

The Impact of Digital Education Material in Improving Clinical and Behavioural Outcomes in Home-Based Cardiac Rehabilitation Participants: A Pilot Study

Dr. Anwar Suhaimi^{1*}, Anie Farhana Ngimron², Lee Wan Ling³, Kasturi Dewi Varathan⁴ and Erma Rahayu Mohd Faizal⁵

Department of Artificial Intelligence, Faculty of Computer Science & Information Technology, University of Malaya, Kuala Lumpur 50603, Malaysia

Abstract

Background:

Aims:

Methods and Results:

Conclusion:

Background: Cardiac rehabilitation (CR) is a structured, supervised program of physical, psychological, and educational interventions designed to improve the health of individuals with cardiovascular disease. Home-based CR (HBCR) has become increasingly popular due to its convenience and accessibility. Digital education material (DEM) is a type of educational content that is delivered through digital devices, such as smartphones, tablets, and computers. DEM can be used to provide patients with information about their condition, treatment options, and self-management strategies. This study aims to evaluate the impact of DEM on clinical and behavioral outcomes in HBCR participants. The study was a pilot study involving 20 participants. The participants were randomized into two groups: the control group (n=10) and the intervention group (n=10). The control group received standard HBCR, while the intervention group received HBCR with DEM. The primary outcome was the change in the percentage of participants who were able to perform physical activity for at least 150 minutes per week. The secondary outcomes were the change in the percentage of participants who were able to adhere to their medication regimen and the percentage of participants who were able to attend to their health needs. The results showed that the intervention group had a significantly higher percentage of participants who were able to perform physical activity for at least 150 minutes per week (80%) compared to the control group (40%). There was no significant difference between the two groups in terms of medication adherence and attending to health needs. The conclusion of the study is that DEM can improve clinical and behavioral outcomes in HBCR participants.

Results: The results of the study showed that the intervention group had a significantly higher percentage of participants who were able to perform physical activity for at least 150 minutes per week (80%) compared to the control group (40%). There was no significant difference between the two groups in terms of medication adherence and attending to health needs. The conclusion of the study is that DEM can improve clinical and behavioral outcomes in HBCR participants.

*Corresponding author:

Received:

Revised:

Citation:

Copyright:

Editor assigned:

Reviewed:

Published:

$\forall x \in D, P(x) \rightarrow Q(x)$
 $\forall x \in D, \exists y \in D, P(x) \rightarrow Q(y)$
 $\forall x \in D, \exists y \in D, P(y) \rightarrow Q(x)$
 $\exists x \in D, \forall y \in D, P(x) \rightarrow Q(y)$
 $\exists x \in D, \forall y \in D, P(y) \rightarrow Q(x)$
 $\exists x \in D, \exists y \in D, P(x) \rightarrow Q(y)$
 $\exists x \in D, \exists y \in D, P(y) \rightarrow Q(x)$
 $\forall x \in D, \forall y \in D, P(x) \rightarrow Q(y)$
 $\forall x \in D, \forall y \in D, P(y) \rightarrow Q(x)$
 $\exists x \in D, \exists y \in D, P(x) \wedge Q(y)$
 $\exists x \in D, \exists y \in D, P(y) \wedge Q(x)$
 $\forall x \in D, \forall y \in D, P(x) \wedge Q(y)$
 $\forall x \in D, \forall y \in D, P(y) \wedge Q(x)$
 $\forall x \in D, \exists y \in D, P(x) \wedge Q(y)$
 $\forall x \in D, \exists y \in D, P(y) \wedge Q(x)$
 $\exists x \in D, \forall y \in D, P(x) \wedge Q(y)$
 $\exists x \in D, \forall y \in D, P(y) \wedge Q(x)$

Citation:

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the specific procedures and protocols that must be followed when recording transactions. This includes details on how to categorize expenses, how to handle receipts, and how to ensure that all entries are properly documented and reviewed.

3. The third part of the document provides a detailed overview of the financial reporting process. It explains how the recorded data is used to generate various financial statements, such as the balance sheet, income statement, and cash flow statement. It also discusses the importance of regular reporting and how these reports are used by management to make informed decisions.

4. The final part of the document discusses the role of internal controls in the financial reporting process. It highlights how these controls help to prevent errors and fraud, and ensure that the financial statements are accurate and reliable. It also provides examples of common internal controls and how they should be implemented.

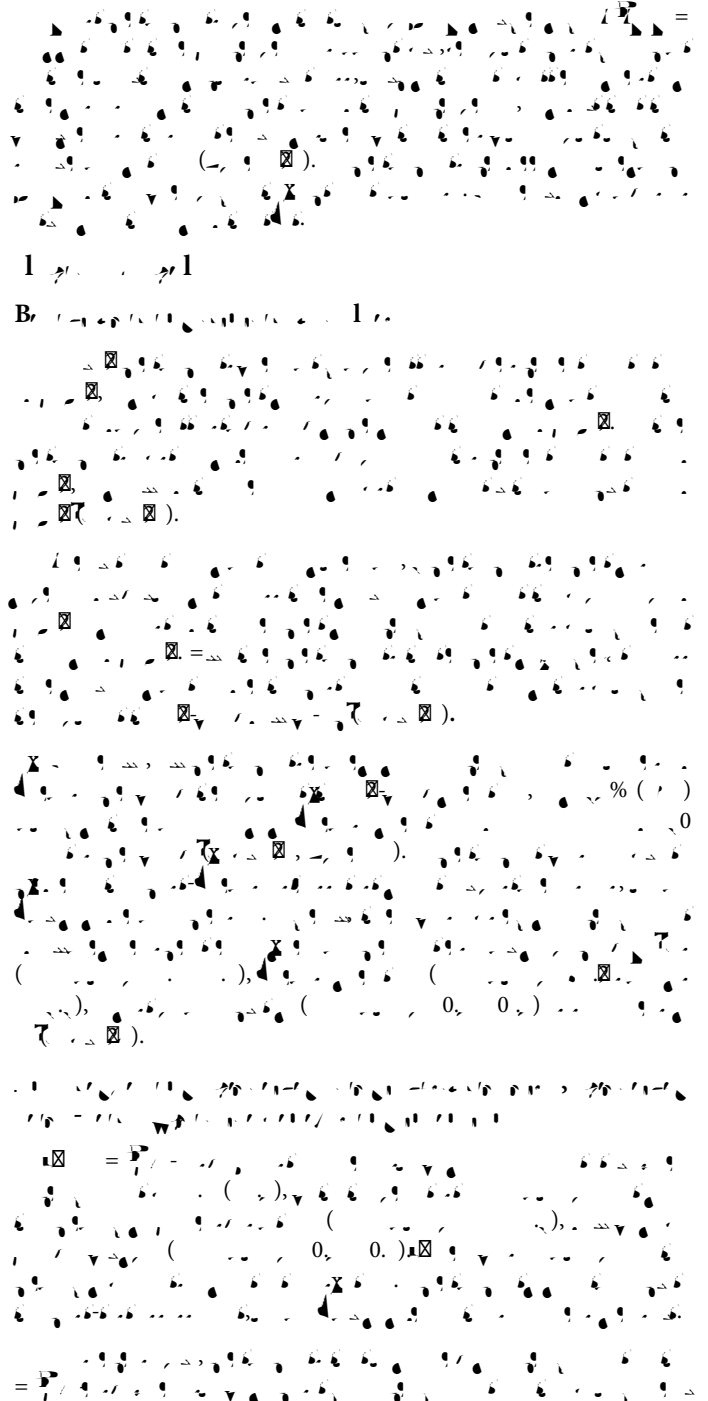
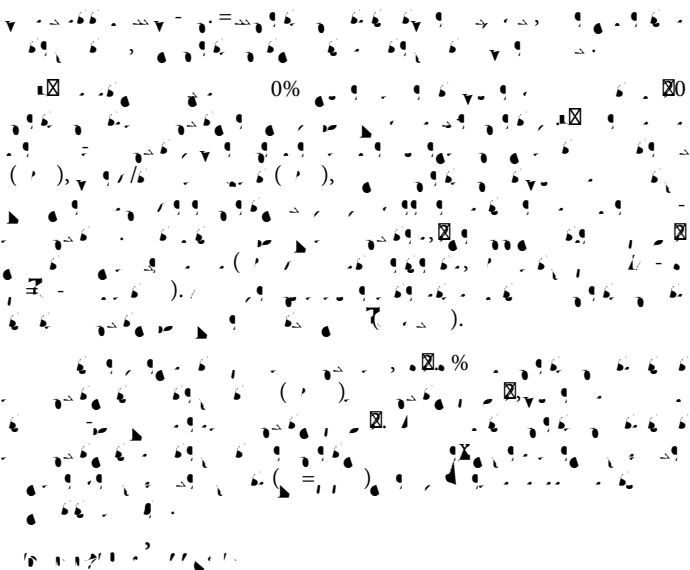


Table 1:

Characteristics	n(%)
Gender	
Race	
Working Status	
Education Level	
Perceived Cardiac Rehab Barrier	
Co-morbidities	
Revascularization procedures	

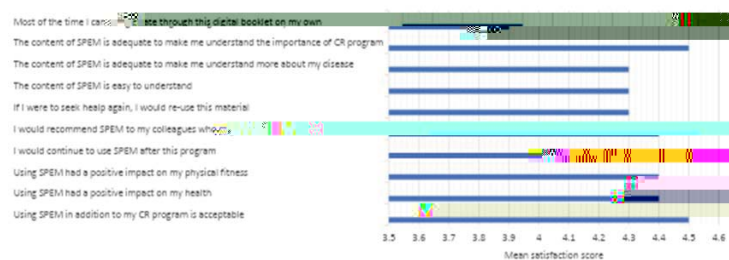


Figure 2: (a)

Table 2(a): (a)

Participant	ABCD Risk			No of cigarette smoked per day			Likelihood to miss daily medication		No of exercise hours per week		Number of attended CR sessions (total 3)
	Pre	Post	Change	Pre	Post	Change	Pre	Post	Pre	Post	

Participant	No of exercise hours per week	Endurance parameters measured by treadmill exercise stress test								
		Peak METs value			Exercise duration (sec- 0143.2426Test					

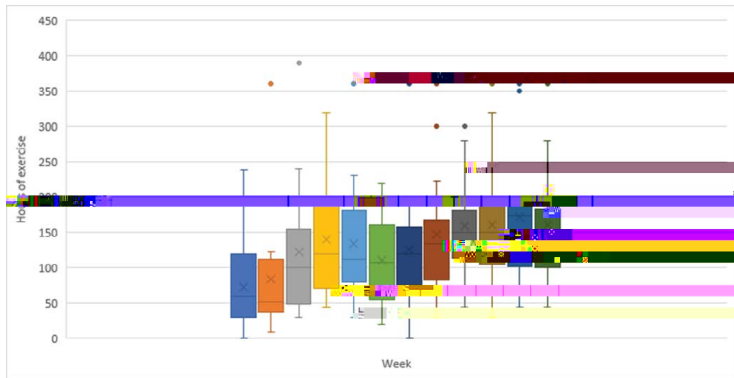


Figure 3:

Citation:

...

...

Acknowledgements

The authors would like to express their gratitude to the staf of the Cardiac

Funding

Declaration of Conficting Interests

The authors declared no potential conficts of interest with respect to the

Efects of Cardiac Rehabilitation The Benefcial

Authors Contribution

Participant feedback:

General feedback from participants

-
-
-
-
-
-
- "I would suggest a downloadable PDF version of this fle is also o fered to

K Jolly, R Taylor, GYH Lip, S Greenfeld, J Raftery, et al. (2007) Business 11.
 Based Cardiac Rehabilitation: A Scientific Statement From the American

References

Citation:

Functions, Influences & Effects of WhatsApp
