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EDITORIAL

Coronavirus and the Crisis in Medicine

Diego Herrera[1]

1. Saludesa, Ecuador

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Abstract

The Covid 19 epidemic has a media component unprecedented in the history of medicine. This, added to the lack of leadership of governments and medical institutions, has generated thousands of equivocal messages generated from personal experiences, far from the scientific method. This editorial is a wake-up call to the passivity of medical institutions, shown in their silence in decision-making and in the implementation of health policies made in the heat of the moment

Keywords: coronavirus, health policy, media, social media.

Lies arise on social networks in the midst of the global crisis caused by the coronavirus, including alerts and false information issued by false microbiologists, unknown experts, millionaires and world-famous people. All of them build stories of all kinds: it is an experiment in social control; “it is a biological weapon; the

weak must die for the triumph of the strong; the land no longer belongs to us; this is the end of capitalism." On the medical side, "the cure is an old drug or chemical without any evidence, natural medicine is the answer, a cocktail of drugs works for me, including antibiotics, antivirals, anti-parasitics and anti-inflammatories." These are some of the news that "bombard" us every day. In the midst of this storm of false news, each one chooses the narrative that most represents him or her.

A question that arises in the face of the avalanche of disinformation is: does medicine have a voice in these narratives? We think not. The media is organizing the health narrative of the pandemic and medical institutions are only playing the game.

The truth is that everyone talks, but nobody listens to those who know, or worse, when they interview those who supposedly know, they really do not know. The result is thousands of recommendations from personal experience and pseudo-science in the media and social networks.

The only thing that is common to all these narratives is the use of the metaphor of war, referring to the virus as an enemy of humanity, against whom we are in the mother of all wars and doctors are the first line of battle. The metaphor is inadequate and also naïve. Sun Tzu advises in *The Art of War*, "If you know yourself, but you don't know the enemy, for each battle won you will lose another; if you don't know the enemy or yourself, you will lose every battle."

Boaventura de Sousa questions the warrior metaphor and prefers to use the learning metaphor and writes... "For me, the virus is a pedagogue. It uses a cruel pedagogy, since although it is preventing us from living our life as we had imagined it, it is also teaching a lot and it would be very important for us to take advantage of this moment to see what he is trying to tell us. For example, the development model that we have followed so far is totally wrong" (1).

Knowledge is built through scientific debate. Hypotheses are formulated and then invalidated or confirmed. We call this the scientific method, on which western medicine has tried to take possession as a science since Hippocrates. But what happens when we lose direction and we get caught up in the media and its whirlwind of fresh and new news?

The intervention of the media tends to transform the scientific debate into a public debate, blurring the small dividing line between the political and the technical. This increases the risk of error.

Any scientist may be wrong and be led to revise his hypotheses to improve his work. This is how different groups end up converging. Therefore, it is normal that there are many questions, different approaches and debates, this is all part of the scientific process. In current times reviewing or questioning hypotheses is not permitted. The urgency to deliver hopeful results forces the health sciences to promote erroneous expectations, spread by social networks, that are politically exploited regardless of the cost that communities are paying.

Mistakes made along the way

From the beginning of the epidemic we made mistakes. In November last year, the WHO Director admitted in an interview that "the world is not prepared for pandemic influenza, we are very vulnerable", and that "countries with weak health systems will impact the entire world". Curiously, the WHO was not ready either.

Although WHO identified the seriousness of the problem early, it is accused of failing to act accordingly. It was a collective failure of health and scientific institutions in both the US and Europe, who considered that it was a "Chinese problem" with an unlikely dangerous arrival to the rest of the world. The impartiality of the World Health Organization (WHO) is questioned. At this time only low & middle-income countries take note of its recommendations. The WHO, faced with a financial and credibility crisis, is criticized by the left,

pointing out its conflicts of interest with multinationals and laboratories. It is also criticized by the right for the inefficiency of its bureaucracy or the supposed influence China or Russia has on their authorities.

Colonialism and patriarchy are alive and strengthened in times of the coronavirus. (1)

False data from projections and simulations

Governments around the world have relied on mathematical projections to guide their health decisions "to confront the coronavirus", both nationally and locally, at a very high health, political and economic cost for the entire population of the world, but spatially for the poorest. We are studying a disease that we do not know with models devised for already known infectious diseases. These models have determined confinements that reached half of humanity. On more or less scientific grounds, their conjectures have acted as prophecies across the planet. However, all these models failed, and they face the lack of data and a virus that for science has "lack of certainty." It is estimated that around thirty different models were used, during the pandemic crisis. All gave very different forecasts.

The greatest example of "doubtful assertiveness" is the mathematical model from the prestigious Imperial College of London. Officials there predicted that in the absence of population containment "approximately 510,000 people would die in the United Kingdom from COVID-19 and 2.2 million in the United States alone." At least eight of its investigators were members of the Scientific Advisory Group for Emergencies (SAGE), which advises Prime Minister Boris Johnson's government or official subcommittees. His forecasts alarmed the world, causing the purchase of millions of body bags and the construction of confinement hospitals for thousands of people, war hospitals without oxygen, without drugs, without trained human resources. Machiavellian political discourse reduced the installation of intensive care units to the mere purchase of mechanical ventilators.

When the media presented their predictive models, the doctors forgot their basic epidemiology classes, where it was emphasized that the models can have different levels of complexity depending on the research question. Any model is an abstraction, a simplification of the reality that allows us to better understand a phenomenon, confirm or invalidate a hypothesis. Models are not crystal balls. They are tools that allow us to translate hypotheses into estimates that we can then use to confront reality.

The “elephant in the room” that no one wants to look at when preparing a model, is the lack of knowledge of the behavior of the coronavirus added to the fact that the data we have on infection and mortality are manipulated. Why is this? Because the diagnostic gold standard test is expensive and difficult to access, especially for poor populations, where nobody wants to count accidental deaths because they are not represented in any model used by health institutions.

We are using the experiences and teachings of past epidemics. The new coronavirus is not influenza, nor is it SARS-CoV-1. Only time can show how these epidemics are different and how strategies must be adapted accordingly. A model must be based on knowledge of the disease. In the case of COVID-19, very little time has elapsed to know the behavior of this new virus.

Jorge Paz, Principal Investigator of CONICET in Argentina, points out “We are studying a disease that we do not know with models designed for known diseases. We are applying containment measures as if it were one or more of the known infectious diseases. What I mean by this: it is not about predicting the evolution of influenza infections, but about a disease that we do not know how it behaves. "

Uncertainty about the universal use of preventive measures

In the first months of the pandemic, the work of Dr. Pascal Crépey, a French professor-researcher and influenza expert, served to promote quarantine worldwide, with the aim of avoiding saturation of the

healthcare system.

A few months later, the WHO published that “applying quarantine measures reduces the number of patients by 44-81% and the number of deaths by 31-63%, clarifying that quarantine alone is not enough, adding other measures such as school closings and social distancing ”(2).

After 3 months of confinement, the economic, social and psychological cost was devastating (3). Due to the impossibility of maintaining quarantine, and discarding the recommendations of medical institutions, models were devised to gradually reopen cities. The results were a further increase in cases and deaths, which forced us to recommend a mixed opening framework (4) to protect those individuals most susceptible to complications from this infection.

The complementary part of reopening is the monitoring of transmission rates through tests and contact tracing. This could never be accomplished due to the low budget allocated to the pandemic in Latin American countries, the shortage of human resources and the limited access to biological tests. As a policy response, governments began using rapid tests of dubious efficacy for both contact identification and epidemiological surveillance.

The only recommendations that remain are social distancing, handwashing and the universal use of face masks, the latter recommendation taken from the example of Asian countries and their results in confronting influenza. The evidence says that "masks should be used as part of a comprehensive strategy to suppress transmission and save lives." There are masks of various types and all entrepreneurs are manufacturing their own version of N95 masks. The resource-poor population is using cloth masks. WHO states that these masks have "limited evidence of their effectiveness" and does not recommend their massive use as a control for COVID-19. Controversially, if WHO recommends them in areas where there is little capacity to use control measures, or physical distancing becomes difficult, such as in public transportation, shops and crowded environments, the authorities must encourage the use of cloth masks (5), (6).

However, the use of masks warrants correct use and high compliance with the recommendation. This becomes a great challenge, especially for people with limited economic resources. Studies indicate the low adherence to the recommendation of the use of the face mask in the community setting, in poor communities. (7), (8).

A large part of the world population is not in a position to follow the recommendations of the World Health Organization to defend themselves against the virus, since they live in confined or heavily contaminated spaces. People are obligated to work in high-risk conditions to feed their families. Others are detained in prisons or in internment camps, does not have soap or water for washing, or the little water available is limited for drinking and cooking (1).

In other contexts, there are health workers, hospital cleaning personnel, security personnel, traffic officers, “uberized” people from the informal economy who deliver food and packages to homes. They are the ones who guarantee the quarantine of many but cannot protect themselves.

Pandemics do not kill as indiscriminately as is believed. The virus is not democratic. Not everyone can stay home or protect themselves, and mortality is higher in the elderly, the poor, and those who lack tertiary medical care.

The weakness of the evidence published in prestigious magazines

The great medical journals are living a credibility crisis. Within a few short months, studies were published that became national health policy, There were studies that were questioned and withdrawn for lack of scientific rigor. Two studies published in the prestigious New England Journal of Medicine and The Lancet

were withdrawn because they were based on a non-independent database. The NEJM study examined the relationship between medications for hypertension and mortality in patients with COVID-19, while the Lancet study looked at whether hydroxychloroquine and chloroquine were effective treatments with COVID-19.One of the first drugs used for the treatment of Sars Cov 2, worldwide, was azithromycin based on a study published in the Journal of Antimicrobial Agents (11).

Within a few months, another study recently published in JAMA showed that azithromycin and hydroxychloroquine did not decrease mortality in hospitalized patients (12).At the same time, an in vitro study was published that ensured that Ivermectin inhibited the growth of the virus, supported by two unpublished studies and without peer review. They were quickly used politically to justify the administration of this antiparasitic to residents in several Latin American countries. (9-10).

Conclusion

Medical societies need a lesson in the learning of uncertainty. These societies must accept the multiple possibilities that they are afraid to acknowledge. As doctors in the health sector, they must recognize that the epidemic is becoming an endemic. Protection measures do not achieve their goal. A second wave not only will appear, but also will become a seasonal infection.

In clinical aspects, physicians must accept that the virus does not resemble any previously known infectious disease. COVID-19 is a great simulator and is forcing us to rethink the diseases that we thought we knew. Certain patients may develop chronic symptoms, and that we do not know what the treatment is.

The task of science is a critical reading of everything published and to resume the scientific method, humbly acknowledging our ignorance about this new disease, questioning everything published, and denouncing political actions disguised as medical evidence that come with a highly recommended cost to the population.

Only through a new articulation between political and civilizing processes will it be possible to start thinking about a society in which humanity assumes a humbler position on the planet on which it lives (1)**.**

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