analogy is the silver halides AgCl, AgBr and AgI either pure or as solid solutions of each other in photography. The salts of some other metals also undergo photoreduction but the mobilities of the electrons and metal ions in the lattice and other attributes do not lead to the formation of a latent image,[4] which is the key to the extraordinary success of the silver halides in practical photography; they have just the right balance of these attributes. Another example is titanium dioxide as a photocatalytic material;[5] many semiconductors exhibit photocatalysis, but only titania (and a few related materials such as some titanates) has an appropriate balance of attributes such as bandgap and band-edge positions to make it practically useful.
4. J.J. Ramsden, Computing photographic response curves. *Proc. R. Soc. Lond.* A406 (1986) 27–37.
5. J.J. Ramsden, Photocatalytic antimicrobial coatings. *Nanotechnol. Perceptions* 11 (2015) 146–168.
6. J.J. Ramsden, COVID-19. *Nanotechnol. Perceptions* 16 (2020) 5–15.
7. P. Thomas, J-value assessment of how best to combat COVID-19. *Nanotechnol. Perceptions* 16 (2020) 16–40.
8. SARS-CoV-2 especially attacks the epithelial cells of the respiratory tract. Obviously as yet there are no data on the possible long-term effects of having had COVID-19, but it is already known that people with preëxisting respiratory problems, such as asthma and chronic obstructive pulmonary disease (COPD),

ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

are likely to be more severely affected by COVID-19. There is some indication that those who recover might nevertheless be permanently more sensitive to respiratory stress, of which the most common cause is air pollution. Despite strenuous efforts (e.g., in the UK, ref. 9), progress in improving air quality has been disappointing. Many countervailing tendencies are ignored (e.g., the removal of hedges by farmers allows wind to whip up more dust from dry soil; and waste incineration, not officially discouraged – indeed new plants are being permitted, is a major contributor to particulate and other forms of pollution – neither is mentioned in ref. 9).

9. *Clean Air Strategy*. London: Defra (2018).
10. H. Keyserling, *Europe* (tr. M. Samuel), p. 151. London: Jonathan Cape (1928).
11. Renewed interest in studying the 1918 pandemic for lessons that might be learned is also bad news for cruise ships. The worst mass incubators for the disease seem to have been the numerous and crowded large ships ferrying troops from barracks to the front in the closing months of World War I and back home after the war had ended.
12. G. Orwell, *Down and Out in Paris and London*, p. 105. London: Penguin Books (1975) (first published in 1933).
13. National habits will doubtless play a rôle. For example, donning face masks covering mouth and nose have long been customary in Hong Kong and Japan, for example; kissing and handshakes are strongly ingrained in French culture but are fairly recent introductions in England.
14. It may be that an infected person is able to transmit the virus before showing any symptoms. In that case contact tracing has to be applied retrospectively once infection has been ascertained.
15. SARS-CoV-2 is a single-stranded RNA virus. The genome is converted to DNA with the enzyme reverse transcriptase (RT), the DNA is "amplified" (i.e., many copies are made) with the polymerase chain reaction (PCR), and finally characteristic base sequences are identified. Other kinds of tests are being developed, based on recognizing one of the surface proteins (an antigen) of the virus, which could potentially be much faster.
16. H.A. Simon, *Administrative Behavior* (4th edition), p. 119. New York: The Free Press (1997).
17. It should nevertheless be noted that fluoridation of tap water, still undertaken in some parts of the UK, comes closer to mass medication because of its universality.[19] Nevertheless, even if it is piped into one's house, one is not obliged to drink it; nowadays bottled mineral water is widely consumed (UK consumption is about 3 million cubic metres per annum).
18. The two extremes are perhaps represented by Samuel[20] and Winston.[21] The former's article is subtitled "The only proven way to stop the pandemic involves no respect for personal freedoms or privacy"; the latter's criticizes eugenics (and, by implication, compulsory vaccination or any other mass medication for the purpose of protecting society) "because it values society over the individual".

ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

19. D. Cross, An unhealthy obsession with fluoride. *Nanotechnol. Perceptions* 11 (2015) 169–185.
20. J. Samuel, Staying at home is not enough to beat this virus. *Daily Telegraph* (28 March 2020).
21. R. Winston, Eugenics. *Sunday Times* (23 February 2020).
22. F. Maclean, *Eastern Approaches*, p. 256. London: Jonathan Cape (1949).
23. N. Machiavelli, *Il Principe.* Milan: Rizzoli (1979) (first published in 1532). See also ref. 24.
24. I. Berlin, The question of Machiavelli. *New York Review of Books* (4 November 1971) pp. 20–32.
25. With the opponents of each side giving them epithets like "planetary ruin" and "back to the Stone Age", respectively. See, e.g., ref. 26.
26. J.J. Ramsden, Doomsday scenarios: an appraisal. *Nanotechnol. Perceptions* 12 (2016) 35–46.
27. W.R. Stahel, *The Performance Economy* (2nd edition). Basingstoke: Palgrave Macmillan (2010).
28. The drop in economic activity has been too sudden for traditional indicators to follow. Probably the simplest measure is the cut in oil production – normally about 100 million barrels per day (a barrel is 160 dm3 and weighs about 136 kg) – that may soon take place, perhaps as much as 20%. This is commensurate with the roughly 90% drop in road and aeroplane traffic,[29] and should lead to a similar percentage drop in anthropogenic carbon emissions, such is the dominance of oil. The Paris Agreement, opened for signature in 2016, envisages a 40% cut in emissions from the level of 1990, when world oil production was about 60 million barrels per day, by 2030. This is close to the absolute magnitude of the cut due to COVID-19, achieved within a few weeks, albeit from a higher starting point.
29. G.C. Holt and J.J. Ramsden, *Climate Change from First Principles*, §4.7. Basel: Collegium Basilea (2019).
30. J.J. Ramsden, Britain and the EU. *Nanotechnol. Perceptions* 12 (2016) 3–14.
31. A. Smith, *An Enquiry into the Nature and Causes of the Wealth of Nations* (ed. E. Cannan). University of Chicago Press (1976). See also ref. 32.
32. R. Schumacher, Adam Smith's theory of absolute advantage and the use of doxography in the history of economics. *Erasmus J. Philos. Econ.* 5 (2012) 54–80.
33. D. Ricardo, *The Principles of Political Economy & Taxation.* London: J.M. Dent (1911). See also ref. 34.
34. R.H. Clarida and R. Findlay, Government, trade, and comparative advantage. *Am. Econ. Rev.* 82 (1992) 122–127.

ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

DOI: 10.67363/1eh0v2ns

ჯერემი ჯ. რამსდენი
ნანოტექნოლოგიების საპატიო პროფესორი,
ბაკინგემის უნივერსიტეტი

ჩვენი ცხოვრება კორონავირუსის შემდეგ

(ანოტაცია)

საკვანძო სიტყვები: კოვიდ-19, პანდემია, იზოლაცია, ინფექცია, იმუნიტეტი, გლობალიზაცია, ბრექსითი, ეკონომიკური ზეგავლენა

ნებისმიერი პანდემია, ბოლოს და ბოლოს, მთავრდება ან საკუთარ თავს აქრობს, როგორც ტყეში გაჩენილი ხანძარი. ბაქტერია კი შეიძლება უკვდავი იყოს, რადგან „დაყოფით მრავლდება“. ვირუსებთან დაკავშირებით სიტუაცია ბუნდოვანია: ერთი ვირუსი უჯრედს აინფიცირებს და მისი რესურსების ხარჯზე, საკუთარ ასლებს ამრავლებს. მოკლედ, კორონავირუსული პანდემია, შეიძლება, არც არასდროს დამთავრდეს. შავი ჭირი რამდენიმე საუკუნისა და მრავალი განმეორებითი აფეთქების შემდეგ, ძლივს გაქრა. ჟამისაგან განსხვავებით, ებოლას კერები მუდამ ლოკალური იყო, მაღალი სიკვდილიანობის გამო. რადგან კოვიდ-19 წარმატებით აბალანსებს გავრცელებას, სიკვდილიანობასა და სიმპტომების სიმძიმეს, გამორიცხული არაა, ამიტომაც დარჩეს სამუდამოდ ჩვენს გვერდით.

არსებული სიტუაცია საზოგადოებაზე მძიმედ მოქმედებს. იზოლაციის გარეშე მრავალი დაიღუპება, როგორც 1918 წელს ესპანური გრიპის ე.წ. „ისპანკას“ ეპიდემიის დროს. იზოლაციის პირობებში, როგორც დავრწმუნდით, გარდაცვლილთა რაოდენობა გაცილებით მცირეა, მაგრამ ეკონომიკა ჯდება ძვირი. ამჟამად მსოფლიოში განხორციელებული უპრეცედენტო მასშტაბის თვითიზოლაციის

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

ორი უმთავრესი ნაკლია ეკონომიკური ზარალი (რაც განსაკუთრებით მძიმედ აისახა ტურიზმზე, კვების ობიექტებზე, თეატრებსა და სპორტზე) და ხალხის მიერ იმუნიტეტის ვერშეძენა.

უმთავრესი მიზანი ისეთი ვაქცინის მიღებაა, რომელიც მოსახლეობას იმუნიზაციის საშუალებას მისცემს. თუმცა, უსაფრთხო ვაქცინის შექმნას ბევრი დრო სჭირდება და თან, წარმატების გარანტიაც არ არსებობს, გრიპის აცრასთან დაკავშირებული გამოცდილებით თუ ვიმსჯელებთ. ვაქცინის შექმნის პროცესი ერთი-ორი წლით თუ გაიწელა, მთლიან შიდა პროდუქტთან დაკავშირებით ვალის კატასტროფულ გაზრდას გამოიწვევს. წარსულში მსგავსი ეკონომიკური კატასტროფის წინაშე არასდროს ვმდგარვართ და მასთან გამკლავების არანაირი გამოცდილება არ გვაქვს. სიტუაციას ისიც დაამძიმებს, რომ მსოფლიო ქვეყნების უმეტესობა ერთნაირად კატასტროფულ დღეში აღმოჩნდება.

ბიზნესის ნაწილი გაკოტრდება, მთავრობისგან მიღებული დახმარების მიუხედავად. კომპანიების მფლობელთა დიდი ნაწილი განსხვავებულ, მათთვის უფრო მოსახერხებელ ანდა უფრო შემოსავლიან საქმიანობას მიჰყოფს ხელს. ალბათ, ყველაზე მთავარი ისაა, რომ შედარებით ხანმოკლე თვითიზოლაციის პირობებშიც კი ადამიანები შეიძენენ ისეთ ახალ ჩვევას, როგორიცაა ხალხმრავლობისა და მასობრივი ღონისძიებების შიში.

ბრიტანეთის მთავრობა გააოცა საზოგადოებამ თვითიზოლაციის წესების ფანატიკური დაცვით; მაგრამ ინგლისელები ბუნებრივად არიან სოციალური დისტანცირებისკენ მიდრეკილნი. რიგების მოწესრიგებულად დაცვა მათი ეროვნული თვისებაა და კორონავირუსისგან თავდაცვის მიზნით შემოღებულმა ახალმა მოთხოვნებმა მხოლოდ ის შეცვალა, რომ რიგში მყოფ ინდივიდებს შორის

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

მანძილი გაიზარდა. წესრიგის დაცვის ინგლისური მიდრეკილებისგან კონტრასტულად განსხვავდება კონტინენტური ევროპელების ჯგროდ დგომის მანერა.

იგივე პრობლემაა ტრანსპორტთან დაკავშირებითაც. თუმცა, ამჯერად მარტივი გამოსავლის პოვნა შეიძლება. ყოველ შემთხვევაში, სადაც კი ადგილები დანომრილია, ადამიანების განთავსება თითო სკამის გამოტოვებით მოხერხდება. თვითმფრინავში ხომ ისედაც ყველა მგზავრს კონკრეტული სავარძელი მიეთითება. ასე მოქცევა ვაქცინის არარსებობის პირობებშიც მნიშვნელოვნად ეფექტურია. თუმცა, მეტროპოლიტენის შემთხვევაში, თანაც პიკის საათებში, როცა ჩაპრესილები მგზავრობენ, ეს ხერხი არ გამოდგება. პირბადეებისა და დამცავი ფარების გაკეთების შემთხვევაშიც კი დაინფიცირების რისკი მაინც ძალზე მაღალი იქნება. საკრუიზო გემების ბიზნესი, ალბათ, ვერ გადარჩება. რადგან ზღვით მოგზაურობა სიამოვნების მიღებას გულისხმობს, სოციალური დისტანცირებით პირბადისა და დამცავი ფარით დროსტარება წარმოუდგენელია. საკრუიზო გემების მცურავ სასტუმროებად გადაკეთებაც ვერ მოხერხდება, ალბათ.

სავარაუდოდ, სწორედ სასტუმროების სექტორი შეეჯახება ყველაზე ბევრ სირთულეს. სტუმრებს როგორ უნდა მისცენ იმის გარანტია, რომ ვირუსით დაინფიცირების საფრთხე არ ელით? ამ მხრივ რესტორნები უკეთეს მდგომარეობაში ჩანან, რადგან მაგიდებისა და ადგილების მცირე გადაწყობა შეიძლება საკმარისი იყოს მოქეიფეთა უსაფრთხო დისტანცირებისათვის. ყველაზე პრაგმატული ოქროს შუალედი მგონია: გონივრული შეზღუდვების გაგრძელება მაღალი რისკის შემცველ აქტივობებთან მიმართებაში, მაგრამ ეკონომიკასთან დაკავშირებული ყველა საქმიანობის მაქსიმალურად აღდგენა იმ პირობით, რომ ხალხმრავლობა მკაცრად აიკრძალება, საყოველთა-

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

ოდ დაინერგება პირბადეებისა და დამცავი ნიღბების ტარება, ხოლო გადაკოცნისა და ხელის ჩამორთმევის ტრადიციები დავიწყებას მიეცემა.

ძნელი წარმოსადგენია, რომ გაერთიანებული სამეფო, სადაც ინდივიდუალური თავისუფლება გაცილებით ფასეულია, ვიდრე საზოგადოების განვითარება, სამხედრო დიქტატურისმაგვარი მაღალორგანიზებული სოციალური კონტროლის დაწესებას დათანხმდება პანდემიის შეჩერების მიზნით. კარგა ხანია, რაც ეს ყოველდღიური კამათის თემაა დიდ ბრიტანეთში. მთავრობის პოლიტიკური ასპექტების უმეტესობა, თუ ყველა არა, საზოგადოების მხრიდან დებატებსა და კრიტიკას იწვევს. ზოგს კი ჰგონია, რომ კრიტიკა კორონავირუსთან ბრძოლას ხელს უშლის, მაგრამ რეალურად, საპირისპირო შედეგი მოაქვს: რაც უფრო მრავალფეროვანია პრობლემასთან დაკავშირებით გამოთქმული ინტელექტუალური მოსაზრებები, მით მეტი ალბათობით მოიძებნება ეფექტური გამოსავალი.

როგორც მაკიაველიმ აღნიშნა, ესაა ეთიკური არჩევანი პირად თავისუფლებასა და საზოგადოების წარმატებას შორის. ინტუიციისა და ოქროს შუალედის შეგრძნების წყალობით, ინგლისელებმა მოახერხეს ისეთი საზოგადოების შექმნა, რომელიც დიდწილად წარმატებულია, ინდივიდის ქმედების თავისუფლების მაქსიმალურად შენარჩუნების ფონზე. ასე რომ, ინდივიდუალური განსჯისა და პასუხისმგებლობის საკითხია, ვინ როგორ დაიცავს ვირუსისგან თავს.

ჯანმრთელობის მაქსიმალურად შენარჩუნება, სავარაუდოდ, ყველას უნდა, მაგრამ, ამავე დროს, ხალხს განსხვავებული იდეები გააჩნია ეკონომიკის განვითარებასთან დაკავშირებით. აშკარად იკვეთება უზარმაზარი პირადი ინტერესები, რის გამოც ეჩქარებათ საქმიანობის ძველ

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)

რეჟიმში დაბრუნება. თან, ხალხმა გემო გაუგო თითქმის დაცარიელებულ გზებსა და ზეცას, ქალაქის აშკარად უფრო სუფთა ჰაერს. უგუნურებას ემგვანება ჩვეული სატრანსპორტო საცობებისა და თვითმფრინავების კონდენსაციური კვალით გადახაზული მზის მონატრება.

კორონავირუსის შემდგომი ეკონომიკური ასპექტები სრულიად არაპროგნოზირებადია. ამას ემატება ევროპისთვის განსაკუთრებულად მტკივნეული კიდევ ერთი საკითხი – ბრექსითი. კოვიდ-19-ით გამოწვეული პანდემია, შესაძლოა, ევროკავშირიდან ბრიტანეთის პოლიტიკური გასვლის დამაგვირგვინებელი ბიძგიც კი აღმოჩნდეს.

მოულოდნელად, გლობალიზაცია არამოდური გახდა. 1776 წელს „პოლიტიკური ეკონომიკის მამის“, შოტლანდიელი ადამ სმითის მიერ აბსოლუტური უპირატესობის დოქტრინის შემოთავაზების შემდეგ, შესაძლოა, პირველად მოხდა იმის გაცნობიერება, რომ გლობალიზაციის საკითხი იმაზე უფრო კომპლექსურია, ვიდრე ჩვეულებრივი ეკონომიკური ანგარიშის საფუძველზე ვვარაუდობდით. მაგალითად, დიდ ბრიტანეთში პანდემიასთან გასამკლავებლად აუცილებელი სამედიცინო მასალის დიდი ნაწილის იმპორტი ჩინეთიდან უნდა განხორციელებულიყო, მაგრამ საჭირო რაოდენობითა და სასურველი ხარისხით ამის გაკეთება ვერ მოხერხდა. ბევრი დრო არ დასჭირდა იმის მიხვედრას, რომ ასეთი მასალების მიმწოდებლად ეროვნული მეწარმეები უფრო გვაწყობს. ისიც უდავოა, რომ ადგილობრივ უნდა იწარმოებოდეს ყველა სხვა საჭირო ნივთი და საკვები პროდუქტიც.

BRAMS 2020 May
Volume 1, Issue 2
ISSN 2667-9299 (print)
ISSN 2960-9348 (online)