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The current COVID-19 Pandemic legacy for Latin American anesthesiologists

El presente y legado de la pandemia COVID-19 para los anesthesiólogos latinoamericanos

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The biological hazards resulting from transmission of respiratory viruses over the past few years have become increasingly relevant and concerning because of their global spread. There was the epidemic in Singapore in 2005, caused by the avian flu known as severe acute respiratory syndrome (SARS) (1) and in 2009, the H1N1 influenza virus pandemic which originated in Mexico. (2)

Among the respiratory viruses arise the new so-called SARS-CoV-2 virus that causes COVID-19 (coronavirus disease 2019), which originated in Wuhan, China, in December 2019 and spread globally. (3) On January 30, 2020, the World Health Organization (WHO) declared this situation a significant public health emergency and on March 11 it was declared a pandemic. (4).

This new situation gave rise to an alert among the international community of anesthesiologists, due to the potential, more frequent, occupational exposure, and required an update on the biological risks and protocols to manage the disease, in addition to prevention protocols and protection practices. (5)

Over the course of 2020, COVID-19 pandemic became increasingly important and impacted the health of anesthesiologists – who, as we well know, are the qualified specialists with high occupational risk – further complicating the situation. (6-9). So, we ask ourselves: What was the legacy of the COVID-19 pandemic for the Latin American anesthesiologists?

This editorial is intended to focus on the implications in terms of labor, the healthcare systems, the vulnerability of human resources, as well as on the development of a “new normal” for the practice of anesthesiology.

CHANGES IN THE LABOR ENVIRONMENT

The COVID-19 pandemic in Latin America strongly hit the economies and the political projects of every country, with economic, social and healthcare impacts. Health emergencies were declared in many countries. So, the labor scenario for the anesthesiologist was changing, dynamic, complex, challenging and with an uncertain future.

Changes in the approaches and characteristics of our work were slowly developing, leading to readaptation in a dynamic process of new working days with less hours and a combination of clinical on-site and virtual activities. New preoperative protocols had to be followed and new surgical schedules, since programmed surgical interventions were adjourned, and only emergency surgeries were performed, or cancer or emergent patients were treated. Anesthesiologists were required to take over other roles in the ICU, in response to the overwhelming demand for care and the shortage of intensivists, some of them affected by the disease.

Very often, anesthesiologists had to manage patients infected with SARS-CoV-2, involving a high occupational risk during aerosol-generating procedures (droplet inhalation) (5) and contact transmission (such as contact with the mucous membrane, the nasal and ocular mucosae) from a carrier, or from surfaces contaminated with the virus. (5)

Through a global strategy, specific prevention and protection recommendations were issued to care for patients with these respiratory infections, including precautionary indications and measures for the medical and healthcare staff, as well as for patients and house staff, particularly focusing on the operating rooms and adjacent areas. (5) The standard precautions (originally called

universal precautions) were emphasized, in particular hand hygiene and the proper use of barrier devices for COVID-19, such as personal protection equipment (PPE). (5) Preoperative assessment protocols were also adopted, in accordance with the epidemiological reality, though one of the drawbacks is the shortage of diagnostic tests, PCR and rapid tests during the assessment and preparation for surgical anesthesia.

IMPACT ON HEALTHCARE SYSTEMS

This pandemic unveiled the economic fragility of healthcare and the deficiencies in the countries' healthcare organization, showing a lack of preparedness to face this type of health emergencies, and the absence of adequate contingency plans.

Furthermore, with regards to the asymmetries in Latin America, the shortage and/or poor planning for procurement of material resources – from the most basic to the most sophisticated supplies – became clearly evident. Healthcare institutions were overwhelmed, evidencing the inadequate stocks of personal protection equipment, the difficulty to ensure the availability of enough diagnostic tests, PCR, rapid tests, in addition to a lack of more sophisticated equipment such as respirators, video-laryngoscopes, etc.

The healthcare systems evidenced their lack of preparedness for such a contingency and were forced to redesign and prioritize new protocols, the supply of personal protection equipment, increase the supply of diagnostic tests, increase the number of ICU beds with their corresponding equipment (respirators and standard fittings); reeducate the healthcare staff, train new specialized human resources to meet additional manpower demands because some of the staff became ill with COVID-19, or experienced burnout.

On top of all this, the outlook is uncertain due to the lack of a vaccine throughout 2020, a situation that the

Latin American governments have tried to correct, with some plans for 2021.

THE “NEW NORMAL” FOR THE JOB OF THE ANESTHESIOLOGIST

This pandemic gave rise to a “new normal” for the job of the anesthesiologist: it is a dynamic concept in view of the new working conditions we must adopt, while living through this SARS-CoV-2/COVID-19 pandemic, with its own dynamics, recommendations, consequences and community interaction in our society. This will lead to a new reality that will reflect on individual, family, collective, social and economic life; moreover, it will give rise to a new occupational reality for anesthesiologists. (10)

These are some of the new working conditions for anesthesiologists in Latin America, albeit the inequalities:

- More frequent exposure to SARS-CoV-2/COVID-19 patients, and to asymptomatic carriers.
- More exposure to new complex and critical patients infected with COVID-19 in our daily practice. (10)
- Dealing with complex settings due to the healthcare system deficiencies that impact medical practice when working for public and private healthcare providers facing severe economic difficulties.
- Living in a new organizational dynamic of on-site and on-line work.
- Adopt the new healthcare safety guidelines focusing on strict prevention and protection procedures in our daily practice. (10)
- Work with the uncertainty about whether patients are complying with the preventive social distancing protocols, poor compliance with epidemiological screening, and justified PCR testing.
- Working as anesthesiologists without a vaccine and dealing with shortages of diagnostic tests.
- In some cases, facing shortages of personal protection equipment (PPE).
- Adopting more often the practice of telemedicine to support clinical activity,

particularly during the pre-anesthesia visit.

- It is important to highlight that these new working conditions bring about anxiety to family members and impact family and social life.
- Some simple recommendations should then be considered in view of this new occupational normal for the anesthesiologist in Latin America.
- Commit to the idea of shared responsibility and occupational safety for anesthesiologists, on behalf of the scientific-professional societies and the health authorities, in the light of this new occupational normal. (10)
- The scientific-professional societies should closely follow any changes in the labor environment, in terms of management of the healthcare systems that should dynamically readapt to new policies and strategies, in hardly hit economies that will experience a slow recovery. (10).
- Demand safe healthcare conditions aimed at adopting strict prevention and protection behaviors in daily practice.
- Demand the protection for colleagues aged 60 and over, with cardiac, metabolic, or respiratory conditions, avoiding exposure to SARS-CoV-2 patients.
- Demand the availability of material resources, including all the range from the most basic supplies to the most sophisticated.
- Demand compliance with the preventive social isolation of patients, compliance with epidemiological screening and justified PCR testing, in accordance with the epidemiological situation.
- Demand government authorities and healthcare systems, the priority administration of the COVID-19 vaccine – as soon as it is available – to anesthesiologists and healthcare workers.
- Actively participate during, and after the pandemic, in reorganizing the work of the anesthesiologist in an organized and safe manner (10), and avoid the patients' “avalanche” effect.
- Seek to strengthen the new occupational

normal to be prepared for any future challenges. (11)

VULNERABILITY OF HUMAN RESOURCES

The COVID-19 pandemic in Latin America represents increasingly challenging and stressing conditions, evidencing the huge vulnerability of the healthcare workers, particularly in our profession, where there is the perception of an increased risk of becoming infected. Certainly, there are additional concerns, such as:

- Fear and concern about our own health and the health of our loved ones, as well as about the economic and labor situation.
- Fear of contagion and even fear to die, despite taking all the protection measures.
- Increased severity of any chronic conditions, particularly with regards to our colleagues who are 60 years and older.
- Increased psychosocial risks that may result in anxiety disorders, distress, sleep disorders, or reactive depression.
- Dramatic increase in work stress.
- Increased severity of situations associated with Burnout syndrome.
- Experiencing post-traumatic stress as a result of work-related situations.
- Worsening of pre-existing psychiatric comorbidities, such as distress, anxiety and depression .
- Work overload, with fatigue and sleep disorders in overcrowded healthcare environments.
- In some cases, further decline of cardiovascular and respiratory diseases.
- Experiencing complex social situations due to stigmatization by those who think healthcare practitioners spread disease.

- Being forced to comply with preventive social isolation after being in contact with a positive COVID-19 patient.
- Being subject to frequent assessments, screenings and the uncertainty of waiting for the results.
- A significant number of infected anesthesiologists as a result of their professional practice.
- More severe consequences such as the death of a large number of colleagues in Latin America due to complications from on-the-job acquired COVID-19 infections.

Finally, SARS-CoV-2 COVID-19 is an emerging and constantly growing disease with dynamic available evidence, which is here to stay. Vaccines will be available in 2021, so we have to learn about its immunity and envisage a new work scenario. We must keep in mind and be attentive to the strains and lineages of COVID-19 to be able to quickly improve and adapt our occupational strategies. Emphasis should be placed on the fact that with or without a vaccine, prevention and protection is the best strategy, and it should be applicable to healthcare practitioners and the community as a whole.

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