Abstract

**Background and Purpose:** Prolonged patient immobilization after the Transcatheter Aortic Valve Replacement (TAVR) procedure leads to poor patient outcomes, including deep venous thrombosis, pressure ulcers, delirium, and sarcopenia. Nurses play a critical role in facilitating early patient mobilization, and deficits in nurses’ knowledge may delay early mobility in TAVR patients. This study examined the effectiveness of a multi-pronged education intervention on the existing clinical practice guidelines on the nurses’ knowledge, attitudes, and behaviors of early patient mobilization.

**Methods:** The study took place on a cardiac step-down unit and involved a pre-and post-test survey design to assess nurses’ knowledge, attitudes, and behaviors regarding early mobilization. The sample included 23 nurses (91% female, 4.3% male, 96% with BSN degree, and 39% with 1-3 years of nursing experience). The impact of the education intervention on patients’ early mobilization was assessed by reviewing 112 electronic patient charts for 12 weeks pre-and post-intervention based on nurses’ documentation. The Wilcoxon rank-sum test and Chi-Square test were used to analyze the pre-and post-data. Significant effects were identified at $p<.05$.

**Results:** Nurses’ pre-intervention scores were computed for knowledge ($M=14.61$, $SD=2.54$), attitudes ($M=30.30$, $SD=4.74$), and behaviors ($M=41.57$, $SD=7.58$). Nurses’ knowledge ($M=18.13$, $SD=2.46$), attitudes ($M=38.91$, $SD=5.99$), and behaviors ($M=53.09$, $SD=7.12$) increased significantly in response to the educational protocol. Pre-intervention patients’ chart review revealed a 52% adherence rate with early mobilization of TAVR patients. The results indicated a significant increase of 89% adherence rate with early patient mobilization after the educational intervention.

**Conclusion:** An educational intervention is critical for improving nurses’ knowledge, attitudes, and behaviors regarding early mobilization and for reducing prolonged post-TAVR patient immobilization.

**Implications:** A patient-centered approach is driven when nurses apply evidence-based clinical practice by implementing standardized protocols and guidelines, which can lead to better patient outcomes.

**Keywords:** early mobility, educational protocol, nursing education, patient mobilization, TAVR