

Effects of Patient Education via Smartphone Messaging Application on Knowledge, Attitude, Self-Care Practice, Quality of Life (KAPQ) And Medication Adherence Among Heart Failure Patients During COVID-19 Pandemic

Lee Siew Huang¹, Shairyazah Ahmad Hisham^{2*}, Syahirah Hamdan¹, Chan Pooi Mun¹, Annur Amanina Abdul Manaf¹, SafiahtulLaini Shabry¹, Sarmini Gunalan¹, Ting Leong Yuen¹, Agnes Lim Yan Chyi¹, Leong Siew Lian², Zainol Akbar Zainal²

¹Pharmacy Department, Kuala Kangsar Hospital, Jalan Sultan Idris Shah 1, Taman Mawar, 33000 Kuala Kangsar, Perak, Malaysia.

²Faculty of Pharmacy, University of Cyberjaya, Persiaran Bestari, 63000 Cyberjaya, Selangor, Malaysia.

*Corresponding author:

Shairyazah Ahmad Hisham, PhD, Faculty of Pharmacy, University of Cyberjaya, Persiaran Bestari, 63000 Cyberjaya, Selangor, Malaysia.

E-mail: shairyazah@cyberjaya.edu.my

Phone number: +6013 287 2126

+603 8313 7051

Effects of Patient Education via Smartphone Messaging Application on Knowledge, Attitude, Self-Care Practice, Quality of Life (KAPQ) And Medication Adherence Among Heart Failure Patients During COVID-19 Pandemic

Background

Heart failure (HF) is a burdening disease which may lead to deterioration of healthcare-related quality of life (HRQoL), increased risk of hospitalisation and mortality. Previous studies have established association between poor disease knowledge among HF patients and poor prognosis. An alternative to traditional patient education which could effectively deliver patient education while maintaining social distancing is needed in a time of crisis such as during current coronavirus disease 2019 (COVID-19) pandemic.

Objective

This study was designed to assess the effectiveness of visual-aided HF patient education program conducted via smartphone messaging application on HF-related disease knowledge, attitude, self-care practice, HRQoL (KAPQ) and medication adherence among HF patients.

Methods

A total of 50 adult HF patients who visited outpatient pharmacy for medication supply at a Malaysia district hospital were recruited. Baseline HF-related disease knowledge, attitude, self-care practice, HRQoL (KAPQ) and medication adherence were assessed using previously developed and validated self-administered questionnaires. The patients then received ten picture messages containing important HF-