



Short Report

Factors influencing COVID-19 vaccination intention among university students: A cross-sectional study in Malaysia



Chee Yin Wong^{a,b}, Jen Sern Tham^{c,d}, Chai Nien Foo^{a,b}, Foong Leng Ng^{a,b}, Saleha Shahar^e, Mohd Nizam Zahary^f, Mohd Nazri Ismail^g, Cheng Siang Tan^h, Boon Peng Hohⁱ, Subbiah Vijay Kumar^j, Yang Mooi Lim^{a,b,*}

^a Center for Cancer Research, Universiti Tunku Abdul Rahman, Kajang 43000, Malaysia

^b M. Kandiah Faculty of Medicine & Health Sciences, Universiti Tunku Abdul Rahman, Kajang 43000, Malaysia

^c Department of Communication, Faculty of Modern Languages and Communication, Universiti Putra Malaysia, Serdang 43400, Malaysia

^d UPM-UNICEF C4D, Faculty of Modern Languages and Communication, Universiti Putra Malaysia, Serdang 43400, Malaysia

^e Faculty of Science, Universiti Teknologi Malaysia, Johor Bahru 81310, Malaysia

^f Faculty of Health Sciences, Universiti Sultan Zainal Abidin, Kuala Nerus 21300, Malaysia

^g Analytical Biochemistry Research Centre, Universiti Sains Malaysia, Bayan Lepas 11900, Malaysia

^h Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, Kota Samarahan 94300, Malaysia

ⁱ Faculty of Medicine and Health Sciences, UCSI University, Cheras 56000, Malaysia

^j Biotechnology Research Institute, Universiti Malaysia Sabah, Kota Kinabalu 88400, Malaysia

ARTICLE INFO

Article history:

Received 23 June 2022

Revised 21 December 2022

Accepted 24 December 2022

Available online 26 December 2022

Keywords:

Behavioral intention

COVID-19

Influencing factor

SARS-CoV-2

University student

Vaccination

ABSTRACT

Vaccination is crucial in controlling the spread of the coronavirus disease 2019 (COVID-19) that triggered the pandemic, but herd immunity can only work with high vaccination coverage in the population. This study aims to measure the COVID-19 knowledge level and determine the factors influencing COVID-19 vaccination intention among university students in Malaysia. A cross-sectional online survey was carried out with 1,274 Malaysian university students in July 2021. Univariate and multivariate analyses were employed to examine the relationships between the study variables. Results showed that the majority of university students had an acceptable level of knowledge of COVID-19. The knowledge, risk perception of COVID-19, social norms, and perceived benefit of COVID-19 vaccination were positively associated with vaccination intention. However, perceived trust in information sources of COVID-19 vaccination and the government's response to COVID-19 did not affect the university students' desire to receive the vaccination. These findings are essential for health policymakers and healthcare providers to implement evidence-based interventions to increase COVID-19 vaccination uptake among university students.

© 2023 Chinese Medical Association Publishing House. Published by Elsevier BV. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

“No one will ever be truly safe until everyone is safe.” This was a loud and clear message from the Deputy Secretary-General of the United Nations, Amina Mohammed, on handling the coronavirus disease 2019 (COVID-19) pandemic crisis [1]. This message is not limited in its use to describe the global economic crisis caused by the COVID-19 pandemic but can also describe the progress of the COVID-19 vaccination program [2]. A high-level action is urgently required to

increase the vaccination rate to control the spread of COVID-19 caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Although preventive measures of non-pharmaceutical interventions (NPIs), such as social distancing, personal protection, and environmental and travel measures, can suppress the spread of COVID-19 [3], herd immunity is frequently cited as the desired panacea to stop the COVID-19 pandemic [4]. Many countries' regulatory affairs agencies have authorized or approved several vaccines for emergency use against COVID-19 [5,6]. However, a sizeable population across the globe is still undecided about whether to receive the vaccine or not. For example, a global survey reported that only 71.5% of the respondents were somewhat likely to take a COVID-19 vaccine [7]. Yamey and colleagues found that 2.8 million people remained entirely unvaccinated [8]. Therefore, the failure to increase access to vaccines by more people in all countries is the principal reason the virus is still winning [9].

Many colleges and universities are starting the fall semester at total capacity, with residential colleges full of students, courses held

* Corresponding author: Department of Pre-Clinical Sciences, M. Kandiah Faculty of Medicine & Health Sciences, Universiti Tunku Abdul Rahman, LOT PT 21144, Jalan Sungai Long, Bandar Sungai Long, Kajang 43000, Selangor, Malaysia.

E-mail address: ymlim@utar.edu.my (Y.M. Lim).

¹ Given her role as an Editorial Board member, Yang Mooi Lim had no involvement in the peer-review of this article and had no access to information regarding its peer-review. Full responsibility for the editorial process for this article was delegated to the Editor William J. Liu.