



Research Article *of the Month*

Lambert V, et al. **Virtual reality distraction for acute pain in children.** Cochrane Syst Rev 2020;20:CD010686. doi: 10.1002/14651858.CD010686.pub2

In a Nutshell:

Distraction reduces children's pain and anxiety due to medical procedures. Virtual reality is one type of distraction that may be used during procedures.

This review found that virtual reality may reduce children's pain during procedures, but more well-designed studies need to be completed in order to determine whether virtual reality is superior compared to other forms of distraction.



Virtual reality is one kind of distraction children can use during procedures

The Details:

Virtual reality (VR) creates a simulated environment that children can experience in order to distract themselves from painful stimuli. This systematic review sought to determine VR's effectiveness in reducing children's acute pain.

This review analyzed 17 studies that used VR for medical procedures including: injections, blood draws, wound dressing changes, and physical exercise. These studies compared VR to either no distraction or non-virtual distraction techniques.

Due to the low certainty that the authors of this review had about the quality of the studies analyzed, it is not possible to determine the effectiveness of VR compared to no distraction or non-virtual distraction. There is some low-quality evidence available that finds VR may be more beneficial than no distraction or non-visual distraction. However, methodological challenges with these studies make it hard to rely on the results.

Other systematic reviews completed on VR distraction agree that the current evidence supporting VR for distraction during painful procedures is limited. Higher quality evidence with a large sample size is necessary before definitively drawing conclusions about VR's efficacy in managing children's pain and anxiety during medical procedures.