Abstract:

Establishing reliable peripheral intravenous access is one of the most common procedures performed daily by nurses across clinical settings in the hospital. The insertion of peripheral intravenous access devices is usually guided by palpation, direct visualization, landmark technique, or by trial and error. The invasive nature of the procedure accompanied by the associated risks requires successful cannulation on the initial attempt. In an effort to decrease the number of peripheral venous access attempts in patients with difficult venous access, a course was developed to educate a cohort of registered nurses on the basic principles and use of ultrasound. After successful completion of the course, each registered nurse was required to perform a minimum of 10 proctored successful ultrasound venous peripheral intravenous catheter insertions. The first attempt success rate for the proctored ultrasound venous peripheral intravenous catheter attempts was 83%, which was higher than that reported in the literature (20%-50%). Overall, the program effectively demonstrated a decrease in the number of attempts required to insert a peripheral venous catheter in patients with difficult venous access.

Reference: