Using a Needs Assessments to Determine Nurses Knowledge Gaps in Trauma Care

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Background

Turnover of nursing staff coupled with the ever-changing healthcare environment makes it challenging to maintain nurses' competencies related to trauma care[1-2]. This study aimed to identify nursing's gaps in knowledge and skills related to trauma care to design needed education.

Methods

A trauma needs assessment (TNA) was emailed to nurses and providers addressing the care needs of trauma patients. The TNA used a 5-point Likert scale to assess the nurse's confidence or the provider's confidence in the nurse's ability to care for trauma patients. Redcap was used to administer the surveys. An email with the survey link was sent to all nurses on the four neuro-trauma and surgical units, the Trauma surgeons, the Surgery Critical Care Fellow, residents on service at the time of the survey, the Advanced Care Providers on service and the Trauma Nurse Specialist. Demographic data were reported separately from the needs assessment to ensure the information was not correlated to any specific person in the study. Participants had three weeks to fill out the needs assessment with weekly email reminders sent out to help improve recruitment.

Results

One hundred twenty-four participants received the TNA. The first round resulted in 17 responses, with an additional seven after receiving the reminder emails. Of the 124 surveys sent out, 24 participants responded. Two surveys were incomplete (1 nurse,1 provider) and therefore

excluded from the data analysis. There were 15 nurses and 9 providers that responded to the survey.

The data were analyzed using Fisher's Exact Test with a significance set at 0.05. All areas of the TNA trended towards significance, with only three areas reaching statistical significance: spinal cord dermatomes ($p=0.0161$), Glasgow Coma Score ($p=0.0211$), and pupil exam ($p=0.0191$). For all areas, the providers had more confidence in the nurses than they had in themselves.

Conclusions

The TNA demonstrated that the providers were more confident in the nurse's ability to care for trauma patients than the nurses were in themselves. The results were shared with the units included in the study to help improve nurses' confidence, morale, and interdisciplinary collaboration. The results led to developing a trauma orientation curriculum for inpatient nurses based on the areas with the lowest confidence scores. Course implementation will be in January 2022.

References

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