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**ASSOCIATED FACTORS OF ACUTE ADVERSE EFFECTS AFTER THE COVID 19
VACCINE ADMINISTRATION**

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Relevance. Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) was declared a pandemic by WHO on March 11, 2020 (World Health Organization, 2020), resulting in devastating medical, economic, and social consequences worldwide. Safe and effective vaccines are therefore very crucial and urgently needed in order to contain the pandemic. Because COVID-19 spreads swiftly, newer vaccine platforms, including mRNA and adenovirus vector-based, were quickly developed and distributed worldwide.

Goal: the objectives of this study is to describe adverse effects and identify factors associated with adverse effects after COVID-19 vaccination. Our study aimed to explore the rates and types of acute adverse effects after the first, second and third doses of nCoV-19 vaccine in Colombo, Gomel, and Grodno. It also analyzed the factors associated with acute adverse effects (AAEs) after vaccination.

Material and methods. Study is an online cohort study that began enrolling participants on March 22nd till March 28th of March 2022 year. Study was basically targeted the population in three cities Colombo, Gomel, and Grodno. Participants are recruited to the study through a digital platform by inviting via social Medias. 140 participants were joined to the survey, who are 18 years or older, and provided consent to participate in the study. After providing electronic consent, participants completed survey.

Result and discussion. Participants reported receiving at least 1 dose of vaccine were 5 (3.8%), 2 doses 89 (66.9%) and 3 doses were 39 (29.9%). 72 (54.1%) participants were non healthcare workers and 61 (45.9%) participants were health care workers. Clinical parameters were included in the questionnaire, with AAEs divided into three types — mild, moderate and severe. Mild AAEs included any of the following symptoms: local site reactions, feverishness, headache, nausea/vomiting, and fatigue. Moderate AAEs included: palpitation, high-grade fever, chills, chest tightness, severe headache, facial weakness, limb weakness, skin lesion, bleeding gums and others. Severe thrombosis, thrombocytopenia with hospitalized patients.

Most of the participant's received brand name is Sinopharm (48.1%) and sputnik v (21.8%) AstraZeneca/ Oxford (18%) Pfizer-Biotech was (9%) and Covaxin (2.3%) Moderna (0.8%). The most common vaccine adverse effects were fatigue (49.2%), muscle pain (40%), headache (37.5%), chills 18.9%, and redness/swelling at the injection site (50.8%), joint pain (27.5%), and fever (42.5%) decreased sleep quality (18.3%), sweating for no reason (9%), nausea (7.4%), abdominal pain (5.8%) diarrhea (7.4%). Outcome of severe or very severe adverse effects, the strongest factor, associated with severe or very severe adverse effects, was vaccine 3rd dose.

By this survey try evaluated the possible relationships between the people who has previous allergic persons to foods and medications, were 13 in number from all 140 participants. Post covid 19 vaccination symptoms not recorded at all for 6 participants (46%). Mild symptoms were recorded for 5 participants (38%), symptoms was moderate (7.69%) and severe (7.69%) for 2 participants 1 by each.

Serious adverse effects, such as anaphylaxis or allergy, were rare. Adverse effects were more common after the full vaccination dose, and in participants with younger age, female sex, prior COVID-19, asthma, and anemia were associated with lower odds of reporting adverse effects.

Conclusion. In this real-world cohort, serious COVID-19 vaccine adverse effects were rare, and overall adverse effects associated factors were similar to current published reports. These results may help to gain a greater understanding of the real-world experience of adverse effects after COVID-19 vaccination.