



## The future pandemic times. The social and health uncertainty from the other bank of the river

Los futuros tiempos pandémicos. La incertidumbre social y de salud desde la otra orilla del río  
*Tempos futuros de pandemia. A incerteza social e de saúde da outra margem do rio*

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Multiple events in the history of humanity have brought widespread fear, anguish and uncertainty in society, the unknown usually generates fear. Trying to recreate predictions is frankly dangerous when entering quicksand, which should not limit us from performing an intellectual exercise aimed at imagining future events. The intensity that our lives have taken on in the last two years of the pandemic leaves little opportunity for reflection, especially for intensivists whose trench has been severely damaged.

How to imagine the events to come in the following years? Certainly a difficult exercise, in which we will probably contemplate a growing influence of artificial intelligence in all aspects of human life. It is difficult to imagine the future medical practice only some 50 years away and what to say in the next century!

So it may be wise to focus on the months of the next few years; for example, what path could take the pandemic that we have suffered in the last two years?

Will it cease to be a latent cause for concern in the lives of all of us? Will it actually come under control? Or perhaps the coronavirus will find the right path towards its indefinite permanence among us to become endemic? Could it perhaps increase its pathogenicity and escape the hopeful protection provided by vaccines? We do not know!, and all we can do is guess.

That is why the parallel reflected in the title of this editorial of the vision that someone could have about what exists on the other side of the river when standing right on the opposite shore. What is immediate can be seen with some clarity, what is located a little further away is already somewhat blurred and what is distant is only visible in broad strokes, the largest mountains/events, the color of the sky on the horizon, but still the change in the color of the sky as the evening falls is difficult to predict. The behavior of biological phenomena is equally difficult to predict, especially when social aspects affect them. Humanity does not have a great

memory about the behavior of pandemics; the most recent, which is more than 100 years old, occurred in very different times, humanity did not move as rapidly as it does now, the world's great cities were small by today's standards, international trade was limited and capital was apparently less voracious than now; it was a more or less static world, more controllable and more predictable; we were less and maybe nobody cared. Things have changed radically, this is another world.

It is perhaps for this reason that all the predictions of how the nations were prepared to combat the coronavirus pandemic failed. It is so that it is not as simple as counting the number of hospital beds and ventilators available, it would be necessary to introduce a good number of other variables, such as previous investment in health and health education, research, organization, infrastructure, culture, the strengths and weaknesses of health systems, trust in the government and its leaders, poverty and social behavior among others. Predicting is a complex matter.

We are facing a pandemic disease that little by little is acquiring endemic characteristics, a concept that is not entirely correct to refer to the most manageable phase of the current pandemic, since we are not yet facing a predictable disease that remains at more or less stable levels in terms of incidence. That is why it is perhaps better to focus on probable scenarios and imagine the best way to prepare a socially acceptable response.

Echoing what has been said by experts in the field, humanity can expect several scenarios that will dominate the years to come, replacing our current vision of the pandemic. However, predicting which of them will predominate and what role human behavior will have in making this possible are even more difficult to define. Unfortunately misinformation, ignorance, social fatigue and lack of social cohesion are risk factors to take into account.

As noted expert in Public Health and Social Medicine Dr. Paul Farmer stated, disease has social roots and must be addressed accordingly through social structures in a broad sense.

Since the beginning of the pandemic it was thought that it was possible, as with other coronaviruses, that this new virus would remain among us forever and that humanity would have to learn to live with it, thus

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becoming the fifth known endemic coronavirus; it seems that this is correct and that SARS-CoV-2 has come to stay, in such a way that the first of the scenarios could correspond to a continuum of small, non-simultaneous epidemic waves in the different nations and regions of the world, with a progressive reduction in the health and economic impact of the virus and, importantly, without changes in the immunity provided by existing vaccines, or resistance to new antivirals as nirmatrelvir/ritonavir and molnupiravir. The possibility of relaxing the sanitary measures between the peaks and beyond exists. But it could also be that these repetitive waves do not decrease in intensity and could show up like those already experienced, attacking the population with risk factors, particularly those not vaccinated or with incomplete schemes, allowing the expansion and permanence of the pandemic. The number of people not vaccinated in the world due to denial or lack of resources is still very high, as is the pediatric population not covered by the vaccination schedules of many countries as México. This scenario would allow intermittent significant pandemic peaks, adverse periods necessarily accompanied by restrictive health measures for society. Another possible framework of events is the future generation of new variants given the constant and high circulation of the virus in the various regions of the world. Here the risk is that one randomly arises that evades the previous immunity, with severe periodic waves, even worse than those already experienced with Delta. The impact on all human activity would predictably be very serious, with important economic and social consequences. The creation of a worldwide culture of continuous vaccination and protection would be necessary. Community health workers take an important role. This, which is already catastrophic, could be even worse, considering the simultaneous emergence of more than one aggressive variant, more contagious, more serious, with a faster and more adverse clinical course, with changes in the epidemiological profile, encompassing other ages and eventually other animal species, variants that could escape the protective effect of vaccines. The international problem would be gigantic, possibly changing humanity forever.

These possible world theaters, although in sight, will be visualized little by little, especially to the extent that societies respond to the demands that will be presented in the near future.

Of course, in the short term and while the period of new waves unfolds in the world, there will be an avalanche of patients not cared for, for more than two consecutive years, mainly carriers of chronic conditions and who will put a huge pressure on health systems, along with the demand from new patients who naturally join the list of applicants for health services every year, mainly survivors of severe forms

of COVID-19, post-Covid lung patients, aspirants for rehabilitation, neurological, psychological or cardiovascular services, among others; in addition to this, most of the hospitals that converted some area for the care of patients with COVID-19 will continue to commit areas, personnel, resources and equipment for the care of new patients infected by the novel coronavirus that will continue arriving in different proportions to the triage centers possibly for a long time, not months but years. The financing of this increase in health services will possibly produce a new crisis in most of the world's health systems, and it is of course expected that their dimensions would be especially critical in the poorest economies and with an unfortunate culture of health care.

Now, how will these different epidemiological scenarios in the different geographical areas of the world could be modified in the time to come, for reasons of social behavior? This is even more difficult to foresee and it may be necessary to look at the social sciences.

Trust has turned out to be a decisive and basic ingredient to explain the so-called «epidemiological mystery» of covid. The notable importance of credibility in leaders and governments as well as citizen solidarity has been described to explain the differences in infections between countries, ruling out medical and technical aspects as preponderant.

As has been observed since the last century (Roseto, Pennsylvania in the United States), in those societies where there is social cohesion, people live in community, peace, harmony, helping each other, there is a better state of health, which is directly linked to those social factors that silently protect their members.

According to recent studies, social trust and collectivism was clearly and strongly associated in different latitudes with a lower number of infections during the first 21 months of the current pandemic (until September 2021). Neither hospital beds, nor laboratories, nor population density, nor per capita investment in health: it was the social capital accumulated by some countries that served them and will serve them as a retaining wall or a fortress against contagion from this and future pandemics. Some of the key factors to prevent COVID-19 infections are interpersonal trust, trust in other members of the community and, of course, trust in the government, in the leaders.

Poor leadership or a lack of it and a bitter and dysfunctional political environment, among other qualitative variables, have important consequences in the field of health by influencing social trust, the human factor in society seems to be fundamental. Trust in authorities has been associated with adherence to recommended mitigation strategies during the Ebola epidemic in Africa, such as maintaining physical

distance and accepting vaccinations. Governments can manifestly foster and promote trust during a health or otherwise crisis.

It is useless to know technically how contagions are carried out step by step if then a fragment of society does not follow the health recommendations because they are not convinced of its usefulness, especially in a city as big as Mexico City, where millions of people travel daily long distances to work; it is of little use to develop a vaccine if such a smaller sector of the population decides not to get it, by not trusting science or the management of the health authorities that recommend them or the transparency of their messages; something precisely described, in societies in which trust is scarce and where social cohesion is diminished. Greater trust in others results in us having better health, while the politicization of health issues and political polarization generally produce bad dividends, disorganization and

confusion in the population and destroy social cohesion or at least undermine it. It is urgent to work on these aspects in our country, whose performance during the pandemic could have been better.

The state can build trust over time as insecurity, injustice, and socioeconomic inequality decrease, which is inversely correlated with interpersonal trust and social cohesion, a factor that would better prepare us for the next pandemic.

While this is happening, everyone should analyze these factors from their trench to appreciate and understand the pandemic results beyond the number of mechanical ventilators, resources and available staff in the ICU.

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