Knowledge, Attitude and Self-Efficacy Towards Blood Donation Among University Students: An Online Intervention Study

MD MIZANUR RAHMAN1*, JAMILAH BINTI HASHIM2, RESEARCH GROUP3

Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia *Corresponding author: rmmizanur@unimas.my; anigm@hotmail.com

Contributing author(s)

Md Mizanur Rahman
 Department of Community Medicine and Public Health, Universiti Malaysia Sarawak.
 Email: <u>rmmizanur@unimas.my</u>, <u>aniqm@hotmail.com</u>
 Contribution: Concept development, design, research methods, analysis and manuscript editing

2. Jamilah Binti Hashim
Department of Community Medicine and Public Health, Universiti Malaysia Sarawak.
Email: <u>hjamilah@unimas.my</u>
Contribution: Concept development, design, research methods, supervision and manuscript editing

3. Research Group Department of Community Medicine and Public Health, Universiti Malaysia Sarawak Contribution: Concept development, design, research methods, data collection, and manuscript editing

ABSTRACT

Background: Long-term shortages in the blood supply perpetuate increased morbidity and mortality from treatable diseases. However, how much people are motivated to donate blood was less studied, especially among university students. This study aimed to determine the effectiveness of online intervention for knowledge, attitude, and self-efficacy towards blood donation among undergraduate university students.

Methods: A pre-and post-test study was conducted among undergraduate students. Four hundred students were invited for the study. Knowledge, positive and negative attitudes, and self-efficacy towards blood donation were measured using a structured questionnaire. Two digital infographics of blood donation information and one 10-minute video were used as intervention materials. Following the intervention, statistical and practical significance was reported. Multivariate analysis of variance was done to determine the differences in invention effect across age, gender, and study discipline.

Results: Following the intervention, there was 29.11% and 5.11% increased knowledge and self-efficacy from the base, respectively. The positive attitude towards blood donation increased by 2.81%, while the negative attitude decreased by 2.14%. Multivariate analysis of variance showed that online health education on blood donation is effective irrespective of age, gender, and discipline of study.

Conclusion and recommendation: Due to the Covid-19 pandemic, the intervention was integrated into a remote health intervention model based on the Internet or mobile communication network. This study has provided a scientific conclusion on whether the intervention could facilitate motivating people to donate blood.

Keywords: Blood donation, Knowledge, Attitude, Self-efficacy, Intervention, Sarawak, Malaysia.

Copyright: This is an open access article distributed under the terms of the CC-BY-NC-SA (Creative Commons Attribution-NonCommercial_ShareAlike 4.0 International License) which permits unrestricted use, distribution, and reproduction in any medium, for non-commercial purposes, provided the original work of the author(s) is properly cited.