

LETTER TO THE EDITOR

NECESSITY OF DIFFERENT COUNTRIES TO DEAL WITH SIMILAR PHENOMENA OF COVID-19 CORONAVIRUS*

**Rovshan Khalilov^{1,2,3}, Mortaza Hosainzadegan⁴, Aziz Eftekhari^{3,5},
Aygun Nasibova^{2,3}, Amir Hasanzadeh^{3,5}, Hasan Hosain zadegan^{3,5†}**

¹Department of Biophysics and Molecular Biology, Baku State University, Baku, Azerbaijan

²Institute of Radiation Problems, National Academy of Sciences of Azerbaijan, Baku, Azerbaijan

³Joint Ukraine-Azerbaijan International Research and Education Center of Nanobiotechnology and Functional Nanosystems, Drohobych Ukraine & Baku, Azerbaijan

⁴Faculty of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

⁵Maragheh University of Medical Sciences, Maragheh, Iran

The new outbreak of the Covid-19 virus from Wuhan, China, has shown to the world that a nanometer-sized biological particle can disrupt the entire health related and subsequently the economy, and even political relationships and infrastructures of countries. It may seem optimistic that such phenomenons should not magnify to the public because of intense fear and horror that creates, but on the other hand, illness mortality is almost as widespread as a war of attrition in all countries. In addition, its high mortality rate, even among physicians and nurses, suggests that a strange biological event with high genetic diversity has occurred at an unbelievably high transmission rate (Chen *et al.*, 2020; Guo *et al.*, 2020; Ji *et al.*, 2020; Zhou *et al.*, 2020). What was most clear to us at the time was that there was no consensus and scientific policy on the agreement in dealing with the virus. Different countries initially ordered a local and regional quarantine or even the whole country by hasty decisions, vice versa, in some countries; the decision was to permit the virus freely contaminate the sensitive humans until to be controlled by herd immunity. Therefore, different countries have adopted their own approaches to this issue. However, what to do? Alternatively, was it possible to make good scientific decisions based on the development of diagnostic and laboratory infrastructures, especially in the field of biological weapons or similar events? Perhaps the question should be asked this way. Are there well-developed laboratory, therapeutic, and hygienic infrastructures for such emerging biological phenomena in all countries? Given that, a few months after the outbreak and despite previous knowledge of the coronavirus family by scientific societies, its diagnostic kits and other rapid diagnostics are still deficient. Certainly, officials and decision makers in the health ministries should plan for a more scientific and practical approaches in dealing with similar issues in the future. In this regard, it should be noted that there is a need for reference laboratories with all the modern diagnostic facilities and techniques

* Received: 24 March 2020; Accepted: 16 April 2020; Published: 22 April 2020.

† Corresponding Author: Hasan, Hosain zadegan, Maragheh University of Medical Sciences, Maragheh, Iran, Phone: +989147667729, e-mail: hasanhosainy122@yahoo.com

particularly in the biotechnology, microbiology and toxicology fields to manage part of such biological phenomena.

Acknowledgments

The authors would like to thank Maragheh University of Medical Sciences, Maragheh, Iran and Baku State University, Baku, Azerbaijan.

References

- Chen, T.M., Rui, J., Wang, Q.P., Zhao, Z.Y., Cui, J.A., Yin, L. (2020). A mathematical model for simulating the transmission of Wuhan novel Coronavirus. *bioRxiv*.
- Guo, Q., Li, M., Wang, C., Fang, Z., Wang, P., Tan, J. (2020). Host and infectivity prediction of Wuhan 2019 novel coronavirus using deep learning algorithm. *bioRxiv*.
- Ji, W., Wang, W., Zhao, X., Zai, J., Li, X. (2020). Homologous recombination within the spike glycoprotein of the newly identified coronavirus may boost cross-species transmission from snake to human. *J. Med. Virol.*
- Zhou, P., Yang, X.L., Wang, X.G., Hu, B., Zhang, L., Zhang, W. (2020). Discovery of a novel coronavirus associated with the recent pneumonia outbreak in humans and its potential bat origin, *Nature*.