



The Globalization of Infectious Diseases: The Emerging and Reemerging Warning

Costa MS*

Federal University of Minas Gerais, Belo Horizonte (MG), Brazil

Letter to the Editor

One of the landmarks of the second millennium is the emergence or reappearance of infectious and parasitic diseases [1]. In an era with the greatest advancement in science and technology ever recorded in humanity, it also reports the failure to control and combat infectious diseases.

The impact of climate change is reflected by thinking about the evolution of species [2], in which the strongest beings adapt and survive, in this way, we experience in parallel the occurrence of mutations of already known etiological agents (such as gonorrhea, SARS-CoV-2, etc.), superbugs (also arising from the indiscriminate use of antibiotics) [3], and there is always an emerging microorganism (such as the genus *Orthopoxvirus*) or reemerging (such as Ebola, Zika, Chikungunya, Coqueluche, Measles and others) causing global health alert in low alert for a pandemic decree [4]. And even with the advancement of technology, we have not yet eradicated some diseases such as tuberculosis, leprosy, malaria, leishmaniasis, syphilis and HIV transmission, for example.

Globalization has influenced people's lifestyle in different aspects [1], especially in: Food, lifestyle, physical activity (or in the absence of it), use of medication, mental health, travel etc. [5]. With regard to displacement, there was an increase in travelers beyond the borders of origin, which could then be exposed to pathogens different from their native region. Due to the evolution cycle of some pathogenic agents, the appearance of signs and symptoms and the period of transmission may occur when these travelers return to their place of origin, contaminating environments and infecting people in their countries and/or places where they had connections during the trip [5,6].

Within infectiology, it is known that to start an outbreak, it is enough to have one case, the R₀, and after that, depending on the form of transmission, an epidemic can develop, requiring a local alert and a quick and effective health response to contain it, the spread. If this does not happen, the higher health authorities must be notified.

The advancement of science in current times and in those to come, should be used to improve, reduce costs and expand the testing of suspected cases and the carrying out of epidemiological inquiries constantly, in order to track new cases early and monitor the incidence and prevalence of diseases, with the intention of developing public policies to mitigate occurrences in a timely manner, as well as this technological advance must be used in the best way for collective prevention, prioritizing the creation or improvement of vaccines, and if possible, the development of new drugs for recovery the health of the most serious cases [7].

References

1. Silva, Jacintho da L. The globalization of disease. *Public Health*. 2003;37(3):273-4.
2. Ogden NH, Gachon P. Climate change and infectious diseases: What can we expect? *Can Commun Dis Rep*. 2019;45(4):76-80.
3. Davies J, Davies D. Origins and evolution of antibiotic resistance. *Microbiol Mol Biol Rev*. 2010;74(3):417-33.
4. El-Sayed A, Kamel M. Climatic changes and their role in emergence and re-emergence of diseases. *Environ Sci Pollut Res Int*. 2020;27(18):22336-52.
5. Jelinek T. Travel diseases-danger of infections in the era of globalization. *Z Rheumatol*. 2021;80(7):597-610.
6. Chen D, Xue Y, Xiao Y. Determining travel fluxes in epidemic areas. *PLoS Comput Biol*. 2021;17(10):e1009473.
7. Garcia-Basteiro AL, Abimbola S. The challenges of defining global health research. *BMJ Glob Health*. 2021;6(12):e008169.

OPEN ACCESS

*Correspondence:

Murilo Soares Costa, *Infectious Diseases and Tropical Medicine, Medical School, Federal University of Minas Gerais, Belo Horizonte (MG), Brazil*,

E-mail: murilosc@ufmg.br

Received Date: 14 Dec 2022

Accepted Date: 02 Jan 2023

Published Date: 06 Jan 2023

Citation:

Costa MS. The Globalization of Infectious Diseases: The Emerging and Reemerging Warning. *Ann Infect Dis Epidemiol*. 2023; 7(1): 1067.

ISSN: 2475-5664

Copyright © 2023 Costa MS. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.