

Short-term side effect patterns of COVID-19 vaccines: Type and dosage matters

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ABSTRACT

Introduction: The type of COVID-19 vaccine and the dosage administered appear to significantly influence the nature and frequency of the side effects. In Malaysia, the vaccines against COVID-19 administered were Pfizer-BioNTech, AstraZeneca and Sinovac. Various studies reported that short-term side effects of the COVID-19 vaccine include localized pain, fever, and fatigue, which vary among different vaccine types and doses. **Objective:** To investigate the short-term side effects of COVID-19 vaccine based on type and dosage. **Materials and Methods:** People aged 18 and above participated in a cross-sectional anonymous online survey. Statistical analysis was performed using SPSS software. Fisher's exact test was used to find the association among the categorical variables and check the significance level. **Results:** A total of 416, 137 and 196 responses were analysed for dose 1, dose 2 and dose 3 (booster) respectively. Among the respondents, 65.1% received the Pfizer BioNTech Covid-19 vaccine followed by AstraZeneca (21.6%) and Sinovac (13.2%) for the first dose. Among those who received the Pfizer vaccine at the first dose, the commonest short-term side effects were pain (87.4%), fatigue (56.9%) and myalgia (37.2%), Commonest side effects among those who received AstraZeneca vaccine at the first dose were pain (84.4%), fatigue (83.3%) and fever (76.7%). Meanwhile, pain (69.1%), fatigue (49.1%) and increased appetite (34.5%) were the commonest side effects among the recipients of Sinovac vaccine. The average number of side effects was least after taking Sinovac vaccine. The second dose was reported to have a lower proportion of people with at least one side effect compared to the first dose and booster dose. **Conclusion:** The study's result emphasized the short-term side effects of Covid-19 vaccination among adults. Pain at the injection site was the most common side effect with any type of vaccine and with each dosage.