

USE OF HEALTH MOBILE APPS FOR TYPE 1 DIABETES EDUCATION: AN INTEGRATIVE REVIEW

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Abstract

Background: It is estimated that more than 9 million people live with type 1 diabetes worldwide, 20% of whom are children and adolescents. Complex treatment involves interventions with individuals with the disease, their families, and the community. In this context, health mobile apps have become crucial technological tools for diabetes education, promoting self-care, monitoring, recording therapy data, and preventing complications. Purpose: To understand and synthesize the scientific literature on health mobile apps for type 1 diabetes mellitus education. Methods: This is an integrative review, searching for articles in the Medline/PUBMed, Embase, Scopus, Web of Science, Lilacs, and Latindex databases, considering publications published between 2014 and 2024 in Portuguese, English, or Spanish. Results: Twelve studies were included, 42% of which were conducted in European countries. All studies addressed the contributions of apps to disease self-management. Improvements in glycated hemoglobin levels were observed in 50% of the studies. There was a lack of studies addressing regular physical exercise, as well as research conducted among the elderly, as population aging makes it crucial to analyze care strategies for this group. Conclusion: Health mobile apps are technologies that can contribute to the self-management of type 1 diabetes mellitus by promoting glycemic monitoring, assistance with proper nutrition, and insulin administration. Implications: Educational apps have proven to be viable tools, especially in the younger age group, which is more familiar with new technologies. Therefore, it is suggested that healthcare professionals be trained to incorporate these technologies as a complementary strategy for diabetes care.

Keywords: Biomedical Technology; Health Education; Comprehensive Health Care.



