Virtual Reality–Based Resilience Programs

Feasibility and implementation for inpatient oncology nurses

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Oncology nurses, like their colleagues in emergency medicine, intensive care, and behavioral health, are at risk for elevated levels of stress, burnout, and compassion fatigue (CF) (Cañadas-De la Fuente et al., 2018; Epp, 2012; Rushton, Batcheller, Schroeder, & Donohue, 2015). The experience of challenging patient cases, suffering, and death affects nurses and other healthcare providers emotionally, physically, and spiritually (Flarity, Moorer, & Jones-Rhodes, 2018; Gentry, 2016; Neumann et al., 2018). Many studies have documented a high prevalence of CF and its two components, burnout and secondary traumatic stress, in nurses, including those specializing in oncology (Flarity, Gentry, & Mesnikoff, 2013, Flarity, Nash, Jones, & Steinbruner, 2016; Gómez-Urquiza et al., 2016; Perry, Toffner, Merrick, & Dalton, 2011). Secondary traumatic stress is defined as trauma experienced by witnessing the pain and suffering of others (Beck, 2011). Burnout includes emotional exhaustion, depersonalization, and reduced personal accomplishment and is greatly affected by the work environment (Mashlash & Mayer, in press; Rushton et al., 2015). CF is associated with adverse health outcomes, absenteeism, increased turnover, and decreased satisfaction for nurses and decreased safety and satisfaction for patients (Cañadas-De la Fuente et al., 2018; Hall, Johnson, Tsipa, & O’Connor, 2016; Perry et al., 2011). The cost of burnout-related attrition is high. Replacing one nurse is estimated to cost six to nine months’ salary (NSI Nursing Solutions, Inc., 2019). Organizations that implement burnout interventions may experience reduced turnover, increased retention, and increased patient satisfaction (Henry, 2014).

Resilience measures, such as self-care activities, may mitigate the negative effects of occupational-related burnout (Flarity et al., 2018; Henry, 2014; Rushton et al., 2015). In healthcare institutions, such interventions have included training programs to improve individual staff members’ abilities to practice mindfulness, mental rehearsal, positive self-talk, communication skills, and tactical breathing exercises, all of which are associated with decreased acute stress and improved technical and nontechnical performance (Anton, Bean, Hammonds, & Stefanidis, 2017; Lauria, Rush, Weingart, Brooks, & Gallo, 2016; van Agteren, Iasiello, & Lo, 2018).

The Role of VR Interventions in Mitigating Burnout

Virtual reality (VR) is a head-mounted technology that creates an interactive and engaging simulation for the user so that he or she believes the experience is taking place in reality. VR is being explored to...