

Review of: "Psycho-Emotional Impact of the First Wave of the COVID-19 Pandemic in Health Care Workers of a Large COVID-19 European Hospital"

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Potential competing interests: No potential competing interests to declare.

Introduction: *This retrospective observational study named PSI-COV-2 was conducted in the summer of 2020 at ASST Spedali Civili of Brescia.....* Comment: it would be auspicious to have more precise dates, from XY to XY.... in addition it's important to mention, that this was probably not during, but rather after the first wave!

Participants: usually we would expect more female nurses than male nurses (different base rate). Is there any explanation why no statistically significant sex difference was found among nurses? This could be relevant for the interpretation of the data (a skewed sample?).

Results: For the regression analysis it might be better to treat the dependent variable on the DASS21 (Depression/Anxiety/Stress/Total score) as a continuous variable in order to avoid a very low N for certain predictor variables in the severe range of anxiety, depression or stress. Doing so, I expect a previous infection with SARS-Cov-2 to become a significant predictor for depression, as it was found in other publications. Another possibility would be to aggregate the DASS21 results into "normal range" and "elevated range" according to published cut-off scores.

Discussion section: *The DASS-21 scale demonstrated slightly higher levels of stress and depression compared to stress, with figures of approximately 30% of the study sample compared to 25%.* Comment: Do you mean anxiety and depression compared to stress?

The main factors of the work environment affecting the workers' wellbeing resulted in decreasing order: fear of contagion, workload, organization and sense of helplessness vs COVID-19 patients. Comment: it's not the work environment, but rather the perceived work environment (as reported from the HCW)

The impact of the pandemic led to the development of stress symptoms, anxiety and depression of varying levels in approximately 30% of HCWs employed in the inpatient wards of COVID-19 patients, with stress symptoms of higher magnitude than anxiety and depression. Comment: due to the cross-sectional design it's not possible to infer any causal relationship: It might be, that the HCW showed already higher levels of such symptoms BEFORE the pandemic. In addition, the fact that only 1229 out of more than 8000 HCW (less than 15%) responded to the survey, could result in a sample bias towards HCW with (preexisting) higher levels of emotional burden.

.....our results appear to disagree with some literature studies showing a prevalence of psychological effects in nurses

and support workers: in our study, no statistically significant association emerged between disorders of the psychological sphere and occupational category. Comment: what might be the explanation for this difference? Selection bias? Other professionals might be affected by not being involved, staying outside/at home/useless? Timing of data collection? Not all datas are showing a higher prevalence of emotional burden among nurses once You control the other variables (sex/age/previous infection with SARS-Cov-2)

Finaly: Some limitations should be addressed, especially the possibility of a selection bias and the cross sectional design