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Prevalence of Covishield COVID-19 Vaccine (ChAdOx1 nCoV-19) Adverse Effects among Health Care Workers in Sri Lanka

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Purpose: A Community vaccination programme is the best approach to combat COVID-19 pandemic. The first priority was given to the health care workers (HCWs) with the introduction of Indian Covishield (ChAdOx1 nCoV-19) vaccine to Sri Lanka since February 2021. An independent post-vaccine surveillance is important to identify the occurrence of adverse effects(A/E) in the population.

Methods & Materials: A multicentered cross-sectional survey was conducted in four provinces of Sri Lanka to estimate the prevalence of A/E after covishield vaccination A/E among HCWs after the first dose. A self-administered questionnaire was used to gather demographic data and A/E. Data was analysed using descriptive statistics.

Results: Of 4834 participants, 3500(72.4%) were females. The median age was 42.23(SD±9.64) years. Only 0.8%(n=31) persons has had Covid infection in the past. 2.2% were breastfeeding mothers and 0.2% were pregnant ladies.

87.4% of persons had at least one A/E and 53.1% had local A/E. Body aches(68.2%), headaches(63.8%), fever(58%), chills 51.4%), fatigue(41.2%), arthralgia(38.1%) and rigors (32%) were the most commonly reported systemic A/E.

Most of the systemic A/E were more prevalent among the ≤42-year-old group, and females. Their duration was mainly 24 hours. Mean duration of onset of fever is 9.76 hours.

Pain and redness at the site were the most commonly reported local A/E.

All of the local A/E were more prevalent among the ≤42-year-old group and females. Mean duration of pain at the site is 4.47 hours.

1.7%(n=61) had reactions within first 20 minutes. 0.08%(n=4) developed anaphylaxis, 0.8%(n=31) had urticaria.

15.4% had at least one comorbidities but there were no significant association between having a comorbidity and developing systemic or local.

1.3% had history of drug or food allergies, they did not show significant relation to current vaccine induced allergies or anaphylaxis.

69.2% attended the routine work despite having minor A/E. 0.13%(n=7) were hospitalised and treated. 22.4% were stayed at home and rested for 24–48 hours due to A/E.

Conclusion: Eventhough more than 60% reported minor A/E, there were only a few serious A/E. A/E were more prevalent in younger age and females. Overall, the first dose of the Covishield vaccine was well-tolerated by HCWs.

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Hesitancy to COVID-19 Vaccines among University Students in Lebanon

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Purpose: The aim of the study is to assess the readiness and behavioral intentions of students enrolled at the American University of Beirut (AUB), Lebanon to obtain the COVID-19 vaccine. To our knowledge, this is the first study to assess vaccine hesitancy among university students in Lebanon.

Methods & Materials: We conducted an online survey between May 11 and June 18, 2021 administered to a total of 3805 undergraduate and graduate students. We used three models as the theoretical framework of the study. These include the Integrated Behavioral Model (IBM) (to assess attitude, perception and behavioral intentions), Precaution Adoption Process Model (PAPM) (to assess readiness to adopt a preventive health behavior), and the Extended Parallel Processing Model (EPPM) (to assess cognition and emotional reactions). Chi square and logistic regression were performed using STATA.

Results: The study included 800 participants (21.02%) from all faculties (n=7) at AUB. The mean age was 21 years with the majority being undergraduate students (75%). The vaccine acceptance group represented 87.01% of the study participants while the hesitant and refusal groups accounted for 10.21%, and 2.77%, respectively. Our results showed that hesitancy was significantly associated with nationality, residency status and university rank (p value< 0.05). Moreover, there was a significant association between hesitancy and agreement/disagreement to the conspiracy type of thinking questions. Interestingly, the majority of the hesitant group agreed that the mainstream media is creating unnecessary fear towards COVID-19 (54.43%) and that millions more people per year die from flu than from COVID-19 (40.51%). Students reporting that pharmaceutical companies adequately tested the safety of the vaccine (OR=0.52; 95% CI=0.19–1.43; p value=0.21) and those who consider the vaccine in agreement with their personal views (OR= 0.11, 95% CI= 0.02–0.51, p value= 0.004) were less likely to be hesitant. Interestingly, history of COVID-19 infection didn't affect the participants' willingness to get vaccinated.

Conclusion: Our results showed a low hesitancy rate among students enrolled at AUB. The factors associated with hesitancy can be used as a core content to organize social campaigns for spreading awareness and increasing the acceptance rate of COVID-19 vaccination.

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