

Review of: "Association of Dementia and Patient Outcomes among COVID-19 Patients: A Multi-center Rétrospective Case-Control Study"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Association of Dementia and Patient Outcomes among COVID-19 Patients: A Multi-center Rétrospective Case-Control Study

Esteemed Authors,

Thank you for this important and robust research. I made only few suggestions to structure the paper according to IMRAD guidelines.

Kind regards,

The Reviewer.

CL

There is spelling error in the Title.

1. The Inclusion and exclusion criteria should also include settings, date of beginning and end of study, some statement about blindness of assessors
2. The Sections Aims, Hypotheses, Variable and Objectives are missing

The authors should state the research Aim in the body of the article and before Materials and Methods, such as:

Research question:

[According to PIO or PICO framework formulated as a question]

Aims

"To describe the role of patients' baseline characteristics specifically dementia in determining overall health outcomes in COVID-19 patients."

Objectives:

Primary Objectives:

1) To conduct a retrospective case-control study [...]

Secondary Objectives:

2) [Summarising in 2-3 points what is done Methods']

Level of significance

An alpha level of 0.05 was selected a priori as the level of significance where to reject the Null Hypothesis.

Research Hypotheses:

[A paragraph on outcomes sought and if an effect size is sought]

- **Null Hypothesis H_0 :** *there is no differences in patient outcomes for patients with COVID-19 pneumonia (60+ years of age), with and without a diagnosis of dementia.*
- **Research or alternate Hypothesis H_a :** *there is a difference in patient outcomes for patients with COVID-19 pneumonia (60+ years of age), with and without a diagnosis of dementia.*

A paragraph on what are the independent (x), dependent (y) and confounding variables (z) according to the authors.

As the level of this direction cannot? can? be determined, we used a (one-tailed?)-[CAN], (two-tailed?)-[CANNOT] level of significance.

Kind regards,

CL