

Research - R124

Poster

Abstract Title:

Nursing Intuition as an Assessment Tool in Predicting Severity of Injury in Trauma Patients

Authors:

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Background & Purpose:

Emergency nurses assess patients using objective and subjective data. When the charge nurse takes report from a paramedic, another form of assessment occurs. By eliciting apt data and using trauma-scoring criteria, a decision to enact a "trauma code" occurs. Considering the cost and staff utilization, it is important for the charge nurse to make sound decisions when activating a trauma code. The objective of this study is to explore the validity of nurses' use of intuition in patients to predict the severity of their injuries, and whether it impacts their choice to institute a trauma code.

Study/Project Design:

The study design was a descriptive, quantitative, cross-sectional record review and cohort analysis.

Setting:

The setting is a rural Trauma Level III ED located 80 miles from the nearest Level I Trauma center.

Sample:

Phase I was a convenience cluster sample of all charge nurses in an ED. Phase II was a collection of all trauma records from June 2010 to May 2012.

Procedures:

Inclusion criteria for Phase I subjects was that all participants were currently working as ED charge nurses. Analysis for Phase I data consisted of evaluating demographic information provided in questions one through six in a questionnaire. For Phase II data a power analysis using Cohen's d was performed to determine the sample size to be evaluated. Based on the 2012 Trauma data a total of 419 records needed to be assessed ($CI\ 0.164 < p < 0.286$). Two groups were created: (1) gut instinct only, and (2) all other criteria. ISS scores were categorized by ascending severity: (1) 0 – 4, (2) 5 – 9, (3) 10 -16, (4) 17 – 24, and (5) greater than 25. The data analysis consisted of a 2-tailed t-Test for probability and a linear regression analysis using Pearson's r for correlation.

Findings/Results:

In Phase I six of eight charge nurses responded. Results showed an average of greater than 10 years experience as an ED RN, certification was equally yes and no, and highest level of education was at the BSN level. The self-assessed level of expertise was between "sometimes" and "often", with the lower rating being with the nurses with less ED experience. Phase II consisted of a review of 393 eligible medical files during the specified time period. 33 records were excluded due to lack of sufficient data. A total of 360 files remained with 109 in the "gut instinct" and 251 in the "other" category. A Student's t-Test was performed using a 2-tailed test with an alpha of .05. Results were a t-score of 0.02, and the null hypothesis was rejected. To evaluate the linear relationship between the sets of data, a Pearson's r correlation coefficient was calculated to determine the relationship between the two variables. Results indicated a strong positive correlation ($r = .992, p = < .001$).

Discussion/Conclusions/Implications:

Intuition is a well-known phenomenon within the nursing community, but it is an abstract concept that is difficult to substantiate. To enhance the development of properly utilizing intuition in practice, this author suggests pairing experienced with novice nurses in their patient assignments. This would enable the less proficient nurse to observe and ask questions about the rationale surrounding decisions the expert nurse has made regarding patient assessment and care. Doing this would benefit everyone by increasing the staff's knowledge base, thus improving patient mortality and morbidity.