

NURSE STAFFING

A HIGHER PROPORTION OF RNS AND RPNs ON INPATIENT UNITS MAY RESULT IN MORE POSITIVE PATIENT OUTCOMES

Source

McGillis Hall, L., Doran, D., Baker, G. R., Pink, G. H., Sidani, S., O'Brien-Pallas, L., & Donner, G. J. (2003). Nurse staffing models as predictors of patient outcomes. *Medical Care*, 41(9), 1096-1109.

Objective

To evaluate the impact of different nurse¹ staffing models on patient outcomes of functional status, pain control and patient satisfaction with nursing care.

Background

With hospital restructuring in the last decade came many changes in the mix of staff providing nursing care to patients, including the introduction of unregulated workers (URWs). An increasing number of studies have examined the impact of these changes on nursing outcomes. For the most part, this research has explored the negative outcomes of nursing care such as patient mortality and the occurrence of adverse events such as falls, medication errors and hospital-acquired infections. There has been less focus on the positive and expected effects of nursing care such as pain management and improvements in physical, mental or emotional functioning.

Methods

- This repeated-measures study was conducted in 19 teaching hospitals in Ontario, Canada.
- The patient sample was composed of 742 medical-surgical patients and 741 obstetrical patients.
- Nurse staffing was categorized into four models according to the mix of nursing staff employed on the unit: 1) RNs and RPNs; 2) all RNs; 3) RNs, RPNs and URWs; and 4) RNs and URWs.
- Patient outcomes included functional status, pain and patient perceptions of nursing care.
- Most variables were measured within 48 hours of admission (within 8 hours for obstetrical patients), at discharge and six weeks following discharge.
- The patient's age, health status on admission, complexity of illness and other factors were taken into consideration when evaluating patient outcomes.

¹ In this study, 'nurse' refers to registered nurses (RNs) and registered practical nurses (RPNs). The title for a practical nurse in Canada, with the exception of Ontario, is licensed practical nurse (LPN). In Ontario, the title for a practical nurse is registered practical nurse (RPN).

Principal Findings

- A higher proportion of regulated nursing staff (that is, RNs and RPNs) on the unit was associated with the following outcomes at hospital discharge:
 - improved independence in functioning and improved social functioning for medical-surgical patients; and
 - increased satisfaction with nursing care for obstetrical patients.

What do the Study Findings Mean?

- An important role of RNs and RPNs is assisting patients to recover their ability to function independently after being ill and to manage symptoms such as pain.
- Maintaining or increasing the proportion of RNs and RPNs on medical-surgical and obstetrical units may result in positive outcomes for patients.
- Increasing the proportion of URWs on nursing units may lead to less positive outcomes for patients.

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