SELF-ASSESSED COMPETENCIES OF NURSES WORKING IN
OBSTETRIC AND NON-OBSTETRIC PERIANESTHESIA CARE UNITS

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Introduction: The current level of recovery care following cesarean delivery may not meet
guidelines and standards put forth by ASPAN and ASA.1-3

Identification of the Problem: Standards of perianesthesia nursing care vary between obstetric
(OB) and non-obstetric (non-OB) settings at a tertiary care center.

Purpose of the Study: The overarching goal of this study was to guide development of
curricula for maintaining, improving, and documenting postanesthesia nursing competencies,
particularly in the obstetric setting. Specifically we compared individual registered nurses'
perianesthesia self-reported training, competencies, and confidence to manage life-threatening
situations4 among nurses providing Phase I PACU care in OB and non-OB PACUs.

Methodology: 243 nurses were sent a 15-minute electronic survey assessing nursing
competencies derived from ASPAN and ASA guidelines. Self-assessed education, competency,
and encounters with 14 topics related to postanesthesia nursing included BLS, ACLS, neonatal
resuscitation, ASPAN standards, Joint Commission guidelines, intravenous access, malignant
hyperthermia, mask ventilation, oral airway insertion, sleep-disordered breathing, hemodynamic
monitoring, ECG interpretation, and neurologic assessment. Nurses’ responses for encounters
and competency within each topic were grouped to represent three possible priorities for future
education and assessment interventions: (1) high priority focus on curriculum, (2) high priority
focus on assessment, or (3) low priority focus on curriculum and assessment. Fisher exact tests
for frequency data and Wilcoxon rank sum tests for data from Likert scales were use for bivariate
analyses; all tests were two-tailed with a P-value of 0.05 indicating a potentially statistically
significant relationship. All analyses were conducted with SAS Version 9.1 (SAS Institute Inc,
Cary, NC).

Results: The response rate was 52%. For obstetric postanesthesia nursing, curriculum should be
the focus of all topics except for BLS and neonatal resuscitation. Oxygen administration and
phlebotomy represented low priority interventions for curriculum and assessment for all nurses.
Surgical postanesthesia nursing should emphasize skills assessment for ACLS and malignant
hyperthermia, with low priority focus on the remaining topics. Both nursing groups indicated the
need for curriculum development and skills assessment for arranging debriefing sessions for the
care team when needed. (Table 1)

Discussion: Nurses almost uniformly agree that ASPAN/ASA competencies and skills are
relevant to their work, even if the corresponding situations are rarely encountered. This survey
demonstrated that meeting professional standards for recovery of surgical patients varied
significantly among obstetric and surgical PACU nurses as measured by self-assessments of
knowledge and skills, encounters, and competencies. Our study findings also indicated that the
skill sets among surgical and obstetric PACU nurses were not congruent, which is consistent
with previous work (Wilkins et al., 2009). Although the results of this study may represent
important targets for improving postanesthesia nursing education and competency,
methodological and generalizability limitations must be considered with any voluntary web-
based survey restricted to a single institution: (1) generalizability may be limited by response rate 52%. (2) The survey results may not apply to other non-tertiary care settings. (4) There may be other important differences between surgical and obstetric PACU nurses that were unable to be detected due to sample size limitations. (5) Extensive multivariate analyses in a sample of 122 eligible responders were not possible. (5) The survey instrument was investigator-devised and remains unvalidated.

**Conclusion:** Future research in knowledge-based (didactics) and skills-based (simulation) programs, including maintenance and assessment of skills, should be tailored to the specific and unique circumstances of each perianesthesia care unit.

**Implications for Perianesthesia Nurses and Future Research:** This study supports partnering with obstetric nursing and anesthesiology colleagues to develop a specialized curriculum for safe obstetrical perianesthesia practice. Research topics include competency and evaluation of patient outcomes, and post-implementation surveys of nurses’ self-assessed competency following implementation of a specialized curriculum.

1. 2008-2010 Standards of Perianesthesia Nursing
2. Anesth Analg 2002:96;742