

# Review of: "Side effects of COVID-19 vaccination in Pakistani population: A cross sectional study"

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Potential competing interests: No potential competing interests to declare.

The manuscript is well written and reflects the objectives the authors set themselves to achieve. However, I leave some comments for the authors in order to contribute, I hope, to improving the manuscript.

# **Abstract**

# Objectives

The first sentence needs a comma between "reducing hospitalizations" and "need for respiratory support" to make better sense.

Authors should present the aim of the study more clearly and objectively

# Materials and Methods

Authors should present the period of time that the study lasted.

Proposed amendment -> "A questionnaire including demographic details, vaccination details" instead of "A questionnaire based on demographic details"

In this chapter, the authors should indicate which vaccines (brands) were used, as they vary from country to country, as well as the statistical treatment they performed.

# Results and Discussion

"most of the side effects resolved within one week (30%)" - I would say that one third of the side effects resolved within one week (30%).

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#### Methods

#### Study design

"i) demographic details such as age, gender, residence etc." - Authors should name all variables studied in terms of demography. And authors should add a semicolon after each item.

Proposed amendment -> "and difficulties faced due to these side effects" instead of "and difficulties faced due these"

# Statistical Analysis

Authors should also refer that logistic regression models were developed for the different types of vaccines. Could the



authors also do an analysis for the most frequent symptoms and determine whether a symptom was significantly more frequent with vaccine A versus vaccine B or C? Especially in relation to the 4 most used or grouping them together (viral vector-based vaccines; RNA vaccines; and attenuated viral vector vaccines).

# Results

General characteristics of the study population

"fully vaccinated individuals" -> Authors should stipulate in the methods what they consider to be a fully vaccinated individual.

Table 1- -> What was the relevance of questioning and analyzing the frequency of different blood types?

Table 3. -> What are the reference categories for each of these OR/p-values? In Moderna, severe pain at injection site is associated with gender. But which one?

# Discussion

Another limitation of the study is that not all infections lead to symptoms or may confer mild symptoms that the patient may not remember when completing the questionnaire, so care is needed when saying "had low incidence of infection".