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ABSTRACT

Background: Agitation after Traumatic brain injury (TBI) is a common behavioral problem which threatens the safety of patients and caregivers, disrupts the rehabilitation process, and becomes a major stress on caregivers. Preferred music as an environmental intervention can reduce agitation by inducing positive memories and emotions and relaxation in a patient.

Purpose: The purpose of this study was to evaluate the effects of preferred music intervention on agitation for patients after TBI compared to those of classical “relaxation” music intervention.

Methods: The study was a crossover design within subjects using a non-probability and purposive sampling method. The sample consisted of 14 patients from the acute rehabilitation unit in the University of Pittsburg Medical Center (UPMC) who suffered from cognitive impairments after severe brain injury and exhibited agitated behaviors. Subjects were divided into two groups. The first group listened to classical “relaxation” music first and then to preferred music. The second group listened to the music in reverse

order. The scores of the Agitated Behavior Scale (ABS) were calculated in 1 hour increments (i.e., one hour before and immediately after listening and then one hour later). Data were analyzed using a mixed model ANOVA, a repeated measures ANOVA and a t-test.

Results: There was a significantly greater effect of preferred music intervention compared to the effect of classical “relaxation” music ($p = .046$). The preferred music significantly reduced agitation ($p = .01$) while the classical “relaxation” music did not ($p = .76$). In particular, the patients’ physical agitation ($p = .006$) and cognitive agitation ($p = .008$) were significantly reduced after preferred music intervention.

Conclusion: According to the findings, preferred music has a potential to provide therapeutic approaches for care of agitated patients after TBI. Additionally, positive effects of preferred music on agitation can give health care providers and patients’ family members motivation to explore more familiar environments for managing agitation.