

APPLICATIONS USED IN THE CONTEXT OF ACUTE MYOCARDIAL INFARCTION: A SCOPING REVIEW

Rafaela Vilela Alves dos Santos

Master's student in Nursing by: Faculdade Israelita de Ciências da Saúde Albert Einstein
Faculdade Israelita de Ciências da Saúde
Albert Einstein
São Paulo – São Paulo, Brazil

Priscilla Caroliny de Oliveira

PhD in Health Sciences by: Universidade Federal de São Paulo
Faculdade Israelita de Ciências da Saúde
Albert Einstein
São Paulo – São Paulo, Brazil

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: Objective: Describe how mobile applications are used in the context of Acute Myocardial Infarction (AMI). **Method:** This is a scoping review conducted according to the Joanna Briggs Institute methodology with the writing guided by the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews Checklist. The search was carried out in reference databases using the descriptors “Mobile applications”, “Acute myocardial infarction;” and “Informatics in Nursing”, with the Boolean operator “and”, without time frame. **Results:** Gray literature was included through research on search engines and application stores. Analysis of the results was conducted by two independent reviewers. 876 articles were identified and after applying the inclusion criteria, 69 studies were selected. Of these, 19 described the development and validation of systems and 36 about the results of the application of Mhealth devices in the management of patients after AMI. In app stores, only 20 were evaluated for addressing IAM. And 9 studies on applications described the validation of the tool. **Conclusion:** It was possible to identify that mobile applications have been used as a health education tool in the AMI scenario. However, studies are needed to validate these technologies. **Keywords:** Mobile applications, Acute myocardial infarction, Nursing informatics.

INTRODUCTION

Data from the World Health Organization indicate that cardiovascular diseases (CVDs) are the main cause of death and contribute significantly to increased health costs (WHO, 2000). Among the diseases of the circulatory system, Acute Myocardial Infarction (AMI) stands out. People who have experienced an AMI need to modify their lifestyle habits, with changes in their daily lives (Cardiometro, 2022).

The role of nursing in health education is highlighted as one of the main axes that help promote and care for patient health. Currently, healthcare teams have been expanding tools for managing patients with chronic conditions, including the use of e-Health systems. Mobile health (mhealth) applications have been used as a patient monitoring and health education strategy in recent years. Describe how mobile applications are used in the context of IAM⁽¹⁻³⁾.

METHODOLOGY

This scoping review was conducted in accordance with the methodological rigors established by the Joanna Briggs Institute, with writing by the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews. In addition to covering traditional research sources, such as databases academics, this review also incorporated gray literature, thus broadening the scope of the analysis to include a variety of perspectives and sources of information. The inclusion of gray literature was carried out through thorough searches on search engines and application stores, aiming to capture a wide range of relevant information. Analysis of the results was conducted independently by two experienced reviewers, ensuring a rigorous and impartial evaluation of the data obtained.

RESULTS

In Table 1 - selection of articles, presented, you can see that 876 articles were identified and after applying the inclusion criteria, 69 studies were selected. Of these selections, 19 studies were dedicated to describing the development and validation of the systems, while another 36 explored the results and impacts of the application of mHealth devices in the management of post-MI patients, thus highlighting the diversity of technological approaches. Furthermore, in the app stores,

a total of 231 relevant tools in the field of cardiology were identified. Within this group, only 20 applications were specifically evaluated because they addressed the topic of IAM, highlighting the need for more research in this specific area. And only 9 studies on applications described the validation of the tool.

CONCLUSION

It was observed that mobile applications have played a significant role as a health education tool in the context of AMI. However, efforts must be made to apply validation methodologies for these technologies before making the tool available to the user.

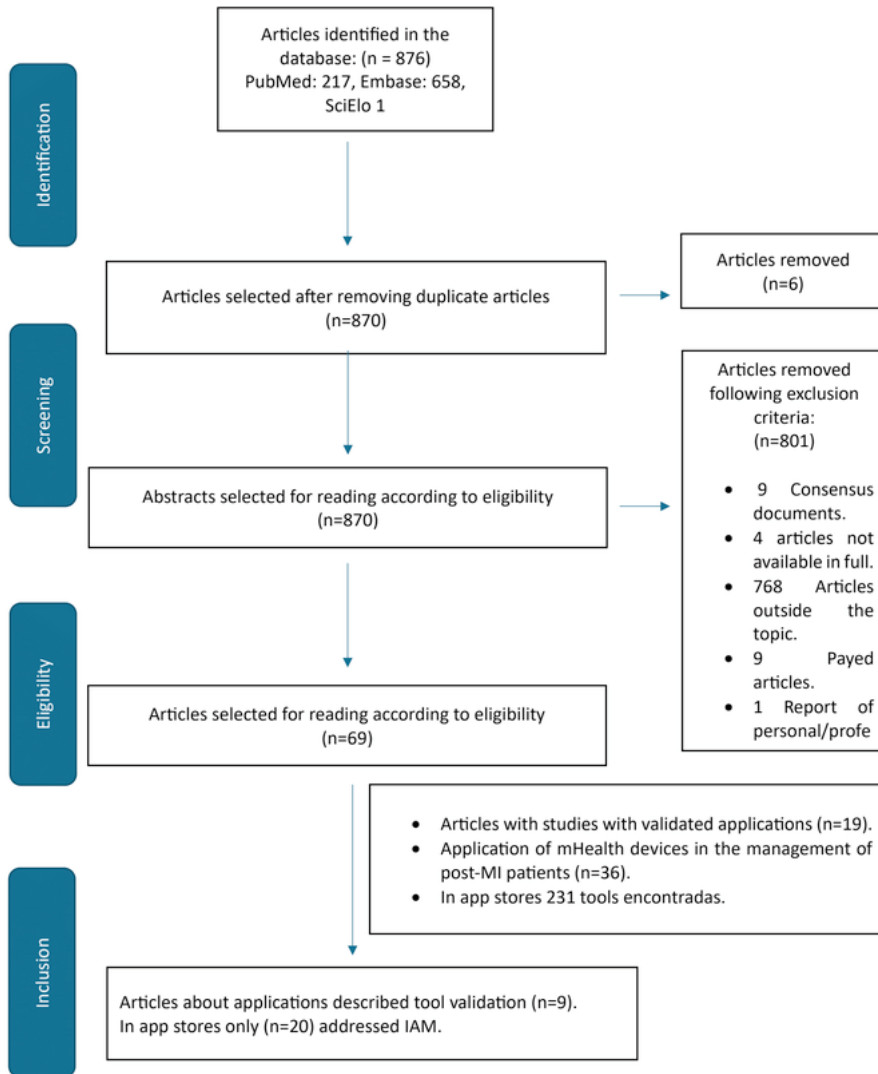


Figure 1: Selection of articles

REFERENCES

1. ORGANIZAÇÃO PAN-AMERICANA DA SAÚDE (OPAS). Doenças Cardiovasculares. [S. l.]: OPAS, [20-]. Disponível em: <https://www.paho.org/pt/topicos/doencas-cardiovasculares>. Acesso em: 05 de Fevereiro de 2023.
2. Brasil. Cardiômetro.(2022). Sociedade Brasileira de Cardiologia. Disponível em: <http://www.cardiometro.com.br>. Organização Pan- Americana da Saúde .(n.d.). Acesso em 22 de Julho de 2022.
3. Sousa, M., Lopes, C., Almeida, A., Almeida, T., Gouveia, B., & Oliveira, S. (2022). Development and validation of a mobile application for heart failure patients self-care. Disponível em: <https://doi.org/10.1590/1980-220X-REEUSP-2022-0315en>. Acesso em: 03 de Março de 2023.