

Author's declarative title: *Burn patients' experiences of virtual reality for acute pain management during burn dressing*

Commentary on: Görücü R, Öztekin SD, Filinte G. Virtual Reality During Burn Dressing: Are Patients Satisfied With Their Experiences? *Pain Manag Nurs*. 2025 Nov 3:S1524-9042(25)00292-9. doi: 10.1016/j.pmn.2025.10.007. Epub ahead of print. PMID: 41188116.

Commentary

Implications for practice and research

- *During virtual reality exposure, it is important to maintain good communication and ensure that the equipment is properly fitted for the patient in terms of weight and comfort.*
- *Future research should explore burn patients' perceptions of the long term use of virtual reality for pain management.*

Context

Virtual reality has been used across multiple clinical disciplines to support pain management (E.g. wound care, injections, dentistry, perioperative care, and oncology and drug infusion)¹. Previous systematic reviews in this area have reported mixed evidence regarding the benefits of virtual reality for the management of acute and chronic pain²⁻³. Despite the wide range of applications, there is limited evidence regarding patients' perceptions of its specific use for pain management in patients with burns⁴. Subsequently, a qualitative study by Görücü, Öztekin, and Filinte (2025)⁴ was undertaken to explore patients' experiences of using virtual reality during burn dressing procedures.

Methods

A purposive sample of 10 burn patients was recruited from a city hospital in Istanbul between March and June 2023. Patients were recruited if they were aged between 18 and 65 with a second-degree burn and a pain score less than seven. Patients were excluded if they were functionally unable to use the VR device due to burns location or physical or auditory deficits. Patients watched a 360 virtual reality video based upon nature/underwater scenery during their wound dressing procedure. Individual interviews were undertaken immediately after treatment to

capture the patients' experiences. The verbatim transcripts from the interviews were analyzed by two reviewers independently using descriptive content analysis. Data was categorized into main themes and subthemes under the relevant research questions.

Findings

The 10 included patients had a mean age of 42 years old (40% female) and had second-degree burns between 10 and 18% total skin area. From an interpretive perspective only, the study found that >50% of participants reported the VRhelped distract their attention, reduced pain perception, gave them a sense of satisfaction, and that they would use the headset again during treatment. Three main themes were identified regarding directing attention, communication with the nurse and user experience. Patients described within the subtheme of "directing attention" that they experienced disconnection, relaxation and calming, altered perception of time, enjoyment and distraction. The second theme of communication with the nurse captured concerns regarding lack of communication and awareness. The final theme, user experience, highlighted concerns relating to fear of the dark, dizziness, and the comfort of the virtual reality headset.

Commentary

When interpreting the findings of this paper, it is important to consider the limited exposure patients had to virtual reality therapy, as they were only exposed to a single session. Furthermore, it is important to note that the findings relating to the quantification of patient satisfaction should be interpreted only in the context of the qualitative data, and not as a measure of effectiveness or representative satisfaction. Although recent systematic reviews in this area have demonstrated a positive statistically significant moderate to large effect in reducing patients' pain perceptions for patients with burns for both children and adults compared to standard care or traditional distraction techniques⁵.

When considering the use of virtual reality with burn patients, the themes identified in this study highlight the importance of maintaining clear communication with the patient throughout treatment in order to monitor issues such as anxiety and dizziness. Furthermore, when virtual reality is used for longer clinical sessions, it is important to ensure that the virtual reality headset fits comfortably. Future research should further explore patients' perceptions of virtual reality experiences over longer exposure periods (multiple treatment sessions) and examine its potential use for prolonged pain management in this population.

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Competing interests

None