Prevalence and Risk Factors of PTSD in Older Survivors of Covid-19 Are The Elderly so Vulnerable?

Numerous studies have highlighted the negative effects of the COVID-19 pandemic on mental health. Several works more specifically focused on older adults because of their high risk for a severe and lethal course of COVID-19. Findings indicate that, although they are likely to express a more pronounced fear of COVID-19, older people appear to be less impacted than younger people by the psychological consequences of the pandemic. Nevertheless, most studies were conducted in the general population whereas a more severe psychological burden has been demonstrated in patients infected with SARS-CoV-2. Only one study has assessed self-reported post-traumatic stress disorder (PTSD) symptoms in older COVID-19 survivors but it included a very small sample of 26 participants, used an online survey when older people are less likely to use the internet, and was conducted while patients were still under quarantine, probably reflecting acute stress symptoms rather than PTSD.

The present study assessed the prevalence of and the factors associated with PTSD in a sample of 139 patients over 60 years old (mean age 68 ± 6 years; 42 women) with a laboratory-confirmed COVID-19 who were recruited at the Lille University Hospital Center. A qualified psychiatrist assessed PTSD by phone with the PTSD Checklist for DSM-5 (PCL-5) during the second month after the onset of COVID-19 symptoms. During this evaluation, In line with previous studies we specifically assessed PTSD symptoms related to COVID-19 that were currently experienced by patients during the second month after the onset of COVID-19 symptoms. While in a recent general population study (N = 138; mean age: 53 ± 16), we reported a prevalence of PTSD of 6.5% of the Covid-19 survivors using the same methodology, only 2.9% [95% CI: 0.9, 7.6] of the 139 followed elderly patients (median PCL-5 score of 5 [interquartile range: 0–11] out of 80) presented a probable PTSD (PCL-5 score ≥ 33). Our findings confirm results from previous studies indicating less intense trauma-related distress in older adults compared to younger populations in non-COVID-19 traumatic contexts and higher levels of resilience. A possible explanation for this result is that older people might be able to consider the current pandemic in a broader context, relativizing its impact, as they are more likely to have experienced traumatic and stressful events throughout their life.

As described in Table 1, we used multivariate analysis to identify two factors significantly associated with a higher PCL-5 score: (1) being a woman (d = 7.20 [95% CI: 3.19-11.21], p < 0.001), which is consistent with epidemiological data pointing to higher prevalence rates of PTSD in women than in men, and (2) having a relative infected with COVID-19 (d = 4.27 [0.09, 8.45], p = 0.045), which has probably impacted older people not only because of the worry for the health of their family or friends but also because of the increased feeling of loneliness due to the recommendations to maintain physical distancing.

Despite some limitations (the study was conducted only in the northern district of France, with small sample size composed mainly of women, and only assess PTSD symptoms specifically related to COVID-19), this work is the first to examine PTSD symptoms related to COVID-19 in elderly people diagnosed with COVID-19 based on hetero-evaluation. The results confirm previous data suggesting that older people present less PTSD compared to younger populations, even in the pandemic context.
which they have been constantly presented as highly vulnerable.

**AUTHOR CONTRIBUTIONS**

All authors substantially contributed to the conception and design of the study and to the acquisition of data. MW performed the analysis. MH, AA, TF, and FDH interpreted the data and drafted the work; all authors performed critical review of the paper for important intellectual content and finally approved of the version to be published.

All authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

We would like to thank the Fondation de France for the financial support to the consultation-liaison psychiatry service of the University Hospital Center of Lille during this unprecedented sanitary crisis. The authors report no conflicts with any product mentioned or concept discussed in this article.

The data has not been previously presented orally or by poster at scientific meetings.

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