

Assessment of Nursing Deficiencies in the Postoperative Care of Microsurgical Patients

Justin M. Broyles MD; J. Michael Smith, BS; Devin Coon, MD, MSE; Steven C. Bonawitz, MD

Background: Close monitoring is crucial following successful flap surgery. Ideally, all patients undergoing microvascular reconstruction should be evaluated in a dedicated unit with specialized nurses; however, this is not always possible and there is often a varied skill mix of nursing staff. The purpose of this study was to identify deficiencies in microsurgical education among nursing staff in an effort to target future educational efforts.

Methods: A 22-question electronic survey was sent out to all nursing staff at three sampled hospitals that manage microsurgical patients. Statistical analysis was performed to identify factors that predicted aptitude, comfort, and deficiencies in the treatment of microsurgical patients.

Results: Of the 160 registered nurses sampled, 106 completed the survey completely (66%). A total of 59 nurses worked at a tertiary care academic institution (55%) and the remaining 47 nurses worked at one of two community hospitals (45%). Regardless of whether the provider self-identified as a critical care or floor nurse, nurses from an academic medical center were significantly more comfortable with their ability to care for microsurgical patients when compared with their community medical center counterparts ($p < 0.05$). Furthermore, regardless of whether the provider self-identified as a critical care or the hospital setting where they worked, nurses with greater than 5 years of experience were significantly more comfortable with their ability to care for microsurgical patients when compared with nurses who had less than 5 years of experience ($p < 0.05$).

There was no correlation with comfort level and the ability to interpret various postoperative flap-monitoring technologies between intensive care unit nurses and floor nurses. **Conclusions** We have identified that nurses with less than 5 years of experience or nurses in a community setting may be less comfortable with the care of postoperative microsurgical patients, especially if newer flap monitoring technologies are employed.

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