

## Systematic review

# Reliable and comprehensive assessment of post-traumatic stress disorder is required to provide population-based prevention and treatment of PTSD during the COVID-19 pandemic

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**Commentary on:** Salehi M, Amanat M, Mohammadi M, *et al*. The prevalence of post-traumatic stress disorder related symptoms in coronavirus outbreaks: a systematic-review and meta-analysis. *J Affect Disord* 2021; 527–538; <https://doi.org/10.1016/j.jad.2020.12.188>

## Implications for practice and research

- ▶ To prevent post-traumatic stress disorder (PTSD) during the pandemic, it is necessary to support the psychological well-being of the general population and healthcare workers through providing evidence-based and trauma-informed mental healthcare.
- ▶ Future research should focus on developing objective assessments of PTSD as well as strategies for early detection and screening of PTSD in high-risk populations during and after the COVID-19 pandemic.

## Context

The COVID-19 health crisis has increased psychological distress due to the required modifications in individual's daily routines<sup>1,2</sup>, and it appears to trigger fear, anxiety and post-traumatic stress disorder (PTSD).<sup>3</sup> While previous reviews speculate high prevalence of mental disorders among healthcare workers,<sup>2</sup> Salehi *et al* conducted 'a systematic review (SR) and meta-analysis (MA) with the purpose of assessing the global prevalence of PTSD and PTSD-related symptoms among different populations in the COVID-19 outbreaks.<sup>4</sup>

## Methods

Salehi *et al* searched literature in 'Scopus Embase, PubMed, and Web of Science, Google Scholar and Grey literature including conference proceedings'.<sup>4</sup> Published articles from 1 November 2012 to 18 May 2020 were searched.<sup>4</sup> To assess heterogeneity, Salehi *et al* employed subgroup analysis, meta-regression and sensitivity analysis.<sup>4</sup>

## Findings

Results of Salehi *et al*'s SR suggest that overall prevalence of PTSD symptoms was estimated around 18%.<sup>4</sup> The MA on 35 studies showed approximately 3 out of 10 survivors of COVID-19 infections, 2 out of 10 healthcare workers and 1 in every 10 individuals of general population experienced PTSD symptoms in outbreaks.<sup>4</sup>

## Commentary

The COVID-19 pandemic has had significant impact on both the physical and mental health of humans worldwide. Studies in this SR revealed a spike in the prevalence of PTSD symptoms in COVID-19 outbreaks.<sup>4</sup> Infectious disease outbreaks can be considered as traumatic events leading to disabling conditions.<sup>1,4</sup> Risk factors for PTSD include perceptions of threat, fear of exposure to the virus and its high level of mortality, leading to inability to cope with such intimidating cues and health anxiety, and those who experience PTSD may be at particular risk for negative repercussions during the pandemic.<sup>1,3</sup>

Salehi *et al*'s SR included studies on general population, healthcare workers, affected patients with COVID-19 and/or survivors<sup>4</sup> while in another SR, authors focused on providing updated and comprehensive information on the prevalence of depression, anxiety and PTSD among healthcare workers during the COVID-19 pandemic.<sup>2</sup> Of these studies, there seems to be insufficient evidence to assess the usefulness of (1) PTSD screening in primary care, (2) public education and (3) media enterprise highlighting the need for future research in these areas. Thus, effective best practices for PTSD prevention should consist of objective assessment of PTSD symptoms and training general practitioners to recognise and treat anxiety, depression, and PTSD-related symptoms.

The focus of this review was determining the global prevalence of PTSD during and after the recent COVID-19 outbreaks in various populations.<sup>4</sup> Salehi *et al* uncovered publication bias and high heterogeneity among studies. They further identified the geographic location of the study as the source of heterogeneity.<sup>4</sup> Remarkably, another SR highlighted the importance of minimising heterogeneity bias and suggested that future prevalence research must adopt random sampling method to improve the precision of estimates.<sup>2</sup>

A major impediment to fidelity in routine care of mental disorders is the lack of feasible, scalable and valid measurement strategies.<sup>5</sup> To inform prevention and treatment strategies, reliable and comprehensive estimates of mental disorders during the pandemic must be established.<sup>2,5</sup> Additionally, policymakers and service providers should swiftly address mental health concerns to prevent long-term health effects<sup>2</sup> and improve accessibility of mental healthcare for at-risk populations.

**Competing interests** None declared.

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