PACU Pioneers Around the World: Nursing Quality Improvement Strategies in Kenya

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Introduction: Currently, five billion people world-wide do not have access to safe surgical, anesthesia, and perianesthesia nursing care. Global efforts to scale up delivery of safe, context-relevant nursing care need to be tailored to environments of low and middle income countries (LMICs).

Identification of the Problem: Literature on Post-Anesthesia Care Units (PACUs) and perianesthesia nursing in LMICs is sparse or non-existent. Understanding the state of perianesthesia nursing practices is a first step toward improving safe and patient-centered care in LMICs.

QI Question / Purpose of the Study: The goal of this work was to develop quality improvement (QI) tools to assess the delivery of perianesthesia nursing care in PACUs in a low-resource setting. These tools were piloted by collecting data from the PACU in a tertiary referral hospital in Kenya.

Methods: Four QI tools were developed using a multidiscipilnary team in order to assess the quality of nursing care in the PACU at a 350-bed Kenyan hospital. Resources from leading global health organizations and the American Society of PeriAnesthesia Nurses (ASPAN) were used to guide this process. The QI tools included: facility assessment, patient observation, semi-structured interview guide for perianesthesia nursing, and semi-structured interview guide for anesthesia providers. The 90-question Facility Assessment was developed to understand the available resources in PACU. The patient observation tool (POT) captured data including patient demographics, events, interventions, length of stay, and delays in PACU. All PACU nurses were interviewed using a semi-structured interview guide and a validated tool to evaluate the quality of nursing work environment: the Practice Environment Scale - Nursing Work Index.

Outcomes / Results: Average PACU length of stay was 1 hour 46 minutes, ranging from 30 minutes to 5 hours. Delays in discharge from PACU occurred in 58% of patients. Top reason for delay was the ward nurse was not available to pick up the patient. Nurse documentation of vital signs was frequently missed. On average, 94% of patients' respirations, 34% of temperatures, and 36% of blood pressures were not documented.

Discussion / Conclusion: Use of QI tools, with support of a multidisciplinary team, offer practical methods to assess perianesthesia nursing, promote safe PACU practices, and gather evidence for setting standards in LMICs.

Implications for perianesthesia nurses and future research: Further iterations of the tools and additional trials should be implemented in other LMIC facilities.