

**A15**

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Advisor(s):

**How does virtual reality alleviate anxiety?**

This study aimed to assess the feasibility and effectiveness of virtual reality (VR) therapy in reducing anxiety levels among pediatric patients in the emergency department (ED). ED visits often induce and escalate anxiety levels, particularly among pediatric patients. Standard pharmacological treatments for anxiety can have side effects, making alternative therapies like VR an attractive option. VR allows users to immerse themselves in a computer-generated 3D environment where they can interact with virtual surroundings. This pilot study involved 101 participants who received VR interventions for pain and anxiety in the ED. Pre- and post-intervention surveys were administered to assess anxiety ratings and pain scores. The results showed a significant decrease in anxiety levels after VR therapy by 25.8%, with 63.4% reporting no anxiety post-intervention compared to 37.6% pre-intervention. Participants' anxiousness ratings also improved, with a significant increase in participants reporting "Not anxious" post-VR intervention by 25.8% and a significant decrease in moderately anxious and very anxious categories. The median anxiety score decreased from 3 to 0. All participants reported enjoying the VR experience, and providers found it beneficial for their patients. These findings support the potential of VR therapy as a feasible and effective tool for reducing anxiety in pediatric ED settings, improving the overall patient experience and care quality. Further research is needed to explore the long-term outcomes and broader application of VR therapy in different patient populations.