Title:
Patient Complexity Factors and Their Influence on Nurses’ Perception of Staffing Adequacy

Margaret M. Duffy, PhD
Nursing Education, Professional Development & Research, North Shore University Hospital, Manhasset, NY, USA

Session Title:
Global Strategies in Workforce Planning
Slot:
B 19: Saturday, 28 October 2017: 3:15 PM-4:00 PM
Scheduled Time:
3:35 PM

Keywords:
nurse perception, staffing adequacy and workforce planning

References:


Abstract Summary:
All of the factors that impact nurses’ perception of staffing adequacy need to be investigated to promote better understanding. Participants at this session will gain insight from the results of a quantitative study that examined the relationship between patient complexity factors, nurse staffing variables and nurses’ perception of staffing adequacy.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. At the completion of this session, the learner will be able to analyze the findings of a quantitative research study to identify patient-specific complexity factors that influence nurses’ perception of staffing adequacy.</td>
<td>1.A. Purpose of the study. 1.B. Significance of nurse staffing and nurses’ perception of staffing adequacy. 1.C. Conceptual framework 1.D. Description of dependent and independent variables 1.E. Study procedures 1.F. Data collection 1.G. Study findings 1.H. Theory testing 1.I. Implications/recommendations</td>
</tr>
<tr>
<td>2. At the completion of this session, the learner will be able to describe patient-level factors identified through research that need consideration in nurse staffing plans.</td>
<td>2.A. Disruptive behavior and family demands were negatively correlated with nurses’ perception of staffing adequacy. 2.B. There was a negative correlation between total shift</td>
</tr>
</tbody>
</table>
factor score, derived from the presence of patient complexity factors, and nurses’ perception of staffing adequacy. 2.C. No correlation was found between perception of staffing adequacy and nurse staffing variables. 2.D. The RAM proposition was supported.

Abstract Text:

Purpose: Nurse leaders must consider the influence of nurse-specific and patient-specific factors on nursing workload and nurses’ perception of staffing adequacy when developing nurse staffing plans. All of the factors that influence individual nurses’ perception of staffing adequacy are not known. The purpose of the study was to determine if selected patient complexity factors not consistently captured in the measurement of patient acuity by commercial staffing software influence nurses’ perception of staffing adequacy. The study aims were:

1. To determine patient complexity factors that predict nurses’ perception of staffing adequacy on selected inpatient units.
2. To examine the effect of staffing based on the predicted staffing requirements made by an automated outcomes-driven acuity software system on nurses’ perception of staffing adequacy.
3. To determine if uncaptured data about selected patient complexity factors affects the nurses’ perception of staffing adequacy.

Methods: The study employed a complex predictive correlational research design that included multiple logistic regression analysis with six predictors, bivariate analyses, and repeated measures of patient, shift, and nurses’ data. Twenty-six Registered Nurses (RNs) from two patient units contributed data from 1,605 different patients. The number of shifts with complete data used for final analysis was N = 294. The theoretical framework for the study was a synthesis of the Roy Adaptation Model (RAM) at the individual and group levels and selected components of economic theory as applied to health care. A theoretical proposition of RAM was tested to describe the interaction between the group subsystems and the RAM modes in relationship to the goals of an organizational system.

Results: Disruptive behavior (r = -.274) and family demands (r = -.186), were negatively correlated with nurses’ perception of staffing adequacy and explained 10% of the variance in a regression model. There was a negative correlation between total shift factor score (r = -.418), derived from the presence of patient complexity factors, and nurses’ perception of staffing adequacy. No correlation was found between perception of staffing adequacy and nurse staffing variables. The RAM proposition was supported.

Conclusion: The differences among the predictors revealed the nature of perception of staffing adequacy and led to new explanations of why patient acuity, classification, ratios, and financial data are outdated paths to knowledge about safe staffing. Nurses need different types of support to meet patient needs and help them deal with negative aspects of their workload. These findings inform the science of nurse staffing by showing which variables might now be collected in large data systems.