Abstract ID: P06:05
Abstract type: Poster

A Systematic Review of Using Virtual Reality Technology in Palliative Care

J. Mo[1], O. Minton[2], S. Tavabie[3], M. Taubert[4], P. Stone[5], N. White[5]

———

[1]University College London, Division of Psychiatry, London, United Kingdom, [2]Sussex Cancer Centre University Hospitals Sussex, Palliative
Medicine, Brighton, United Kingdom, [3]St Josephs Hospice, London,
United Kingdom, [4]Velindre NHS Trust, Cardiff, United Kingdom,
[5]University College London, Marie Curie Palliative Care Research Department, London, United Kingdom

Background: Virtual Reality (VR) has the potential to ease patient symptomatology but its efficacy is not known.

Aim: A systematic review on the feasibility and effectiveness of VR intervention in a palliative care setting.

Methods: Medline, Embase, AMED, PsycINFO, CINAHL, Cochrane Central Register of Controlled Trials and Web of Science were searched from inception up to March 2021. Studies that reported on the use of VR in an adult (over 18 years) palliative population were included. The ROB-2 (for RCTs) and ROBINS tools (for non-RCTs) were used to assess risk of bias. The GRADE tool assessed the quality of the evidence. The standardised mean differences were calculated from the pre- and post- data of the Edmonton Symptom Assessment System-revised (ESAS-r). A DerSimonian-Laird random effects model meta-analysis was conducted. Registered: PROSPERO (CRD42021240395, 03/03/2021)

Results: 8 studies were included, 3 were included in the meta-analysis. All studies had at least some concern for risk of bias. 225 patients used
the VR technology. Patient diagnoses included cancer (3/8; 37.5%), multiple (3/8; 37.5%), advanced heart disease (1/8; 12.5%), and dementia (1/8; 12.5%). 44% (97/219) were male; the mean age ranged from 47 to 85 (years). Recruitment was feasible and retention rates ranged between 55% and 100%. Overall, participants reported a positive experience with using VR and were happy to repeat the experience. Discomfort and technical issues were recorded in 4/7 studies (57%). The meta-analysis showed limited evidence for VR across the domains of the ESAS-r. The quality of the evidence was rated as low to very low.

Conclusions: VR in palliative care is feasible and has varying acceptability. Limited sample sizes and low-quality studies mean that the efficacy of VR is difficult to draw definitive conclusions on. Existing studies provide valuable insights and guidance into how to set up VR in clinical practice settings and the challenges to expect.