BioScientific Review (BSR)
Volume 5 Issue 1, 2023
ISSN$_{(P)}$: 2663-4198 ISSN$_{(E)}$: 2663-4201
Homepage: https://journals.umt.edu.pk/index.php/bsr

Article QR

Title:	**The Disturbing COVID-19 Epidemiological Picture Emerging Worldwide and the Way Forward**
Author (s):	Bashar Haruna Gulumbe[1], Abdullahi Adamu Faggo[2], Nazeef Idris Usman[2]
Affiliation (s):	[1]Federal University Birnin Kebbi, Nigeria [2]Bauchi State University, Gadau, Nigeria
DOI:	https://doi.org/10.32350/bsr.51.ii
History:	Received: February 3, 2023, Revised: May 3, 2023, Accepted: May 5, 2023
Citation:	Gulumbe BH, Faggo AA, Usman NI. The disturbing COVID-19 epidemiological picture emerging worldwide and the way forward. *BioSci Rev*. 2023;5(1):06–09. https://doi.org/10.32350/bsr.51.ii
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Conflict of Interest:	Author(s) declared no conflict of interest

A publication of
The Department of Life Sciences, School of Science
University of Management and Technology, Lahore, Pakistan

The Disturbing COVID-19 Epidemiological Picture Emerging Worldwide and the Way Forward

Bashar Haruna Gulumbe[1*], Abdullahi Adamu Faggo[2] and Nazeef Idris Usman[2]

[1]Department of Microbiology, Federal University Birnin Kebbi, Nigeria
[2]Department of Microbiology, Bauchi State University, Gadau, Nigeria

DEAR EDITOR

The world finds itself in an unprecedented dilemma following the emergence of COVID-19 in 2019, which spread to approximately 213 countries and territories by mid-2020 [1]. The spread of the disease was followed by a series of total lockdowns enacted globally that greatly impacted the world economy, affecting businesses and schools and increasing the mortality rate due to hunger, depression, and anxiety [2]. In collaboration with national and state governments, the WHO quickly responded to the pandemic by providing palliatives and intensive care units, globally [3]. Since then, pandemic had been contained and many countries acclimatized to the new normal, relaxing the lockdown and going back to their businesses. However, new variants resurfaced for the second time in 2021 [4] which later spread to various countries, such as Germany, Thailand, Malaysia, and South Africa [5]. During the progression from the initial wave to the subsequent resurgence of COVID-19, numerous variants including alpha, beta, gamma, delta, and (the latest) omicron have surfaced. The emergence of the new variants serves as a major threat, with concerns about the efficacy of the available vaccines that have been developed in record time [2]. Omicron has spread rapidly and has been reported to have more than 50 mutations distinct from other variants, with an average 48 hours of doubling time [2]. These variants have spread in various countries, including Canada (British Colombia) and India [2]. Furthermore, the third wave of infection started by the end of 2022 and gradually increased through January 2023 [6].

The new surge has followed the lifting of COVID-19 related restrictions in China, which resulted in the reinfection of more than 80% of those residing in "the southwestern province of Sichuan", with 18.6 million new cases across the country and more than 100,000 deaths, perhaps due to the Omicron BA.5 sub-variant domiciled in China [7]. Over 3 million new cases and 10,000 fatalities were recorded globally from December 26 to January 1, 2023. This reflects a 22% and 12% weekly increase in cases and fatalities. Over 14.5 million new cases and over 46000 new fatalities were recorded globally between December 5, 2022 and January 1, 2023, an increase of 25% and 21% respectively from the previous 28 days. Over 656 million confirmed cases and over 6.6 million fatalities had been recorded globally as of January 1, 2023 [8]. Further, the Omicron variant of concern (VOC), which made up 103,723 of these sequences, accounted for 98.4% of all arrangements reported globally in the previous 30 days, based on the data of 105,428 SARS-CoV-2 sequences globally through GISAID between December 2, 2023 and January 2, 2023 [8]. In the US, a recent report indicated the emergence of a highly transmissible subvariant XBB.1.5. Still, its

*Corresponding Author: bashar.haruna@fubk.edu.ng

severity of infection remains oblivious to the scientific community although the infection has so far spread across 29 countries, including Denmark, Germany, and many other European countries [9, 10]. The world needs to be worried, as a recent report expressed concern about the resurgence of infection even in densely vaccinated areas [6]. This is especially so as the world is not ready and cannot afford to go back to the era of total lockdown.

Therefore, it is necessary for all pertinent global health stakeholders to keep up their tireless efforts to halt the virus and lessen its effects. To monitor the spread of new variants and comprehend the danger that results, it is necessary to strengthen international cooperation and increase the laboratory genomic-sequencing capability [11]. The current approach towards limiting the spread of cases involves preventative measures. Early screening, diagnosis, isolation, and treatment are essential. Preventive strategies include keeping patients isolated and practicing meticulous infection control, including taking proper precautions while diagnosing and treating infected patients [12]. Posters and booklets on all topics related to COVID-19 protection and prevention have been prepared by several organizations and extensively distributed, worldwide [12]. Moreover, public health initiatives should be scaled up. The public should focus on regularly washing their hands, using portable hand sanitizer, and avoiding contact with their face and mouth after entering a potentially contaminated environment, as these measures have proven to be effective. People should be encouraged to exercise respiratory hygiene (cover their coughs) and, if possible, stay away from crowds and close contact with sick people to lower the risk of transmission in the community. In indoor situations, people should keep their distance from one another to at least six feet and outdoor events should be promoted.

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