

Review comment-1

Potentially great paper, just need a little more explanation in the methods to support some of your claims in the results and discussion section.

Results: Why is “multiple races” the reference group?

Specific Comments:

Methods: There’s a typo in Section 2 – “MEPS is a national representative survey of Americans”.

Methods: I need some more information about study population, especially on the inclusion criteria. If variables weren’t present, were they excluded? A flow chart would be helpful

Methods: How many repeated measures are you collecting? Three time points? As many as possible? Wouldn’t these bias individuals who have more than 3 encounters?

Results: Is there a significant difference between these weighted categories? ANOVA report out.

Results: A table 1 for demographic models is necessary.

Results Section 2: “this finding that was robust to controlling for pre-pandemic health and insurance status.”?? What does this mean?

Results: Unclear... do you have a pre-pandemic score and a post-pandemic score for psychological and perceived health status? The within group change of this variable is not helpful clinically (visually No Covid changed from 2.55 to 2.65 is that significant?)

Discussion: The primary finding is incorrect and also unsubstantiated. This conclusion is based on one single data point of a beta parameter being significant. That’s not a statistically or clinical reason to make this conclusion.

Mathematically, first a relationship needs to be made between the variables, a stepwise regression needs to be conducted with the addition and removal of other beta parameters, and an examination of other modelling parameters, such as interactions. A lone p-value does not suffice. The rest of the paragraph is well-written to point out non-spontaneous conclusions, although more citations would be beneficial. If this was conducted, it needs to be explained within the results.

Strengths and Limitations: Just because insurance status is present that does not mitigate confounding on coverage or access at all. That is factually incorrect, take it out.

Conclusion: This study does not provide definite evidence that Long COVID is associated with pre-pandemic health status, especially with the data present. At best, you have proven a correlation.