On the Threshold of Safety: A Qualitative Exploration of Nurses' Perceptions of Factors Involved in Safe Staffing Levels in Emergency Departments

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Introduction: The emergency department is a unique practice environment in that the Emergency Medical Treatment and Active Labor Act (EMTALA), which mandates a medical screening examination for all presenting patients, effectively precludes any sort of patient volume control; staffing needs are therefore fluid and unpredictable. The purpose of this study is to explore emergency nurses' perceptions of factors involved in safe staffing levels and to identify factors that negatively and positively influence staffing levels and might lend themselves to more effective interventions and evaluations.

Methods: We used a qualitative exploratory design with focus group data from a sample of 26 emergency nurses. Themes were identified using a constructivist perspective and an inductive approach to content analysis.

Results: Five themes were identified: (1) unsafe environment of care, (2) components of safety, (3) patient outcomes: risky care, (4) nursing outcomes: leaving the profession, and (5) possible solutions. Participants reported that staffing levels are determined by the number of beds in the department (as in inpatient units) but not by patient acuity or the number of patients waiting for treatment. Participants identified both absolute numbers of staff, as well as experience mix, as components of safe staffing. Inability to predict the acuity of patients waiting to be seen was a major component of nurses' perceptions of unsafe staffing.

Discussion: Emergency nurses perceive staffing to be inadequate, and therefore unsafe, because of the potential for poor patient outcomes, including missed or delayed care, missed deterioration (failure to rescue), and additional ED visits resulting from ineffective discharge teaching. Both absolute numbers of staff, as well as skill and experience mix, should be considered to provide staffing levels that promote optimal patient and nurse outcomes.

Key words: Emergency care; Emergency department staffing; Nurse retention; Workplace safety; Nursing workload

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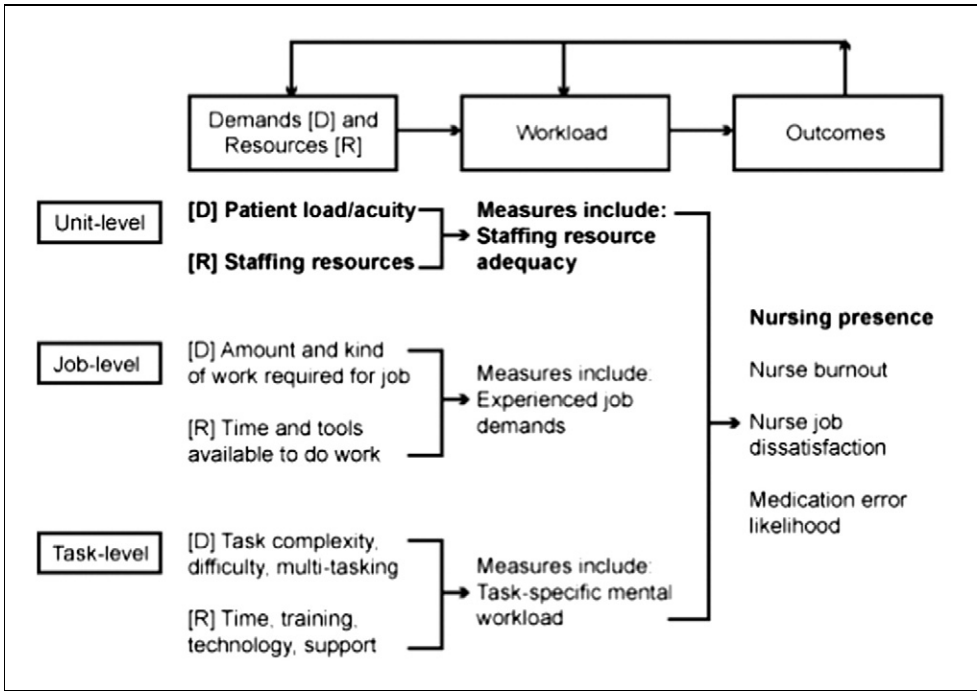
Nurse-to-patient ratios of 1:4, and a higher percentage of baccalaureate-prepared nurses, in most cases, result in reasonable, safe, and cost-effective care and lead to better outcomes for both nurses and patients.[1–9] However, this evidence is based on research conducted on inpatient units, with a dearth of research specific to the emergency care environment. Otegebye et al[10] describe a successful staffing change process in one emergency department, but because the intervention was department specific, the findings may not be generalizable and cannot be used with the same degree of certainty as with larger, more rigorous studies conducted in the inpatient setting. ENA developed an online staffing guidelines tool[11] in 2013, which calculates minimum full-time equivalents (FTEs), but does not establish staffing ratios. A recent, similar study using the Manchester Triage System also establishes FTEs, but again, it is not useful for establishing ratios.[12] Additionally, although the State of California mandated the implementation of

staffing ratios in nursing units that included emergency care settings, 75% of emergency departments in California were initially unable to meet those ratios.[13] The emergency department is a unique practice environment subject to the provisions of the Emergency Medical Treatment and Active Labor Act (EMTALA), thereby mandating a medical screening examination for all presenting patients. This requirement that all patients be examined effectively precludes patient volume control; as a result, staffing needs are difficult to anticipate and are therefore fluid and unpredictable. Safe staffing involves more than just the number of nurses on a given shift but also includes skill and experience mix (eg, experienced versus inexperienced nurses, level of education, and professional training) and educational and administrative support (eg, safe staffing policies and flexible scheduling).

Nurses' perceptions of factors involved in safe staffing levels may also yield important information about how best to staff emergency departments to provide optimal patient and nursing outcomes. We have chosen to present the findings of our exploration of factors involved in safe staffing in the context of nurses' "situational workload," a concept developed by Carayon and Gurses[14] in their work with inpatient nurses. A situation-level approach takes into account not only the number and clinical condition of patients assigned to a nurse but also the facilitators and barriers that affect the workload over a relatively short period (eg, a 12-hour shift) under different conditions and settings (Figure). There is a significant gap in knowledge about the effect of staffing on both nurse and patient outcomes in the emergency care setting,[15] and thus the purpose of this study is to explore emergency nurses' perceptions of safe staffing levels and to identify factors that negatively and positively influence their workload. Findings from this study might provide direction for further research that could improve our understanding of safe staffing and help improve patient safety and nursing outcomes.

Methods

A qualitative exploratory design with a constructivist perspective was used to examine this problem. Prior to recruitment of subjects, Institutional Review Board approval was obtained (Chesapeake Research Review, Columbia, MD). Consent was obtained explicitly when the participant signed up for an online focus group and was confirmed when participants arrived on-site. Focus group discussions were audio recorded and transcribed. Individual identifiers were redacted from the final transcripts during data analysis. Once the findings were verified by the participants, the audio recordings were deleted.



FIGURE

A multi-level human factors framework of nursing workload. Modified from reference[20].