

Review of apps for treating Alzheimer and other neurodegenerative diseases

Branislav Gerazov¹, Milan Rusko², Géza Németh³, Artur Janicki⁴, Robert Sabo², Viki Kevicka², Marian Trnka², Lukovszki Csaba³, Pal Varga³, and Dimitar Taskovski¹

¹Faculty of Electrical Engineering and Information Technologies, Ss Cyril and Methodius University in Skopje, Macedonia

²Institute of Informatics, Slovak Academy of Sciences, Bratislava, Slovakia

³Budapest University of Technology and Economics, Budapest, Hungary,

⁴Warsaw University of Technology, Warsaw, Poland

gerazov@feit.ukim.edu.mk

Abstract

The prevalence of Alzheimer disease (AD) and other neurodegenerative disorders, such as Parkinson disease (PD), Huntington disease (HD), and amyotrophic lateral sclerosis (ALS), is rising globally, with significant consequences for affected individuals, their caregivers, and healthcare systems. The search for complementary or alternative interventions to medical treatment continues to grow, leading to a growing interest in mobile apps as a means of supporting the management and treatment of these conditions. This review aims to synthesize existing literature on mobile apps specifically designed for AD and other neurodegenerative diseases, focusing on their features, efficacy, usability, and acceptability. The variety of apps analyzed, focus primarily on cognitive training, mood monitoring, and disease management education. Some apps show promise in improving cognitive function or reducing caregiver burden, although their effectiveness is still to be firmly validated. The current evidence suggests that mobile apps may be a useful adjunct to traditional care for individuals with AD and other neurodegenerative diseases, but further rigorous research is needed to establish the efficacy and safety of these interventions, highlighting gaps in existing literature and providing recommendations for future studies on this topic.

Keywords

Alzheimer, neurodegenerative disorders, mobile apps, treatment, cognitive training