Reviewer’s report

Title: The mental health of neurological doctors and nurses in Hunan Province, China during the initial stages of the COVID-19 outbreak

Version: 1 Date: 03 May 2020

Reviewer's report:

Thank you for inviting me to review this paper. I have the following recommendations. I am happy to review this paper again after amendments.

1. Under the Introduction, the authors mentioned "while transmission via the fecal-oral and the aerosol routes remains ambiguous 43 [11-13]." A significant number of Chinese believe in airborne transmission. Please add this mode of transmission:

while transmission via the airborne, fecal-oral and the aerosol routes remains ambiguous [11-13, Wang et al 2020]

Reference

2. The authors stated the following statement:

The experience with SARS indicated that the prevalence of psychiatric morbidity, such as fear and anxiety, was high among medical workers, patients, and even the general public [18, 19]. To date, the psychological impacts of COVID-19 have remained unknown.

The above statement is inaccurate because the psychological impacts of COVID-19 has been researched. Please include the following landmark papers:


Key findings to be included:
This study included 1210 respondents from 194 cities in China. In total, 53.8% of respondents rated the psychological impact of the outbreak as moderate or severe; 16.5% reported moderate to severe depressive symptoms; 28.8% reported moderate to severe anxiety symptoms; and 8.1% reported moderate to severe stress levels.

Key findings to be included:
This study found that there was a statistically significant longitudinal reduction in mean IES-R scores (from 32.98 to 30.76, p < 0.01) after 4 weeks since COVID-19 outbreak. Nevertheless, the mean IES-R score of the first- and second-survey respondents were above the cut-off scores (> 24) for PTSD symptoms, suggesting that the reduction in scores was not clinically significant.


Key findings to be included:
The mean IES-R, DASS-21 anxiety, depression and stress subscale and ISI scores were higher in psychiatric patients than healthy controls (p < 0.001). Serious worries about their physical health, anger and impulsivity and intense suicidal ideation were significantly higher in psychiatric patients than healthy controls (p < 0.05). More than one-third of psychiatric patients might fulfil the diagnostic criteria post-traumatic stress disorder (PTSD). More than one-quarter of psychiatric patients suffered from moderately severe to severe insomnia.

3. Under discussion, the authors stated "Our study found that the SAS scores of the neurological staff was higher than the Chinese national norms". It is important for the authors to compare the prevalence of depression and anxiety with healthcare workers in other countries and other workers during COVID-19 pandemic. Please refer to the following landmark studies:

Key findings to be included:
Out of the 906 healthcare workers who participated in the survey, 48 (5.3%) screened positive for moderate to very-severe depression, 79 (8.7%) for moderate to extremely-severe anxiety, 20 (2.2%) for moderate to extremely-severe stress, and 34 (3.8%) for moderate to severe levels of psychological distress.


Key findings to be included:
We found that 10.8% of respondents met the diagnosis of post-traumatic stress disorder (PTSD) after returning to work. The respondents reported a low prevalence of anxiety (3.8%), depression (3.7%), stress (1.5%) and insomnia (2.3%).

4. Under discussion, the authors stated "It is difficult for neurological workers to differentiate and screen patients with manifestations of the neurological system as the initial symptoms without fever and pulmonary disorders, which may lead to inadvertent exposure of medical staff to the virus." It is important to mention other sources of stress reported by healthcare worker:

… inadvertent exposure of medical staff to the virus. Reasons for the fear reported by healthcare workers include reduced accessibility to formal psychological support, less first-hand medical information on the outbreak, less intensive training on personal protective equipment and infection control measures (Tan et al 2020).

Reference:

5. The authors should mention about psychological resilience:

Workers with psychological disorders can also use online psychological self-help intervention systems to reduce symptoms of anxiety and depression [23] and develop psychological resilience (Ho et al 2020).

Reference:

6. I recommend the authors to add one additional limitation:

This study was limited by its use of the SAS and SDS to measure symptoms of anxiety and depression, which was different from a clinical diagnosis and did not measure severe psychiatric symptoms such as suicidal ideation or psychotic experience (Tan et al 2020).

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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