**Presentation Title: More than three-fourth of AstraZeneca (ChAdox1 COV-19) COVID-19 vaccinated individuals develop Post Immunization Adverse Event in Northwest Ethiopia**

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**Abstract:**

**Background:** Several vaccines were approved and used for different countries as a major preventive strategy for the COVID-19 pandemic. The study aimed to assess the magnitude and associated factors of adverse events following ChAdOx1 COV-19 immunization among health professionals of the University of Gondar Specialized and Comprehensive Hospital, 2021.

**Methods:** An institution-based cross-sectional study was conducted among health professionals of the University of Gondar Comprehensive and specialized referral hospital. All health professionals who took the ChAdOx1 COV-19 vaccine in the 1st phase were surveyed. A total of 314 health professionals who take the ChAdOx1 COV-19 vaccine were included**.** Data was collected using a self-administered questionnaire. The Epidata version 4.6.0.0 and Stata 16 were used for data entry and analysis respectively. A binary logistic regression was used to identify statistically significant factors associated with adverse event following Immunization (AEFI). Chi-square and multicollinearity assumptions were tested. A p-value <0.2 and 0.05 were used as cut-off values of significance in the bi and multivariable logistic regression models respectively. An Adjusted Odds Ratio (AOR) with 95%CI was reported for statistically significant variables.

**Results:** Among 314 study participants, 263 of them had at least one mild to severe AEFI of ChAdOx1 COV-19 with a prevalence of AEFI 83.76% (95% CI: 79.23, 87.46). The commonest AEFI observed were injection site tenderness (n=198/263), fatigue (114/263), headache (n=107/263), and muscle pain (n=85/263). Females (AOR=2.75, 95%CI: 1.15, 6.58), and participants who feel the vaccine was unsafe (AOR=2.84, 95%CI: 1.03, 7.85) were having nearly three times more odds of AEFI immunization as compared to males and those who feel the vaccine was safe respectively.

**Conclusions:** Adverse event following immunization was a public health problem in Northwest Ethiopia. Being female and those who feel the vaccine as unsafe were statistically significantly associated with AEFI.

**Key-words**: Adverse event, ChAdOx1 COV-19, associated factors, and Ethiopia

**Biography of presenting author** (should not exceed 100 words)

Mr. Atalay studied Bachelors of Sciences in Public Health at the University of Gondar in 2015. Then joined the department of Public health of University of Gondar. He received his Masters of Public Health in Epidemiology and Biostatistics, University of Gondar, Ethiopia in 2018. He then joined the university of Gondar institute of Public Health, University of Gondar. He published more than 20 research articles as a primary and co-authors in reputable journals.

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