

Physicians' View on Telemedicine during the Corona Outbreak: A Cross-Sectional Study Conducted in Imam Reza Teaching Hospital of Mashhad

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ABSTRACT

Background: Teaching science through serious games is known as a successful method in medicine. To this end, this systematic review is conducted on serious games for patients with liver disease.

Objective: This study aims to conduct a systematic review to assess whether serious games affect liver disease outcomes. In addition, the effect of assessment tools, intervention type, and study quality were investigated.

Material and Methods: Articles were searched in PubMed, Science Direct, Scopus, IEEE, Cochrane, and Embase databases until December 1, 2022. Two independent researchers extracted data and 2295 articles were retrieved. In the end, nine studies were included in the study.

Results: We measured the outcome measures of the type of disease, the duration of the game and intervention, the target group, and the “results of interest”. More than half of the articles included skills training that used the VR method. More than 70% of the studies had significant results and three studies showed a significant change in liver cirrhosis. The maximum playing time of the game was an hour, and the maximum intervention time was two years.

Conclusion: Our study shows the potential of serious games to improve health outcomes in people with liver diseases. However, the results suggest that more intensive interventions should be designed and tested for diabetes and fatty liver disease to support their impact on improving health outcomes. Also, since “Game-Log” is one of the valuable outcome measures in evaluating games, it is suggested that researchers use “Game-Log” data to evaluate more results.

Keywords

Serious Games; Liver Disease; Hepatitis; Gamification

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