



LETTERS TO THE EDITOR

The importance of assessing the self-reported impact of COVID-19 on clinician mental health

Dear Editor,

The COVID-19 pandemic will forever be etched in history as a landmark moment. With its profound impact on health-care, clinicians have felt its draining effect. Early reports have suggested marked physical and psychological sequelae among patients and clinicians,¹⁻³ and our experience from the Severe Acute Respiratory Syndrome (SARS) virus has illustrated the far-reaching short- and long-term psychological consequences of such disasters.⁴ Clinicians will require increased psychological support, and understanding how the pandemic has affected us will be essential in preparing our mental health services. It is for this reason, we aimed to understand the self-reported psychological impact of COVID-19 on clinicians by using validated depression and anxiety scales. We wanted to evaluate how frontline duties and a previous mental health history can impact us during this crisis.

A 25-question survey was designed by a panel of multi-disciplinary clinicians across two universities. Objective and validated scales were used to ensure appropriate analysis, i.e. the Patient Health Questionnaire (PHQ-9) and the Generalized Anxiety Disorder Score (GAD-7).⁵ The survey was limited to a private social media group of medical doctors in Belgium. Participants were divided into two groups: those who self-reported to be in the frontline of care, i.e. working on COVID-19 units, intensive care and the emergency department, and those who reported to be working in healthcare but not in the frontline. The questionnaire was divided into three broad sections: demographic data, PHQ-9 and GAD-7.

490 clinicians filled in the questionnaire, of which 33% were working in the frontline. 70% of them were under 40, compared to 51% of non-frontline clinicians. 23% of frontline workers and 19% of non-frontline workers had had previous psychiatric follow-up respectively. The PHQ-9 score averaged 9.8 for the frontline group compared to 9.2 for the non-frontline group ($p=0.3$, unpaired t -test). In frontline staff, 51% had a score of 10 or more, reflecting at least moderate depression. This was in comparison to 45% in non-frontline staff (Fig. 1). The GAD-7 score averaged 8.4 for frontline clinicians compared to 7.8 non-frontline ($p=0.3$, unpaired t -test). 40% of frontline doctors had a score of

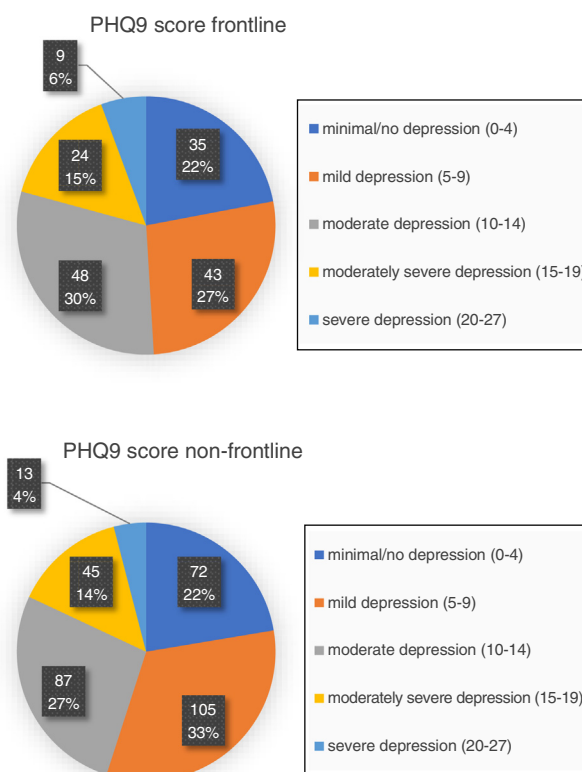


Figure 1 Patient Health Questionnaire Score (PHQ9). The PHQ9 is a self-reported measure used to assess the severity of depression. The total scores are categorized as follows: minimal/no depression (0–4), mild depression (5–9), moderate depression (10–14), moderately severe depression (15–19), or severe depression (20–27). In frontline staff, 51% of staff had a score of 10 or more, reflecting at least moderate depression. This was in comparison to 45% in non-frontline staff.

10 or more, reflecting at least moderate anxiety. In non-frontline staff, the proportion having a score of 10 or more was lower, i.e. 34% (Fig. 2). Subgroup analysis showed that when measuring respondents with prior psychiatric history, the PHQ-9 score was 12.4 in the frontline group, and 13.4 in the non-frontline group. The difference in scores between groups with and without prior psychiatric history was significant ($p < 0.001$, unpaired t -test). The GAD-7 score was 10.8 in the frontline group, and 11.5 in the non-frontline group.

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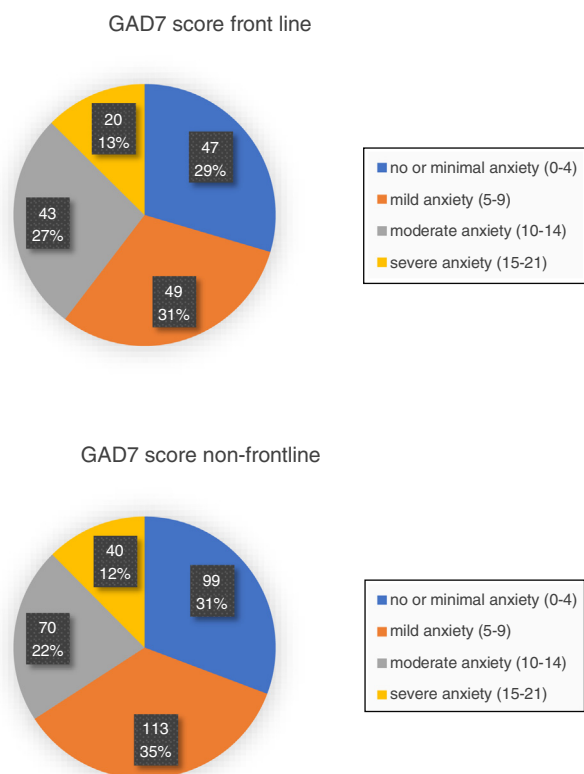


Figure 2 The Generalized Anxiety Disorder Score (GAD7). The GAD7 is a self-rated scale to evaluate the severity of anxiety and has good reliability and validity. The total scores are categorized as follows: minimal/no anxiety (0–4), mild anxiety (5–9), moderate anxiety (10–14), or severe anxiety (15–21). 40% of frontline doctors had a score of 10 or more, reflecting at least moderate anxiety. In non-frontline staff, the proportion having a score of 10 or more was lower, i.e. 34%.

The difference between groups with and without previous psychiatric history was again significant ($p < 0.001$, unpaired t -test).

The COVID-19 pandemic will likely change the mental health landscape for times to come. We performed a snapshot of the acute mental health effects on clinicians as a consequence of COVID-19. We note that there are higher percentages of clinicians having at least moderate anxiety and depression in the frontline group, however the difference is not significant. Nonetheless, the impact of frontline work may be felt later on in the form of depression and post-traumatic stress disorder, and future studies are necessary to evaluate this. Past mental health history was found to be a significant factor in higher depression and anxiety scores. This is an important point and shows that there is an increased vulnerability for this group requiring early support. Continuous mental health and pastoral care is essential

to safeguard the psychological welfare of all staff, and early identification of at-risk staff is required. This can be done by ensuring psychological services are easily available for hospital staff. This can be done in person or by virtual consulting and telehealth. Clinician-reported statistics can help in designing the psychological support network and will be useful in strategizing our mental health resources for the impact of this pandemic and similar disasters in the future. It is only by ensuring our doctors are physically and psychologically well that we would be able to provide optimal care for our patients.

Level of evidence: III

Ethical considerations

Institutional Review Board (IRB) approval was obtained.

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Conflict of interest

None to declare by the authors.

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