## Letter to the Editor

## Lack of Clinical Research and Evidence Based Medicine during COVID-19 pandemic in Perú

Enrique O. Bedoya-Ismodes<sup>1,2\*</sup>, Adriano Huaroc-Revollar<sup>1</sup>

<sup>1</sup>Universidad Peruana de Ciencias Aplicadas, Lima, Perú; <sup>2</sup>Studiis Clinical Research;

\*Correspondence: Enrique O. Bedoya-Ismodes, enri1093@gmail.com.

Received: 05/04/2022; accepted: 08/04/2022; published: 04/04/2023.

DOI: http://dx.doi.org/10.21801/ppcrj.2022.84.2

Dear editor,

One of the biggest advances facing the COVID-19 pandemic was the development and application of vaccines around the world. Different studies worldwide have found and concluded that the best way to prevent complications and reduce the incidence rates of this disease, is by implementing preventive measures through the application of vaccines. (Thompson et al., 2021). In Perú, the mortality and hospitaliztion rates have decreased since the vaccine application, but the main public health problem emerges when ministers, leaders and medical profesionals that are selected without implementing the proper criteria, do not consider the vaccination as an important way for preventing the disease and prefer the use of medicine that does not have enough evidence. The application and the objective of reaching the minimum coverage of vaccinated population depends on the Ministry of Health and on the intensive work of the health personnel at sites of application, even at places that would be otherwise not used for this purpose.

Unfortunately, as previously mentioned, some of these professionals used and prescribed drugs without evidence to treat COVID-19, such as ivermectin, hydroxychloroquine, azithromycin and many others for all patients and without clinical criteria. The investment and expenses that public Peruvian economy used for COVID-19 treatment, left without supply of medicines for diseases that should be used as the first line of treatment as hydroxychloroquine for malaria or ivermectin for strongyloidiasis and many other examples. By this, the individual decisions of treating a disease without the correct evidence, generates that people who require this medication are left without availability and increase the symptoms and complications of other disease that are present. Instead, a better strategy that should be done was the implementation of oxygen plants, due is demonstrated that early application of oxygen in appropriate cases is critical improving mortality rate and is necessary for many other respiratory diseases. (COVID-19 Treatment Guidelines Panel., 2022)

Why is this important? Because of the number of people that died because of COVID-19, not only due to a complication of the disease itself, but also due to

**Academic Editor:** Felipe Fregni

Peer-reviewers: Nicole Sanchez, Leandra Ramin, Niels Pacheco.

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an iatrogenic effect because of the usage of those drug. During the worst moments of the COVID-19 pandemic, the decisions and treatments made without evidence could have been credited to fear and ignorance. However, nowadays the amounts of evidence and literature with consistent results with a correct methodology, show that these medications should not be used for the treatment of this condition because of non-significantly improvement or for the significantly increased mortality that could lead to. (Fiolet, T., et al 2021)

Low-income and middle-income countries need more professionals with knowledge in medical decisions based on evidence, critical thinking and with a positive research culture, these aspects are important to improve global health and benefit for positive outcome in different populations. (Adhikari., 2021)

In conclusion, the development of evidence-based medicine, critical thinking, and programs which promote clinical research are necessary to improve the health systems and reduce the mortality and morbidity in developing countries due to the COVID-19 and other diseases. This would not only have an influence on individual health but also on public health. Therefore, for futures diseases and pandemics, it is essential that the health personnel who directly, or indirectly take care of patients and leaders must have knowledge and experience in evidence-based medicine. (Simons et al., 2019)

Funding: This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

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