OPEN ACCESS Freely available online

ISSN: 2329-6607
Cardiovascular Pharmacology: Open Access

Short Communication

Heartman: A Mobile Personal Health System for Heart Failure

Laura Boeing*

Department of Medical Education, Jagiellonian University, Kraków, Poland

DESCRIPTION

This study examined the impact of Heartman, a mobile personal health system that provides decision support for the treatment of congestive heart failure, on aspects of health-related quality of life, self-management, exercise capacity, the perception of illness, and mental and sexual health. With ambulatory CHF patients in stable condition, a proof-of-concept trial that was randomised and controlled was set up in Belgium and Italy [1]. A 6-minute walking test and several standard questionnaire instruments were used to gather the data. The study was completed by 56 participants in total. While the need for sexual counselling decreased in the control group, all dimensions of depression and anxiety decreased in the intervention group. Self-care improved and sexual issues diminished in the intervention group alone, despite there being no statistically significant differences between the groups. There were no discernible intervention effects for exercise capacity, self-care confidence, illness perception, or HRQoL [2]. Overall, the proof-of-concept trial's findings indicate that the HeartMan personal health system significantly enhanced CHF patients' sexual, mental, and behavioural self-care. These findings contrasted with the absence of intervention effects on HRQoL, the perception of illness, and exercise capacity. A common cardiovascular condition, congestive heart failure affects an estimated 26 million adults worldwide and is 10% more prevalent in those over the age of 70. CHF continues to be a condition with high rates of premature mortality and hospital readmission despite significant advancements in medical treatment. Since there is currently no treatment for CHF, effective disease management is essential because it can reduce mortality, alleviate symptoms, and prevent hospitalization [3]. The patient's health-related quality of life may be impacted by the best disease management, which is thought to be a key treatment objective. Despite the availability of evidence-based recommendations for effective disease management, clinical practise generally adheres to these recommendations only sporadically, especially when it comes to getting the recommended amounts of exercise. Since substantial behavioural efforts are needed to ensure medication compliance, fluid and sodium intake, a healthy diet, maintaining a healthy weight, quitting smoking and drinking, and engaging in physical activity, self-care in CHF management is extremely complex. Patients with CHF, who tend to be older people and frequently experience comorbid conditions and mental health issues, frequently struggle to follow their complex treatment plans and lifestyle recommendations to manage their disease. Because of this, Health applications hold great promise for optimising self-care and raising clinical results [4]. The effectiveness of mHealth interventions in CHF has yet to be proven, according to the results. To address CHF self-management, HeartMan was created as a comprehensive personal health system. The central component of the system is a mobile application, which is linked to several sensing components, such as a personalised wristband and cloud services. Recommendations from a decision support system are displayed in the mobile application, which also solicits patient input. It is a multi-disciplinary system that combines a variety of intervention modalities to cover both the management of physical health and psychological support[5].

CONCLUSION

A comprehensive exercise programme with an individual weekly plan made up of resistance and endurance exercises is part of the DSS's expert system for physical health. Additionally, it includes customised systems for disease education, self-monitoring, medication intake, and nutrition counselling. The expert system for psychological support offers mindfulness practises and cognitive behavioural interventions that are carried out according to a weekly schedule. HeartMan's primary outcomes are HRQoL and self-management, in contrast to most mHealth interventions that focus on rigid clinical endpoints like mortality and hospitalisation. In CHF, the goal of treatment is to increase quality of life while also extending life. Hard endpoints may not accurately represent how a patient experiences a disease, its symptoms, or a treatment. As a result, over the past few years, there has been an increase in interest in using patient-reported outcomes as independent outcome measures in clinical practice. Furthermore, it has been shown that PROs like self-reported HRQoL and health status are predictors of clinical events in CHF patients and have a pathophysiological basis. A randomised controlled proof-of-concept trial was conducted to

Correspondence to: Laura Boeing, Department of Medical Education, Jagiellonian University, Kraków, Poland, E-mail: Lauraboe@gmail.com

Received: 04-Nov-2022, Manuscript No. CPO-22-19364; **Editor assigned:** 07-Nov-2022, PreQC No. CPO-22-19364 (PQ); **Reviewed:** 21-Nov-2022, QC No. CPO-22-19364; **Revised:** 29-Nov-2022, Manuscript No. CPO-22-19364 (R); **Published:** 07-Dec-2022, DOI: 10.35248/2329-6607.22.11.317

Citation: Boeing L (2022) Heartman: A Mobile Personal Health System for Heart Failure. Cardiovasc Pharm. 11:317

evaluate Hartman's effectiveness, with HRQoL and self-management as primary endpoints and exercise capacity, illness perception, and mental and sexual health as secondary endpoints.

REFERENCES

1. Mackay JH, Powell SJ, Osgathorp J, Rozario CJ. Six-year prospective audit of chest reopening after cardiac arrest. European Journal of Cardio-Thoracic Surgery. 2002;22(3):421-425.
2. Birdi I, Chaudhuri N, Lenthall K, Reddy S, Nashef SAM. Emergency reinstitution of cardiopulmonary bypass following cardiac surgery: outcome justifies the cost. European Journal of Cardio-Thoracic Surgery. 2000;17(6):743–746.
3. Arntz HR, Bossaert L, Filippatos GS. European Resuscitation Council guidelines for resuscitation 2005. Section 5. Initial management of acute coronary syndromes. 2005;67(1):S87-S96.
4. Biarent D, Bingham R, Richmond S, Maconochie I, Wyllie J, Simpson S, et al. European R.C. European Resuscitation Council guidelines for resuscitation. Section 6. Paediatric life support, Resuscitation. 2005; 67(1):S97-S133.
5. Dunning J, Fabbri A, Kolh PH. Guideline for resuscitation in cardiac arrest after cardiac surgery. European journal of cardio-thoracic surgery. journal of the European Association for Cardio-thoracic Surgery. 2009:36(1):3-28.