

LETTER

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

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## **Dear editor**

We read with interest the article by Churiso et al<sup>1</sup> 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,<sup>2</sup> 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.<sup>3</sup>

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.<sup>4</sup>

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.<sup>5</sup>

As evident from the aforementioned studies, it is imperative that further large-scale studies are conducted with well-developed 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.

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