# Role of Peer-Assisted Learning (PAL) for Point of Care Ultrasound in Nursing Education

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Introduction

The utilization of ultrasound for placement of peripheral intravenous cannulation is now recognized within the scope of practice of registered nurses. Challenges facing though is learning this predominantly physician-performing technique as a new skill to

Ultrasound Novice Nurses Learning POCUS
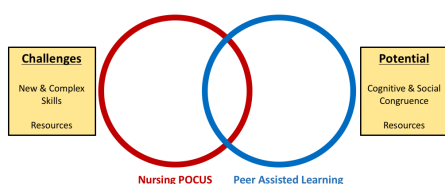
Peer-Assisted Learning (PAL) is a new method of teaching used in various disciplines. Peers, wherein having similar social groupings, are able to achieve better learning from each other. Tutors and learners having a cognitive congruency shown to achieve the positive outcomes of the PAL.

Near-Peers (NP) Learning and **Same-Level Peers (SLP)** Learning are types of PAL in reference to seniority. NPs are trainee one or more years senior to another trainee of the same educational background while SLP is all at same level.

Objective of the Study

To compare the competency of RNs who were trained and assessed by the principal investigator (designated as NP) versus RNs who were trained and assessed by NP (designated as SLP).

Methodology

We designed a prospective quasi-experimental research to evaluate the competency of ultrasound novice nurses who learn ultrasound guided peripheral intravenous cannulation (UG-PIVC) from near peers (NP) versus same level peers (SLP).

Competencies are defined as the time to complete the UG-PIVC task on a standardized mannequin. A visual aid was created to scaffold peer learning and teaching.
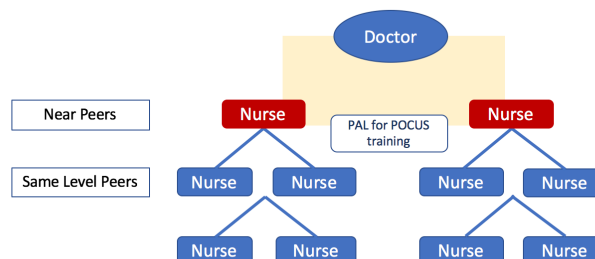
Two senior nurses were trained by a recognized POCUS expert physician to perform UG-PIVC on the mannequin. They were designed as NP and trained a group of 8 nurses. After training, these 8 nurses were designated as SLP and subsequently trained another group of 12 nurses. The competencies of these two group of nurses were recorded and compared using the t-test

Results
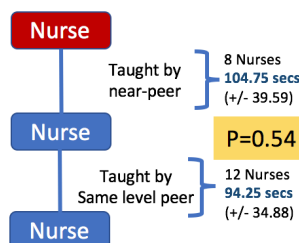
Nurses who were taught by the NP and SLP completed the UG-PIVC task with a mean of 104.75 seconds (SD 39.59) and 94.25 seconds (SD 34.88) respectively, p = 0.540.

Conclusion

There is **no statistical significance** in the time to task completion for both groups. The result suggests that ultrasound novice nurses could learn UG-PIVC skills from same level peers as effectively, if not more, compared to learning from near peers. PAL has the potential to alleviate faculty teaching pressure in nursing POCUS education.

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