



## SCIENCE'S COMMITMENT TO INVESTIGATING THE LONG-TERM BEHAVIOR OF COVID-19

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Most people infected with the SARS-CoV-2 virus, the causing agent of the infectious disease named coronavirus (COVID-19), cause mild to moderate respiratory syndrome and recover without the need for hospital treatment. Yet, one in six infected people become severely sick<sup>(1)</sup>. As a virus of high transmissibility and lethality, the COVID-19 pandemic has become a global health crisis that led scientists from many countries worldwide to researching several aspects of the pandemic in a short time frame.

Quickly it was identified the virus' genetic sequencing, morphology, physiology, transmission, measures to prevent contagion, signs, and symptoms of the disease, classification of severity, possible factors associated with the onset and mortality, therapeutic protocols were tested, diagnostic tests were developed and investment in vaccine development was made. The immunizers were created in record time, tested, and have been widely injected around the world. There are at least seven different vaccines that countries have begun to dispense, prioritizing the most vulnerable people.

The National Health Surveillance Agency, after approving the emergency use of CoronaVac (Sinovac/Instituto Butantan) and ChAdOx1 (AstraZeneca/Fiocruz) vaccines, the first to be distributed in Brazil, stated that immunizing agents provide relevant protection against moderate to severe forms of COVID-19 and have sufficient immunogenicity to slow down transmission and hold the spread of the pandemic<sup>(2)</sup>. The immunization time guaranteed by the vaccines and how long each one of them protects against SARS-CoV-2 is still under study. However, the more the virus spreads, the greater the opportunity for its development and mutation. This emphasizes the need for the population to get vaccinated, keep precaution measures such as the use of masks, social distancing to reduce the number of contamination and deaths<sup>(1)</sup>.

Amid the serious health crisis, many countries still face a political-ideological denying crisis that hampers the operation of disease control strategies, significantly affecting several aspects added to health, with repercussions on the political, social, economic, and family structures. In Brazil, there was also health, political, and social chaos set in, and many families were devastated, bereaved, and suffering from the unexpected and premature deaths of their family members. Families who became orphans in the COVID-19 pandemic.

The disease has impacted the lives of adults, older adults, pregnant women, teenagers, and children. The question still is: What are the needs of this population in physical, emotional, and financial health matters? How to solve the upcoming and remaining problems caused by COVID-19?

There are many challenges and commitments from all areas of science, in investigating the behavior of SARS-CoV-2 and the repercussions of the disease on the global population, seeking better health care solutions for long-term human and social development. And so, produce knowledge for the social benefit, assisting managers from all areas in conducting government policies.

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