

Awareness and acceptance of COVID-19 vaccines and associated factors among pharmacy students in Zambia

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Abstract

Background: Several vaccines have been developed and administered since coronavirus disease 2019 (COVID-19) was declared a pandemic in March 2020. In April 2021, the authorities in Zambia administered the first doses of the Oxford-AstraZeneca[®] COVID-19 vaccine. **Objective:** To assess the awareness and acceptance of COVID-19 vaccines and associated factors among pharmacy students in Zambia. **Methods:** A cross-sectional study among 326 undergraduate pharmacy students in Lusaka, Zambia, from February through to 25 April 2021. Data were analysed using Stata version 16.1. Multivariable logistic regression was used to determine factors influencing vaccine acceptance. **Results:** Of the 326 participants, 98.8% were aware of the COVID-19 vaccines, but only 24.5% would accept vaccination. Being of Christian faith was associated with reduced odds of awareness of the COVID-19 vaccine (aOR=0.01; 95% CI: 0.01-0.20). Compared to females, male respondents were 86% more likely to accept the vaccine if it was made available (aOR=1.86; 95% CI: 1.10-3.14). Unmarried compared to married respondents were 2.65 times as likely to accept vaccination (aOR=2.65; 95% CI: 1.06-6.63) whilst unemployed respondents were less likely to accept vaccination (aOR=0.32; 95% CI: 0.16-0.46). Barriers to the acceptability of the vaccine were possible side effects (78.5%) and scepticism about its effectiveness to prevent COVID-19 (10.2%). **Conclusion:** There was significant vaccine hesitancy toward COVID-19 vaccines among Zambian pharmacy students despite their awareness of the vaccines. Health authorities must work collaboratively with training institutions to mitigate vaccine hesitancy, especially with healthcare students being a key part of the future healthcare workforce overseeing disease prevention strategies.

Keywords: Acceptance; Acceptability; Awareness; COVID-19 vaccines; Pharmacy Students, Zambia