LETTER **COVID-19** Clinical Features and Recovery Time: Factors Affecting the Outcome [Letter]

Abdul Moeed D, Zunera Huda D

Department of Internal Medicine, Dow University of Health Sciences, Karachi, Pakistan

Correspondence: Abdul Moeed, Department of Internal Medicine, Dow University of Health Sciences, Karachi, Pakistan, Tel +92-3061159372, Email abdulmoeed117@outlook.com

Dear editor

We read with interest the article by Churiso et al¹ titled "Clinical Features and Time to Recovery of Admitted COVID-19 Cases at Dilla University Referral Hospital Treatment Center, South Ethiopia" published in the prestigious journal "Infection and Drug Resistance". Firstly, we applaud this study and want to congratulate the authors on the successful publication.

This hospital-based retrospective study conducted by Churiso and colleagues analyzed records of 220 patients between September 2020 and July 2021 with a positive RT-PCR for COVID-19 infection. Although this study successfully identified body temperature, breathing rate and severity of the disease as significant determinants of recovery time (RT), we believe that the study has certain lackings regarding the predictors of time to recovery and patient and study demographics. As such, we would like to make some contributions.

Although patients who presented with tachycardia (37.7%) and headache (34.1%) were included in the study, Churiso et al failed to establish these clinical features as predictors of RT. As per a recent study by Hsieh et al,² sinus tachycardia in COVID patients was significantly associated with clinical deterioration as demonstrated by elevated C-reactive protein, abnormal Chest X-ray, and extended hospital stay. Hence, tachycardia remains a significant predictive factor of prolonged length to recovery. Likewise, a case-control by Martinez et al identified headache as a vital determinant of a mild Coronavirus infection which, as suggested by Churiso et al, could be linked to a shorter RT compared to severe COVID-19 infection.³

Additionally, as the COVID pandemic progressed, therapeutic management regimes for the virus advanced alongside the advancement of healthcare providers' skills. Hence, the patients admitted in 2021 were more likely to have a shorter pre-discharge holding time compared to those hospitalized in 2020, which was not identified by Churiso et al. A similar association was also documented in a study by Chiam et al, in which each week since the onset of the COVID-19 pandemic was accompanied by a decreased hospital stay.⁴

Further, Churiso et al lacked in acknowledging the impact of supportive care practices, including oxygen therapy and mechanical ventilation, and COVID treatment drugs, on time to recovery. According to Wiersinga et al, Remdesivir was found to reduce the recovery period by four days. In association with mechanical ventilation, Dexamethasone therapy was reported to significantly reduce all-cause mortality and, consequently, affect the RT in admitted patients.⁵

As evident from the aforementioned studies, it is imperative that further large-scale studies are conducted with welldeveloped methodologies to better understand the association between clinical features of COVID-19 patients with recovery time.

Disclosure

The authors report no conflicts of interest for this communication.

References

- 1. Churiso G, Diriba K, Girma H, Tafere S. Clinical features and time to recovery of admitted COVID-19 cases at Dilla University Referral Hospital Treatment Center, South Ethiopia. *Infect Drug Resist.* 2022;15:795–806. doi:10.2147/IDR.S356606
- Hsieh JYC, Kan JYL, Mattar SAM, Qin Y. The clinical implications of sinus tachycardia in mild COVID-19 infection: a retrospective cohort study. SAGE Open Med. 2021;9:205031212110549. doi:10.1177/20503121211054973
- 3. Gonzalez-Martinez A, Fanjul V, Ramos C, et al. Headache during SARS-CoV-2 infection as an early symptom associated with a more benign course of disease: a case–control study. *Eur J Neurol.* 2021;28(10):3426–3436. doi:10.1111/ene.14718
- 4. Chiam T, Subedi K, Chen D, et al. Hospital length of stay among COVID-19-positive patients. J Clin Transl Res. 2021;7(3):377.
- 5. Wiersinga WJ, Rhodes A, Cheng AC, Peacock SJ, Prescott HC. Pathophysiology, transmission, diagnosis, and treatment of coronavirus disease 2019 (COVID-19): a review. JAMA. 2020;324(8):782–793. doi:10.1001/jama.2020.12839

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Infection and Drug Resistance 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Infection and Drug Resistance editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

Infection and Drug Resistance

Dovepress

Publish your work in this journal

Infection and Drug Resistance is an international, peer-reviewed open-access journal that focuses on the optimal treatment of infection (bacterial, fungal and viral) and the development and institution of preventive strategies to minimize the development and spread of resistance. The journal is specifically concerned with the epidemiology of antibiotic resistance and the mechanisms of resistance development and diffusion in both hospitals and the community. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: https://www.dovepress.com/infection-and-drug-resistance-journal

https://doi.org/10.2147/IDR.S367741