

Peer Review Report

Review Report on Impact of the COVID-19 pandemic on chronic obstructive pulmonary disease patient mortality: a nationwide study in France

Original Article, Int J Public Health

Reviewer: Reviewer 1

Submitted on: 29 Sep 2023

Article DOI: 10.3389/ijph.2024.1606617

EVALUATION

Q 1 Please summarize the main findings of the study.

The authors present a longitudinal analysis of a large cohort using retrospective data from SNDS database. They report an excess mortality in 2020 compared to previous years, with a larger impact on persons without a COPD history. They also report on a continued excess of all-cause mortality among COPD patients compared to controls through 2017–2020, but the gap being shrunk in 2020. Covid19-specific mortality rates were higher among COPD patients.

Q 2 Please highlight the limitations and strengths.

It is a large nation-wide cohort using a well-established data source. Methods seem valid and appropriate, but the authors need to expand substantially on them in the Methods section.

- Limited novelty of the analyses (see Moreno-Martos et al. 2023). A slight update of literature referenced is warranted.
- Although it is a nice overview of historic events, there is little implication for public health currently. How are these results helping in preparing for future pandemics similar to COVID? Where the mitigation measures effective in France? What were the causes for non-COVID death excess in France?

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.

Major:

- General: why not including 2021 in the design? 2020 was the year of COVID expansion, but 2021 still had no vaccine available. In addition, understanding mortality in 2022 could help to observe mitigation measures effectiveness.
- Methods: control cohorts are not described in methods or in the flowchart.
- Line 89: is the period of case ascertainment the same as the observation period? If so, patients identified in 2020 have lower probability of follow-up.
- Discussion: have the authors considered that COPD diagnosis in 2020 may have decreased substantially, thus causing a classification bias compared to previous years? In addition, those COPD incident cases would "de facto" be part of the control group (allegedly). Likewise, cause of death identification was dramatically affected by the outbreak in 2020, focusing coding practices on COVID-19 primarily, any other causes, especially in general population may have been overlooked.

Minor:

- Results lines 154 to 159: you present absolute increases in death, but it is actually a mortality rate. Absolute numbers refer to n, and rates are already relative to a denominator. It is confusing for the reader.
- Figures: in the manuscript for review they are illegible (red bars over fuchsia background)

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

yes

Q 5 Are the keywords appropriate?

yes

Q 6 Is the English language of sufficient quality?

N/A (I'm not native speaker)

Q 7 Is the quality of the figures and tables satisfactory?

No.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)

Yes, but I suggested to give it another look as 2023 produced some new relevant studies

QUALITY ASSESSMENT

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 your comments:

Major revisions.