Correspondence

ANNALS OF MEDICINE & SURGERY

OPEN

The WHO has terminated global public health emergency for COVID-19 by the IHR Emergency Committee recommendation: potential impact analysis

Md. Ashrafur Rahman, PhD[a], Sydney Cronmiller, MSc[a], Evangelos Victoros, MSc[a], Yeasna Shanjana, MSc[b], Md. Rabiul Islam, PhD[c,*]

Dear Editor,

In December 2019, an outbreak resulting in pneumonia-like symptoms that first began in a seafood market in Wuhan, China, swept our world and changed how we live our day-to-day lives[1]. This new coronavirus is an RNA virus that arose from infected bats that is similar to the SARS outbreak of 2003[2,3]. At the beginning of 2020, the virus began spreading, and travel restrictions and lockdowns were put into place by the centers for disease control and prevention and the WHO in areas of concern such as China, New York, and California. Quarantine, mask-wearing, and following health safety guidelines were mandatory worldwide to prevent the further spread of infection. On 11 March 2020, the WHO released a statement declaring coronavirus disease 2019 (COVID-19) a global pandemic after it had taken 4291 lives and spread into 114 countries. As a result, the authorities applied numerous measures such as travel bans, school closures, and vaccine developments[4]. The healthcare professional tested remdesivir, favipiravir, ritonavir, corticosteroids, and monoclonal antibodies to help alleviate the symptoms of this viral disease[5]. The food and drug administration (FDA) also approved convalescent plasma therapy with high antibody levels to treat COVID-19. Paxlovid, a combination of nirmatrelvir and ritonavir, got FDA emergency use authorization for moderate to severe patients in December 2021[6]. Recently, a single injection of pegylated interferon lambda (PEG-lambda) showed new hope to prevent severe COVID[7]. In December 2020, the FDA approved the Moderna vaccine for adults above 18; and other vaccines from Johnson & Johnson and Pfizer-BioNTech for those younger than 18 after numerous vaccine trials[8]. On 5 May 2023, the WHO declared that COVID-19 is no longer a global public health emergency after almost three years of continuous pandemic-level threats. Therefore, this decision about the termination of the emergency for COVID-19 has drastic effects on vaccination, health safety measures, and how the virus is monitored from this point on.

During the pandemic phase of COVID-19, many individuals suffered financially, and numerous relief legislations were active such as the Coronavirus Aid, Relief, and Economic Security Act and the Inflation Reduction Act. This new declaration from the WHO might cease these policies that are helping families stay stable[9]. New vaccination policies might require as this announcement would affect the emergency use authorization of COVID-19 vaccines[10]. Furthermore, this virus will begin being monitored differently because the authorities may not require hospitals to report known cases, testing results, and COVID deaths[11]. Therefore, individuals should remain cautious of this disease, and it is even more necessary to wear a mask when inside and get treated when feeling unwell. Furthermore, individuals must become fully vaccinated to protect them from becoming infected or spreading the virus. Other medications, such as Legevrio, Paxlovid, Veklury, and monoclonal antibodies, as well as preexposure prophylaxis measures, are also being strongly recommended at this time for individuals who are at high risk or do not want to receive the vaccine[12]. We should also be mindful of social distancing, getting tested, and quarantining if infected to prevent this virus from gaining control and spreading rapidly.

One of the threats of the coronavirus is its mutative abilities. As an RNA virus, it tends to mutate during RNA replication[3]. Virus can also create hybrid strains when it goes through a process known as recombination. A person gets infected with two strains of the virus. Therefore, a new strain of virus may develop upon their interaction. They are more threatening as new mutations give the virus different characteristics[13]. One recombinant variant (XBB.1.16) known as Arcturus is already taking over in India as of 31 March 2023. It is a recombination of BA.2.10.1 and BA.2.75, and its spike protein mutations result in a more severe virus that is easier to spread and holds higher resistance against antiviral agents[13]. With this variant taking over and now spreading into the United States, it may not be much longer before this disease reaches a pandemic-level threat again. Therefore, removing the virus' status at the moment by the binary type of a decision may end up detrimental to the world's population.

Moreover, this declaration came when lower vaccination rates were still observed in Africa (37%) compared to 82.3% in Latin America as of March 2023[14]. When COVID-19 was at its peak, getting people to get their vaccinations was already a struggle, as there is a large number of individuals who has hesitations about the vaccines side effects, do not trust those who developed the vaccine,

[a]Nesbitt School of Pharmacy Wilkes University, Wilkes-Barre, Pennsylvania, USA, [b]Department of Environmental Sciences, North South University, Bashundhara and [c]Department of Pharmacy, University of Asia Pacific, Farmgate, Dhaka, Bangladesh

Sponsorships or competing interests that may be relevant to content are disclosed at the end of this article.

*Corresponding author. Address: Department of Pharmacy, University of Asia Pacific, 74/A Green Road, Farmgate, Dhaka 1205, Bangladesh. Tel.: +880 1715161511; fax: +880258157097. E-mail: robi.ayaan@gmail.com (Md. R. Islam).

Annals of Medicine & Surgery (2023) 85:3755–3756

Received 29 May 2023; Accepted 3 June 2023

Published online 8 June 2023

http://dx.doi.org/10.1097/MS9.0000000000000945

as well as those who feel that the virus was not detrimental enough to warrant a vaccine. With the WHO taking COVID-19 out of the pandemic-level, this could mean fewer people will get vaccinated in the future, and more opportunities will create for viral mutations. These mutations can be worse than the original virus[15]. Another impact of this declaration could be a decrease in the reporting of COVID-19 cases. People may begin to think that they do not need to worry about this virus as it is no longer a pandemic. Therefore, they may not get themselves tested or isolated when they become sick. If people are not as concerned with reporting the virus and we are unaware of how large the case number is, it could lead to the virus getting out of hand again. For example, we saw similar incidents when the Ebola virus was circulating in West Africa from 2013 to 2016[16,17]. There is no way of knowing how detrimental the virus spread is if we do not report them properly[17]. It is imperative that better surveillance systems are implemented in countries such as Africa to decrease the probability of this virus gaining control again if it does mutate.

The COVID-19 pandemic that hit our world in 2020 has taken a detrimental toll on people's health and well-being and how they live. We were forced into quarantine, isolated from loved ones, and restricted from various daily activities. The authorities have controlled its spread with strict guidelines, drug therapies, and vaccination rollouts. The WHO is now declaring that this virus is no longer an emerging threat of international concern. Automatically, there will be less surveillance and financial support to control it. Therefore, it has the potential to become a global threat once again. So, we do not disregard this virus as a result of this statement because it is still very apparent and severe. We should focus on safety precautions to prevent this virus from becoming virulent to hindering our lives.

Ethical approval

Ethics approval was not required for this Correspondence.

Consent

Informed consent was not required for this Correspondence.

Sources of funding

We did not receive any specific fund for this work.

Author contribution

Md.A.R., S.C., and E.V.: conceptualization, data curation, and writing the original draft; Y.S. and Md.R.I.: conceptualization, supervision, and review and editing the manuscript. All authors reviewed and approved the final submission.

Conflicts of interest disclosure

The author(s) of this work have nothing to disclose.

Research registration unique identifying number (UIN)

Not applicable to this study.

Guarantor

Md. Rabiul Islam: Department of Pharmacy, University of Asia Pacific, 74/A Green Road, Farmgate, Dhaka 1205, Bangladesh.

Provenance and peer review

Not commissioned, externally peer reviewed.

Data availability statement

Data sharing is not applicable to this article.

References

[1] Wu YC, Chen CS, Chan YJ. The outbreak of COVID-19: an overview. J Chin Med Assoc 2020;83:217–20.
[2] Zhou P, Yang XL, Wang XG, *et al*. A pneumonia outbreak associated with a new coronavirus of probable bat origin. Nature 2020;579:270–3.
[3] Perlman S. Another decade, another coronavirus. N Engl J Med 2020;382:760–2.
[4] Centers for Disease Control and Prevention. "COVID-19 Timeline." 2023. Accessed 26 May 2023. Available from https://www.cdc.gov/museum/timeline/covid19.html
[5] Chakraborty C, Sharma AR, Bhattacharya M, *et al*. The drug repurposing for covid-19 clinical trials provide very effective therapeutic combinations: lessons learned from major clinical studies. Front Pharmacol 2021;12:704205.
[6] Pfizer. If it's COVID, PAXLOVID. 2023. Accessed 26 May 2023. Available from https://www.paxlovidinformation.com/
[7] Reis G, Moreira Silva EAS, Medeiros Silva DC, *et al*. Early treatment with pegylated interferon lambda for Covid-19. N Engl J Med 2023;388:518–28.
[8] Mayo Clinic. COVID-19 and related vaccine development and research. 2023. Accessed 26 May 2023. https://www.mayoclinic.org/coronavirus-covid-19/history-disease-outbreaks-vaccine-timeline/covid-19
[9] KFF. What Happens When COVID-19 Emergency Declarations End? Implications for Coverage, Costs, and Access. 2023. Accessed 26 May 2023. Available from https://www.kff.org/coronavirus-covid-19/issue-brief/what-happens-when-covid-19-emergency-declarations-end-implications-for-coverage-costs-and-access/
[10] HHS Press Office. Fact Sheet: End of the COVID-19 Public Health Emergency. 2023. Accessed 26 May 2023. https://www.hhs.gov/about/news/2023/05/09/fact-sheet-end-of-the-covid-19-public-health-emergency.html
[11] Centers for Disease Control and PreventionCenters for Disease Control and Prevention. End of Public Health Emergency. 2023. Accessed 26 May 2023. https://www.cdc.gov/coronavirus/2019-ncov/your-health/end-of-phe.html
[12] Massetti GM, Jackson BR, Brooks JT, *et al*. Summary of guidance for minimizing the impact of COVID-19 on individual persons, communities, and health care systems - United States, August 2022. MMWR Morb Mortal Wkly Rep 2022;71:1057–64.
[13] European Centre for Disease Prevention and Control. SARS-CoV-2 variants of concern as of 4 May 2023. European Centre for Disease Prevention and Control. 2023. Accessed 26 May 2023. https://www.ecdc.europa.eu/en/covid-19/variants-concern
[14] The New York Times. Tracking Coronavirus Vaccinations Around the World. 2023. Accessed 26 May 2023. https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html
[15] GAVI. COVID-19: what happens if some countries don't vaccinate?. 2021. Accessed 26 May 2023. https://www.gavi.org/vaccineswork/covid-19-what-happens-if-some-countries-dont-Vaccinate
[16] Bell BP, Damon IK, Jernigan DB, *et al*. Overview, control strategies, and lessons learned in the CDC response to the 2014-2016 ebola epidemic. MMWR Suppl 2016;65:4–11.
[17] Aborode AT, Hasan MM, Jain S, *et al*. Impact of poor disease surveillance system on COVID-19 response in africa: time to rethink and rebuilt. Clin Epidemiol Glob Health 2021;12:100841.