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

Nerges Mistry[1]

1 Foundation for Medical Research

Potential competing interests: No potential competing interests to declare.

The study has assessed the proportion of people facing various side effects of different COVID-19 vaccinations administered in Pakistan and delves into the incidence of disease post-vaccination. Though the study is informative and well written, at this point in time with the waning of the COVID-19 pandemic, the data presented is not novel or time-relevant. The study would benefit from exploring the long-term side effects of the vaccination. Similarly, the discussion section could also be improved by explaining the relevance of results in the current context.

- The study needs to provide more details on the basis of selecting the given sample size.
- What were the side effects in participants who received a combination of vaccines i.e. different booster vaccine compared to primary shot?
- As the majority of the -participants are in the age group 20-40, the data analysis could be improved by looking at the presentation of side effects in different age categories. It would be important to know if the population above the age of 60 suffers from more side effects from different vaccines compared to other groups.
- The study describes the association of age and gender with certain side effects such as moderate pain and swelling at injection sites for some vaccines, as well as the association of comorbidities with certain side effects. All these associations should be discussed in the discussion section
- Please clarify if the percentage of patients with comorbidities like diabetes and hypertension mentioned in the bracket refers to the overall percentage or within a cohort of participants with existing illnesses.
- Did the participants face the same side effects after the second dose or booster dose? The relationship between the number of vaccine doses and side effects in the same participants (if data is available) should be analyzed.
- What does the Forest plot indicate, was the analysis done in participants who were infected post-vaccination or in all participants with COVID-19? Are the significant factors mentioned in the results correlated with vaccination?