Reviewer’s report

Title: Direct and indirect exposure to violence and psychological distress among civil servants in Rio de Janeiro, Brazil: a prospective cohort study

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Reviewer: Wagner Ribeiro

Reviewer’s report:

1. General comments
This is a study on the association between "direct and indirect exposure to violence and psychological distress among civil servants in Rio de Janeiro, Brazil". The study's making strength is its longitudinal design, which makes it possible to establish a temporal – or cause-effect – relationship between exposure and outcome. Considering that most the evidence on the association between violence and mental health problems comes from cross-sectional surveys, the study helps to overcome the main limitation of such surveys, that is, the reverse causality issue.

On the other hand, the study included a sample of a very specific population, comprised by civil servants working in a university setting. This feature limits considerably the generalizability of the study’s results, as the sample seems to be quite different from the “Brazilian socioeconomic structure”.

2. Discretionary revision
2.1. Regarding the “design and study population”: The article poses clearly its research question, that is, to investigate the effects of individual exposure to and of contextual violence on psychological distress. It also presents a design and procedures that are suitable to address the research questions. Regarding the “design and study population” section, more information on the target population and sampling frame should be provided. It is described that the study is based on “a cohort of non-faculty civil servants” and that “4,030 men and women were enrolled”. However, none information is given regarding the total size of the target population (how many civil servants in total were working at the university at the time the survey was done?). Also, information on sampling procedures is missing (did all university’s civil servants participate on the study? If not, how those who participated were chosen? Were they randomly selected, or did they volunteer?)

2.2. Regarding the “statistical analysis”: it is described that “the effect of contextual violence was assessed with a multilevel model”. More information on the statistical modeling should be provided (i.e., multilevel logistic regression analysis?).
Also, besides collecting information on exposure to violence in the baseline, did the survey collect such information in the follow-up? If so, I wonder whether
analysis should not consider measures of proximal (last year, collected in the follow-up) and distal (baseline) exposure to violence.

2.3. Regarding the “discussion” section: Considering the Odds Rations presented in table two, it seems that “indirect violence” had a higher impact on the outcome than “direct violence”, which sounds counter-intuitive, as the literature on traumatic events suggests the opposite. How do authors interpret such results?

Also it is stated that the “results did not support the hypothesis that higher rates of homicides at the contextual level would increase the risk of psychological distress”. I wonder how accurate homicide rates are as a measure of contextual violence, considering that many violent acts may not result in homicide, so a given area may have high crime rates (e.g., robbery etc.), even though its homicide rate is low. This should be discussed in the article, as well as the reasons for not using other sources of data on violence, such as crime registers etc.

Finally, regarding the sample’s homogeneity, how results could be applicable to other populations/contexts?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests