Abstract:

Highlights: Ultrasonography is an important tool for vascular access practice. Ultrasound should be used for vascular access assessment and insertion. Ultrasonography should be incorporated into formal nursing education curriculum and simulation training.

Background: This study analyzed nurse practitioner students’ knowledge of ultrasound-guided vascular access after the implementation of an educational and simulation course.

Methods: Nurses’ knowledge of ultrasound-guided peripheral intravenous catheter placement was analyzed using a ten-item questionnaire both before and after course. A sample of bachelor’s degree-prepared nurses voluntarily participated in this study. Ultrasonography simulation was carried out with two handheld ultrasound devices and two ultrasound blocks.

Results: The findings demonstrated that there is a statistically significant increased comprehension of ultrasound-guided vascular access after simulation courses.

Conclusion: This study illuminates the need for formal education both in academic curriculum and through simulation to improve ultrasound-guided vascular access knowledge for patient care.

Reference: