## **Peer Review Report**

# Review Report on Reinfections and cross-protection in the 1918/19 influenza pandemic: Revisiting a survey among male and female factory workers

Original Article, Int J Public Health

Reviewer: Reviewer 2 Submitted on: 14 Feb 2023

Article DOI: 10.3389/ijph.2023.1605777

#### **EVALUATION**

### Q 1 Please summarize the main findings of the study.

This study is a review of a 100-year old survey and responses, from the 1918/1919 global influenza pandemic. The authors were able to use the original survey questionnaires to set up a new database and then prepare descriptive and statistical analyses of the results. The manuscript findings provide some additional historical context about the original pandemic, and considerations about reinfections and mutations during the current SARS-CoV2 variants and infections.

## Q 2 Please highlight the limitations and strengths.

This is a very well written paper. The authors provide a strong rationale for their study, and provide historical and contemporary context for interpreting their findings, including the limitations to the data and their results.

I have just a few comments to strengthen the paper. Please see below.

Q 3 Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

I recommend including a sentence about the sex differences found in the analyses in the abstract. This would create a flow of information that is suggested in the title, and the advantages of having the survey data by sex.

The methods section would benefit from more of the details that are provided in the Supplement. Specifically, I recommend including what the authors did when they found the original questionnaire forms, and I also recommend including the paragraph describing their statistical analyses in the main body of the methods section in the manuscript.

In the Introduction section, the second sentence in the third paragraph (Factories have been identified...) is oddly placed. I recommend using this as an opening to the following paragraph which introduces the greater risks of illness for people of lower socioeconomic status.

Thirdly, the third paragraph in the Discussion section seems a bit disconnected, with the final sentence on nutritional status at the end of the First World War requiring a bit more context to tie in with the the point the authors are making here.

### PLEASE COMMENT

Yes						
Q 5	Are the keywords appropriate?					
Yes, though it would be advantageous to include "sex differences" if possible						
Q 6	Is the English language of sufficient quality	/?				
Yes						
Q 7	Is the quality of the figures and tables satisfactory?					
Yes.						
Q 8	Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)					
Yes, as far as I can tell						
QUALITY A	SSESSMENT					
Q 9	Originality					
Q 10	Rigor					
Q 11	Significance to the field					
Q 12	Interest to a general audience					
Q 13	Quality of the writing					
Q 14	Overall scientific quality of the study					
REVISION	LEVEL					
Q 15	Please make a recommendation based on y	our comments:				
Accept.						