



Effectiveness of an Educational Intervention on Knowledge and Attitudes towards COVID-19 Vaccination: An Interventional Survey in Faculty of Allied Health Sciences, University of Ruhuna

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Abstract

Evaluation of knowledge and attitudes toward COVID-19 vaccination would be important for the success of future immunization programmes. This study aimed to evaluate the effectiveness of an educational intervention in improving knowledge and attitudes towards COVID-19 vaccination among undergraduates of the Faculty of Allied Health Sciences (FAHS), University of Ruhuna. First, second and third-year undergraduates in FAHS were considered as the study sample. This interventional study was conducted as an online survey using self-administered questionnaires. A voice-dubbed video was introduced to the participants as an educational interventional tool. The knowledge scores were computed by scoring 1 for each correct answer and 0 for an incorrect answer with 'don't know' added into the incorrect answer (Knowledge score < 50% = poor, 50-75% score = moderate, and > 75% score = good). For attitudes, marking ranged from -7 to +7 (true answer +1 and false and undecided -1). An individual's positive score indicated a positive attitude, while negative or zero scores indicated a negative attitude. Data were statistically analysed using GraphPad Prism, version 7 software. The level of significance was claimed based on a *p*-value < 0.05. Data were collected from 285 undergraduates of FAHS. The majority of participants were first-year (66.0%) and female (76.8%) undergraduates. In pre-intervention, only 38.6% and 16.8% of participants had "good knowledge" of AstraZeneca and Sinopharm COVID-19 vaccines respectively while 46.0% and 47.7% of participants had "moderate knowledge" of AstraZeneca and Sinopharm COVID-19 vaccines respectively. Following the video intervention, "good knowledge" of both vaccines was significantly increased to 80.3% and 68% respectively (*p* < 0.0001). The attitude of most of the participants (53.0%) was significantly positive towards vaccination in post-intervention when compared to pre-intervention (35.8%, *p* < 0.0001). Following video post-intervention 48.7% of participants had significantly high acceptance of the COVID-19 vaccine when compared to pre-intervention (24.6%, *p* < 0.0001). An educational video about the COVID-19 vaccine significantly improved undergraduates' knowledge and attitude toward the COVID-19 vaccine and vaccination.

Keywords: *Attitudes, COVID-19, Knowledge, Undergraduates, Vaccination.*

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