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#400WORDS: KNOWLEDGE + ACTION

## The use of VR in preceptorship programmes: a critical review of the literature

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### Background

Preceptorship was introduced in 1990 as part of the 'Project 2000' nurse education reforms in the UK (Caldwell et al., 2017), defined as 'a period of structured transition for the newly registered practitioner during which [they] will be supported by a preceptor, to develop their confidence as an autonomous professional, refine skills, values and behaviours and to continue on their journey of life-long learning' (Department of Health, 2010: p11).

The Council of Deans (2016) call on nurse educators to implement innovative pedagogical methods to encourage motivation, and nurture life-long learning, and pedagogically verified information technology should be exploited for learning and development (Preker et al., 2019; Butt et al., 2018; Wen and Ma, 2012). The advancement of technology in recent years has seen Virtual Reality (VR) commonplace in undergraduate nurse curriculum (Sharman, 2021; Chang and Lai, 2021).

### Method

A structured literature review was undertaken to identify the current evidence base for virtual reality (VR) use within preceptorship programmes.

### Results

The NHS Knowledge and Library Hub databases were searched for 'virtual reality', 'precept\*' and 'newly qualified nurse\*'. Three hundred and forty-six full text articles were found published in English in the last ten years. These were screened to identify 16 articles that were used in this review. No articles were found that directly associated VR use in nurse preceptorship training, however the 16 articles were utilised to inform the discussion below.

### Discussion

The literature suggests that VR is underpinned by a range of teaching methodologies including constructivism (Chen, 2009), experiential (Chang and Lai, 2021), and transformational learning theory (Kleinheksel, 2014).

A wealth of evidence conducted in the pre-registration nursing education setting suggests that VR could be utilised to improve knowledge, skills, and attitudes of learners (Aggarwal et al., 2010; Oermann and Gaberson, 2014). VR as a teaching tool has been validated as a method of bridging the liminal space between higher educational institutions and clinical practice (Weeks et al., 2019), offering diverse learning opportunities including clinical skills, leadership, communication, critical thinking (Forsyth and Jenson, 2012; Bayram and Caliskan, 2020), and even empathy (Khalaila, 2014, Adefila et al., 2016; Hannans et al., 2021). VR also offers several practical benefits such as overcoming practicum location issues (Luctkar-Flude and Tyerman, 2021), a prevalent issue during the pandemic. A comparison study between VR and traditionally taught clinical skills sessions also suggest VR offers economic and ecological savings (Chang and Lai, 2021). It can therefore be surmised that the use of VR should be appraised by stakeholders as this teaching tool could contribute to an effective preceptorship programme, which in turn may reduce transition shock and subsequent burnout.

## Conclusion

A critical review of the literature has revealed a clear need for further research on VR in post-registration preceptorship education programmes.

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