

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

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Side Effects of COVID-19 Vaccination in the Pakistani Population: A Cross-Sectional Study

The recent study offers invaluable insights into the safety profile of COVID-19 vaccinations, a topic of paramount importance given the prevailing hesitancy surrounding potential side effects. While previous studies conducted in Pakistan reported mild adverse reactions to the vaccines and the factors associated with these side effects, this particular research stands out due to its comprehensive cross-sectional analysis of a large population. The methodology employed is commendable, with data meticulously analyzed across diverse demographics, including variables such as BMI, age, and smoking history.

The study's findings reveal that the four different COVID-19 vaccine brands available in Pakistan generally have minimal side effects, with most symptoms being transient. Furthermore, the vaccination was found to be highly effective, leading to a marked reduction in hospitalizations and the severity of the illness. However, despite these positive outcomes, Pakistan's vaccination rates lag behind its neighboring countries, possibly due to reduced acceptance. This study, therefore, plays a crucial role in raising awareness and aiding individuals in making informed decisions.

A noteworthy aspect of this research is its detailed data on the side effects associated with different vaccine brands. Such information is invaluable for consumers, allowing them to make an informed choice based on their comfort level, potentially eliminating the need to "shop around."

Delving deeper into the data, it's evident that a higher BMI emerges as an independent risk factor for significant side effects. In contrast, individuals with a normal BMI exhibited a lower incidence of side effects. This finding underscores the importance of maintaining a healthy lifestyle and BMI, emphasizing the need for public awareness on the topic. Additionally, the study indicates that younger individuals also face a heightened risk of side effects.

In terms of vaccine brands, participants who received the Moderna and Pfizer vaccines reported 7% and 5% extreme difficulties in their daily routines, respectively. In contrast, all other vaccines resulted in 1% or no extreme difficulty. This raises the question of whether individuals with a higher BMI and older age might benefit more from vaccines other than Moderna and Pfizer.

The study's correlation between side effects and vaccination is particularly enlightening. Only 12% of participants who had a prior COVID-19 infection before vaccination contracted the virus again after being fully vaccinated, with a mere 0.51%

reporting a second infection post-vaccination. These findings underscore the reduced hospitalization rates among vaccinated individuals.

Lastly, in the complications section, while unvaccinated patients exhibited 4-5 symptoms, only one symptom, Lung fibrosis, was observed in vaccinated individuals. This long-term complication suggests that while short-term complications are rarer among vaccinated individuals, there's a slightly elevated risk of long-term complications like Lung fibrosis.