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.

Several questions arose for me while reading the paper, especially regarding the statistics / methodology.

In the manuscript, medical staff in a clinic in a region in Italy heavily affected by COVID-19 are studied. The data is from 2020, which raises the question of why it is only now being published. There are already meta-analyses on the topic of exposure to COVID-19 from China, for example, which summarise the results of much larger samples. Why is publication on this important topic so late?

Unfortunately, no Cronbach's alpha for the sample is given for the measuring instruments used. What was the reliability of the instruments?

Unfortunately, no pre-registration or review by an ethics committee. How were highly stressed employees dealt with? Were there recommendations for psychological / psychiatric support? Was an optimal sample size determined?

Marking significant differences does not seem to be useful to me. For example, in Table 1, two fields of the 5x2 design are marked in bold for the occupation. But the 5x2 (occupationxgender) test would only show overall differences here. There seems to be a blurring in the interpretation of the results.

Similarly, in Table 2, rank-scaled values are compared, why with a Chi2 test and not with a suitable procedure for rank-scaled data?

The primary results of the 5 multinominal logistic regression analyses shown in Table 4. Since the five dependent variables are presumably highly correlated with each other, very intensive thought should be given here to a structural equation model for categorically ordered data. This would in particular reduce the problem of alpha error inflation, which is present in these analyses. The sample size would allow this form of analysis. Then, taking into account the correlations between the dependent data, the primary questions could be answered with a model.

With the appropriate statistical methods, more insight can probably be drawn from the data.