cambridge.org/neu

Editorial

Cite this article: Wegener G. (2023) Navigating the complexity of COVID-19: a multifaceted examination. *Acta Neuropsychiatrica* **35**:247. doi: 10.1017/neu.2023.50

Received: 30 October 2023 Accepted: 30 October 2023

Email: wegener@clin.au.dk



Navigating the complexity of COVID-19: a multifaceted examination

Gregers Wegener 💿

Translational Neuropsychiatry Unit, Department of Clinical Medicine, Aarhus University, Aarhus, Denmark

The COVID-19 pandemic has left an indelible mark on every facet of our existence. In this issue of Acta Neuropsychiatrica, we embark on a comprehensive exploration of the pandemic's multifaceted impact, drawing on the insights gleaned from four recent research papers. These studies illuminate critical dimensions, including the pivotal role of inflammation management in shaping COVID-19 outcomes, the unexpected neurological manifestations it incites, the potential risk of obsessive-compulsive disorder (OCD), and the pandemic's toll on the mental health of undergraduate students. Collectively, these findings offer a holistic perspective on the profound and far-reaching effects of COVID-19, providing essential guidance as we continue to navigate this global crisis.

Inflammation Management in COVID-19 Our evolving understanding of COVID-19 has brought the role of inflammation into sharp focus, as underscored by the work of Tang and coworkers (Tang et al., 2023). This research emphasises the intricate interplay of various factors in COVID-19, highlighting the host's inflammatory response as a key determinant of disease severity, symptoms, and prognosis. Genetic factors, age, immune status, health, and disease stage all influence this inflammatory response. Effectively managing inflammation has emerged as a vital strategy for reducing morbidity and mortality across all stages of COVID-19.

OCD and Gender Disparities The pandemic's impact extends to the realm of mental health, including a potential risk of OCD, as elucidated in a systematic review (Jalalifar et al., 2023). This analysis reveals that COVID-19 and its containment measures may heighten the risk of OCD, with females appearing particularly susceptible. Notably, under-18 students, hospital staff, and individuals in the Middle East are among the groups most affected. This insight can inform targeted support and resource allocation to address these vulnerabilities.

Psychological Suffering Among Undergraduate Students One poignant revelation is the psychological toll exacted on undergraduate students during remote learning (Silva et al., 2023). Despite a relatively low prevalence of COVID-19 fear, an alarming 83.0% of students reported symptoms of depression, and 76.1% experienced anxiety. These findings underscore the profound impact of the pandemic on the mental health of young individuals. Vulnerable groups, including female students, those in poor health, and those who lost family members to COVID-19, are particularly affected. Targeted interventions, such as physical activity programmes, hold promise for enhancing students' well-being.

Surprising Neurological Manifestations in Post-COVID-19 Patients A fourth paper explores the unexpected neurological sequelae in post-COVID-19 patients, revealing marked impairments in fine motor skills, balance, memory, attention, and concentration (Chiminazzo and Kirsten, 2023). This study challenges initial assumptions about COVID-19, which primarily targets the respiratory system. Instead, it unveils a range of neurological manifestations even among young and healthy individuals. These findings underscore the urgency of developing rehabilitation protocols to address the neurological deficits stemming from COVID-19 infection.

Collectively, these research papers offer a comprehensive view of the multifaceted and profound impact of COVID-19. From the critical role of inflammation management to potential OCD risk disparities, surprising neurological consequences, and the psychological toll on students, our understanding of this pandemic continues to evolve. As we navigate the ongoing challenges, these insights must guide our response, offering hope and evidence-based strategies to mitigate COVID-19's extensive effects on individuals and society as a whole.

References

Chiminazzo LLW and Kirsten TB (2023) Psychomotor and neurofunctional aspects after COVID-19. Acta Neuropsychiatrica 35(5), 292–302.

Jalalifar E, Arad A, Rastkar M and Beheshti R (2023) The COVID-19 pandemic and obsessive-compulsive disorder: a systematic review of comparisons between males and females. *Acta Neuropsychiatrica* **35**(5), 270–291.

- Silva RR, Santos DaT, Costa BA, Farias Júnior NC, Braz AG, Costa GDCT, Andrade MS, Vancini RL, Weiss K, Knechtle B and De Lira CaB (2023) Prevalence of fear of COVID-19, depression, and anxiety among undergraduate students during remote classes. *Acta Neuropsychiatrica* **35**(5), 303–313.
- Tang SW, Helmeste DM and Leonard BE (2023) COVID-19 as a polymorphic inflammatory spectrum of diseases: a review with focus on the brain. *Acta Neuropsychiatrica* **35**(5), 248–269.

© The Author(s), 2023. Published by Cambridge University Press on behalf of Scandinavian College of Neuropsychopharmacology. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/ by/4.0/), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

