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Differences in nursing practice environment among US acute care unit types: A descriptive study

JiSun Choi [a,*], Diane K. Boyle [b]

[a] College of Nursing Science, Kyung Hee University, Seoul, South Korea
[b] Fay W. Whitney School of Nursing, University of Wyoming, Laramie, WY, United States

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ABSTRACT

Background: The hospital nursing practice environment has been found to be crucial for better nurse and patient outcomes. Yet little is known about the professional nursing practice environment at the unit level where nurses provide 24-hour bedside care to patients.
Objectives: To examine differences in nursing practice environments among 11 unit types (critical care, step-down, medical, surgical, combined medical–surgical, obstetric, neonatal, pediatric, psychiatric, perioperative, and emergency) and by Magnet status overall, as well as four specific aspects of the practice environment.
Design: Cross-sectional study.
Settings: 5322 nursing units in 519 US acute care hospitals.
Methods: The nursing practice environment was measured by the Practice Environment Scale of the Nursing Work Index. The Practice Environment Scale of the Nursing Work Index mean composite and four subscale scores were computed at the unit level. Two statistical approaches (one-way analysis of covariance and multivariate analysis of covariance analysis) were employed with a Tukey-Kramer post hoc test.
Results: In general, the nursing practice environment was favorable in all unit types. There were significant differences in the nursing practice environment among the 11 unit types and by Magnet status. Pediatric units had the most favorable practice environment and medical–surgical units had the least favorable. A consistent finding across all unit types except neonatal units was that the staffing and resource adequacy subscale scored the lowest compared with all other Practice Environment Scale of the Nursing Work Index subscales (nursing foundations for quality of care, nurse manager ability, leadership, and support, and nurse–physician relations). Unit nursing practice environments were more favorable in Magnet than non-Magnet hospitals.
Conclusions: Findings indicate that there are significant variations in unit nursing practice environments among 11 unit types and by hospital Magnet status. Both hospital-level and unit-specific strategies should be considered to achieve an excellent nursing practice environment in all hospital units.

What is already known about the topic?

- The nursing practice environment is an important component of better nurse outcomes, such as nurse job satisfaction and retention.

* Corresponding author at: 26 Kyungheedae-ro, Dongdaemun-gu, Seoul 130-701, South Korea. Tel.: +82 2-961-0306.
E-mail address: jchoi14@khu.ac.kr (J. Choi).

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- Researchers to date have investigated the nursing practice environment at either the individual nurse or the hospital level.

What this paper adds

- US acute care hospital units have favorable practice environments overall.
- The nursing practice environment is the most favorable on pediatric units and the least favorable on adult combined medical–surgical units.
- There are significant differences in professional nursing practice environment among 11 acute care unit types overall, as well as four core aspects of the PES-NWI subscales.

1. Background

Hospitals in the United States (US) are increasingly challenged to improve patient care quality and safety while undergoing transformations in health care delivery and financing systems, changes in budgetary and regulatory constraints, and rapid increases in the aging population. In response to these major challenges, many quality improvement programs and initiatives have been developed and implemented at the local, state, and national levels. Because of these efforts, and more importantly, because nursing has been recognized as a major contributor to better quality of patient care (Institute of Medicine, 2004), increased attention has been given to creating positive work environments for registered nurses (RNs) in US acute care hospitals (Aiken et al., 2008; Lake, 2007; Schmalenberg and Kramer, 2008).

Over more than three decades, the nursing practice environment has been investigated extensively and globally to address concerns about nursing workforce shortages and patient care quality and safety. Early researchers identified organizational attributes that are particularly important for nurse satisfaction and retention, including unit self-governance, professional nurse autonomy and responsibility for patient care quality, adequate nurse staffing, flexible scheduling, and visible and effective nursing leadership (Kramer and Hafner, 1989; McClure et al., 1983). Building on this research has been challenging because the nursing practice environment is complex to conceptualize and measure. Lake (2002) defined the nursing practice environment as "the organizational characteristics of a work setting that facilitate or constrain professional nursing practice." She developed the Practice Environment Scale of the Nursing Work Index (PES-NWI) as a core set of five dimensions of the nursing practice environment: (1) nurse participation in hospital affairs; (2) nursing foundations for quality of care; (3) nurse manager ability, leadership, and support of nurses; (4) staffing and resource adequacy; and (5) collegial nurse–physician relations. The PES-NWI has been the only measure endorsed by National Quality Forum (NQF, 2012) as a nursing practice environment measure, and its use has grown in measuring various practice settings in multiple countries (Warshawsky and Havens, 2011).

A large and growing number of studies using the PES-NWI have found that a favorable nursing practice environment was related significantly to better nurse outcomes, including higher nurse job satisfaction, less burnout, greater nurse empowerment, and lower intent to leave (Laschinger, 2008; Li et al., 2012; Patrician et al., 2010). Further, researchers have found better patient outcomes in more favorable practice environments, including higher nurse-rated quality of care, lower mortality and failure to rescue rates, and higher patient satisfaction (Aiken et al., 2008; Kutney-Lee et al., 2009). Researchers have demonstrated that better nurse and patient outcomes exist in American Nurses Credentialing Center (ANCC) Magnet® designated hospitals – vs. non-Magnet hospitals – because of their superior nursing practice environment to support patient care delivery (Drenkard, 2010; Kelly et al., 2011). Many US hospitals consider embarking on the Journey to Magnet Excellence™ as a highly effective strategy to improve hospital nurse practice environment as well as quality patient care. As of August 2013, 386 (7%) of US hospitals were ANCC Magnet designated (ANCC, 2013).

To date, many of the studies on the nursing practice environment with the PES-NWI have been conducted at either the individual nurse level or the hospital level. More evidence is needed about professional nursing practice environment at the unit level, the smallest organizational unit amenable to management efforts that affect nurse and patient outcomes in acute care hospitals. Relatively few researchers have investigated the relationship of unit-level nursing practice environment with unit nurse and patient outcomes. In a study in which researchers analyzed data from 42 units in four Belgian hospitals by using a multilevel modeling approach, higher nurses' ratings of quality of care at the unit level were associated with higher ratings of unit-level nurse management, but associated with lower ratings of hospital-level management and organizational support (Van Bogaert et al., 2010). In a recent study using data from a multi-country nurse workforce study, three aspects of nursing practice environment (promotion of care quality, doctor–nurse collegial relations, and managerial support for nursing) were examined in relation to three dimensions of nurse burnout (emotional exhaustion, depersonalization, and personal accomplishment) by testing a series of multivariate multilevel probit models (Li et al., 2012). Note that these researchers did not report the original subscale names of the PES-NWI and did not include all of the three-subscale items: nursing foundations for quality of care (promotion of care quality, 9 items), collegial nurse–physician relations (doctor–nurse collegial relations, 7 items), and nurse manager ability, leadership, and support of nurses (managerial support for nursing, 4 items). Overall, lower ratings of the nursing practice environment were significantly related to higher nurse burnout at both the unit level and the hospital level. The relationships of each of three aspects of nursing practice environment to nurse burnout were not consistent at three different levels (unit, hospital, and country). For example, all three dimensions of nurse burnout were significantly related to promotion of care quality at both levels (unit and hospital), but to

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