

**COMPETENCY, CONFIDENCE, KNOWLEDGE RETENTION:  
IS SIMULATION THE ANSWER?**

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**Identification of the Problem/overview:** Annual competency assessment for RN's is a regulatory requirement. The traditional method of assessing annual competence has been objective testing and observation. Learning theories suggest adults learn best by doing. Could changing our assessment methodology increase learning, confidence and improve retention of knowledge about high risk/low volume events in the Perianesthesia environment?

**EBP Question/Purpose:** Can high fidelity simulation (HFS) of high risk/low volume events increase learning, confidence and improve knowledge retention in the Perianesthesia nurse?

**Methods/Evidence:** Kolb's theory of experiential learning was used for this EBP project. A literature review using CINAHL, PubMed, and OVID databases yielded 15 articles. The review of literature indicates that adults learn best by hands on participation. Adult Learning Theory states that 90% of what we say and do is retained, while only 20% of what we read and hear is remembered. Therefore, simulation offers opportunity to coalesce didactic learning with hands on experience. Simulation can equip learners with skills that are transferable to clinical settings that lead to improved self-confidence and clinical judgment. Three high risk, low volume perianesthesia scenarios were created for simulation. Sixty-two nurses attended annual skills fair where these scenarios were enacted. A facilitator was present during each scenario followed by a video-taped debrief. A written evaluation of the experience was obtained.

**Significance of Findings/Outcomes:** A Likert scale (0-5) was used to measure self-perception of learning and confidence. The comparative data collected in 2016 and 2017 demonstrated increases in learning (4.8 to 4.95) and in confidence (4.7 to 4.86). Qualitative data was also collected using open ended questions. Written comments included, "I learn more with hands on teaching", "Hands on and discussion after is beneficial". "Acting it out makes it easier to commit to memory", "Definitely retained information from last year", "Reviewing emergency situations helps me to remember throughout the year".

**Implications for Perianesthesia Nurses and Future Research:** HFS is of value to Perianesthesia nursing practice and education. Nurses demonstrate increased learning, confidence, and retention of information using simulation. Future studies are needed to determine if HFS can be effective as a tool for orientation of novice Perianesthesia nurses.