Abstract

Background:

Pain and anxiety during arteriovenous fistula (AVF) puncture are crucial factors affecting haemodialysis (HD) patients’ quality of life.

Aim:

The aim of this study is to assess the effect of virtual reality (VR) distraction on pain, anxiety, satisfaction and haemodynamics during AVF puncture.

Methods:

This randomised controlled trial study was conducted in a Haemodialysis unit at Mansoura University Hospital. Ninety-six patients were randomly divided into the intervention (*n* = 48) and control (*n* = 48) groups. Six minutes prior to the puncture, patients in the intervention group used VR glasses to experience a 360° ‘Relax River VR tour’, whereas patients in the control group received no intervention.

Results:

Following the intervention, pain, anxiety, systolic blood pressure and heart rate were significantly lower, and satisfaction scores were significantly higher in the intervention group than in the control group (*p* < 0.05).

Conclusion:

VR distraction may help alleviate pain, anxiety and increase satisfaction. It may be considered a safe and cost-effective non-pharmacological therapy for HD patients undergoing AVF puncture.