

From the Controller to the Screen and Everything in Between: A Narrative Review on Video Games in Medicine

Mohammed S. Rais • Eric M. Schorr • Matthew B. Winfield • Farhana S. Rais • Mohammed S. Rais

Abstract

Video games have become a global phenomenon in modern society as a means of entertainment, social interaction, and stress relief. Although they are often associated with negative effects, such as lack of productivity and a sedentary lifestyle, research on video games displays potential benefits in everyday life and medical training. This narrative review provides an overview of video games and its contributions to stress relief, surgical dexterity, and cardiovascular health in the context of medical education and general wellness.

To conduct this study, a comprehensive literature review search was performed utilizing PubMed and Google Scholar, placing emphasis on studies that discussed video games in society, in medicine, and in associations with health. Search terms used included: “video games in medicine,” “video games and mental health,” “video games and cardiovascular health,” “video games and surgery,” and more. Exclusion criteria for this review included papers not written in the native English language and case reports due to inherently small sample sizes.

Video games show promise in relieving stress and increasing cognition, improving surgical dexterity and hand-eye coordination, and improving general cardiovascular health. They pose as a potential implementation to improve health and wellness of medical trainees.

Despite the negative societal implications of video games, there is evidence that they provide health benefits and help hone skills needed in medicine. By reducing stress, preventing long-term disease, and increasing surgical skills and dexterity, video games tap into factors from which all people, especially physicians and medical trainees, can benefit from.