

Viral fever of unknown origin during COVID-19 and dengue outbreaks in Pakistan: Is media spreading panic during pandemic?

Dear Editor,

The hospitals in the largest city of Pakistan, "Karachi," are receiving several patients with high-grade fever, headache, musculoskeletal pain, and reduced platelet count. However, these patients showed negative results following dengue virus antigen (NS1) detection and polymerase chain reaction tests.¹ This viral fever of unknown origin has created an immense pandemonium among the population and healthcare professionals of Pakistan. Though the exact number of such cases is unknown, health professionals have confirmed a gradual increase of patients presenting with dengue-like symptoms along with negative NS1 test. It must be noted that Pakistan is experiencing the worst health crisis amid the COVID-19 pandemic and recent dengue viral infection (DVI) outbreak.^{2,3} The emergence of a new virus will devastatingly impact the fragile healthcare system in the country. Moreover, health professionals have reported that dengue patients are presenting to the hospitals with more severe disease and complications this year.⁴ The suspected viral illness is closely related to the clinical manifestations of DVI including reduced levels of platelets, white blood cells, and elevated liver transaminases. In addition, these patients are also responding to the conventional treatment for DVI. Alarming, the media in Pakistan is portraying this disease as a "new mysterious virus" and creating panic among the general community which is already in a state of fear due to the COVID-19 and DVI epidemic.¹

Fortunately, no mortality has been reported among patients with this suspected viral infection and patients are portending a favorable prognosis. The media reports on the emergence of a new virus will create a state of unrest among the general population as well as healthcare professionals. The viral fever of unknown origin is not new in Pakistan and has been previously reported during dengue outbreaks.⁵ There is a propensity that suspected viral illness is attributed to a new variant of the dengue virus. There is also a possibility of another virus from the family of arboviruses. Moreover, the likelihood of false-negative results of antigen testing can not be disregarded. Nevertheless, there is a dire need for scientific evidence to make a firm conclusion.

A large volume of evidence has suggested the negative role of electronic and social media during the ongoing pandemic. The most of the news has focused on the mortality and grave consequences, resulting in negativity, panic, fear, and mistrust among general population. However, Pakistani media has paid a little attention to

promote the preventive measures and healthy practices.^{6,7} We believe that the dissemination of premature information from health authorities and the amplified exemplification of this suspected viral infection by the electronic and paper media will boost the mistrust of the general population towards the healthcare system. Our search of this news on social media indicated that people are blaming this suspected infection as a side effect of COVID-19 vaccines. Pakistan has gained an international appreciation for mass vaccination campaigns against COVID-19 and any mis- or disinformation will challenge the success of the ongoing vaccination program. Vaccine hesitancy is a quite sensitive issue in Pakistan and has already posed serious challenges for the polio eradication campaigns.⁷⁻⁹ Since the National Command Operation Center in Pakistan is achieving its predefined goals against the COVID-19 pandemic, any resistance from the general population will compromise its efforts. To the best of our search, we did not come across any statement from the health regulatory authorities in Pakistan countering the exemplified media reports on this suspected infection. In this context, we felt inclined to urge health authorities in Pakistan to take proactive measures to mitigate the risks of disease phobia and panic in the general community. Moreover, with the help of this letter, we intend to draw the attention of infectious disease researchers towards this suspected fever so they could provide potential suggestions and remedies on this issue. Since Pakistan is among the top hotspots for dengue infection, we also suggest specialized training programs for the healthcare providers on the diagnosis and management of dengue infection during the COVID-19 era. It is imperative for healthcare professionals to have sufficient knowledge for differential diagnosis so such suspected infections could be ruled out in timely manners. Moreover, specialized workshops on the detection and management of dengue and COVID-19 coinfection are the need of hours.

CONFLICT OF INTERESTS




The authors declare that there are no conflict of interests.

AUTHOR CONTRIBUTIONS

Yusra H. Khan, Muhammad Salman, Muhammad H. Butt, and Tauqeer H. Mallhi were involved in conceptualizing, literature review and drafting of the letter. Tauqeer H. Mallhi critically revised the letter for final submission. All authors approved the final version for submission and publication of the content.

DATA AVAILABILITY STATEMENT

The authors declare that there is no available data.

Yusra Habib Khan¹
Muhammad Salman² 
Muhammad Hammad Butt³ 
Tauqeer Hussain Mallhi¹ 

¹Department of Clinical Pharmacy, College of Pharmacy,
Jouf University, Sakaka, Al-Jouf Province, Kingdom of Saudi Arabia

²Department of Pharmacy Practice, Faculty of Pharmacy,
The University of Lahore, Lahore, Pakistan

³Department of Clinical Pharmacy,
Faculty of Pharmacy,
University of Central Punjab, Lahore, Pakistan

Correspondence

Tauqeer Hussain Mallhi, Department of Clinical Pharmacy,
College of Pharmacy, Jouf University, 72341, Sakaka, Al-Jouf
Province, Kingdom of Saudi Arabia.
Email: tauqeer.hussain.mallhi@hotmail.com and
thussain@ju.edu.sa

ORCID

Muhammad Salman  <http://orcid.org/0000-0002-4366-1461>
Muhammad Hammad Butt  <http://orcid.org/0000-0003-4387-1351>
Tauqeer Hussain Mallhi  <http://orcid.org/0000-0001-9957-5362>

REFERENCES

1. Bhatti W. Mysterious virus spreading in Karachi causing dengue-like symptoms: experts. Accessed December 14, 2021. <https://www.thenews.com.pk/print/907958-mysterious-virus-spreading-in-karachi-causing-dengue-like-symptoms-experts>
2. Butt MH, Ahmad A, Misbah S, Mallhi TH, Khan YH. Dengue fever and COVID-19 co-infection; a threat to public health for co-epidemic in Pakistan. *J Med Virol.* 2021;93(6):671–672.
3. Butt MH, Safdar A, Amir A, et al. Arboviral diseases and COVID-19 coincidence: challenges for Pakistan's derelict healthcare system. *J Med Virol.* 2021;93:6465–6467.
4. Ilyas F. Suspected new variant of dengue under analysis in Karachi. Accessed December 14, 2021. <https://www.dawn.com/news/1658842/suspected-new-variant-of-dengue-under-analysis-in-karachi>
5. Mahmood K, Akhtar T, Naeem M, Talib A, Haider I. Fever of unknown origin at a tertiary care teaching hospital in Pakistan. *Southeast Asian J Trop Med Public Health.* 2013;44(3):503–511.
6. Giri SP, Maurya AK. A neglected reality of mass media during COVID-19: effect of pandemic news on individual's positive and negative emotion and psychological resilience. *Pers Individ Dif.* 2021; 180:110962.
7. Khan YH, Mallhi TH, Alotaibi NH, et al. Threat of COVID-19 vaccine hesitancy in Pakistan: the need for measures to neutralize misleading narratives. *Am J Trop Med Hyg.* 2020;103(2):603–604.
8. Bukhsh A, Hussain S, Rehman IU, et al. Awareness and perception of seasonal influenza (Flu) among health science and non-health science university students in Pakistan: a nationwide survey. *Pak J Pharm Sci.* 2019;32(4):1789–1796.
9. Bukhsh A, Rehman H, Mallhi TH, et al. Parents' attitude, awareness and behaviour towards influenza vaccination in Pakistan. *Hum Vaccines Immunother.* 2018;14(4):952–957.