

Examining the Effects of Physical Assessment Education Tools in Relation with the Implementation of Joint Practice Protocols

Timothy Waterman, BSN, RN and Trisha Kehoe, BSN, RN



Background

Physical assessment and triage is an essential component to a psychiatric nurse practicing in a psychiatric hospital where access to medical supplies and equipment may be limited. Treating pediatric injuries as they occur is an essential component to practice. Psychiatric nurses must quickly assess and triage situations where one or more patients are involved. Learning these unique “field” assessment skills is essential to providing high quality care to psychiatric patients. This assessment and educational tool set was designed to reinforce this nursing practice and encourage nurses to practice to their fullest licensure.

Practice Change

Refresh registered nurses’ (RNs’) knowledge of medical assessment and interventions encountered in the psychiatric setting and provide knowledge and confidence to practice at the peak of their license with the complement of newly implemented joint practice protocols.

Methods

- Administered anonymous paper pre-intervention surveys to RNs.
- Provided copies of educational tool for RNs to review following completion of the pre-intervention survey.
- Anonymous post-intervention surveys were administered following administration of educational tool.

Measures and Results

- This educational tool was compiled by utilizing peer reviewed reference journals to ensure up to date treatment and assessment protocols
- The pre and post assessment tool requested that participants self rate their confidence in assessing and treating the following medical conditions as they occur on a 0-10 scale: Fractured or sprained ankle, asthma attack, frequent emesis, fractured metacarpal, extrapyramidal symptoms, prolonged QT interval, pinworms, scabies, wound infection, multiple self inflicted open lacerations, pacemaker with PVCs, and concussion
- 2 North and 2 South RN’s at Acadia were given the pre test prior to educational tool administration, and post test following the educational tool for an undefined time.
- Some participants completed the post test several days after viewing the educational assessment
- The Standard deviation among participants was 43.91 on a 120 point scale suggesting a wide range of comfortability among RNs, and skewing the data from a normal shaped bell curve to an abnormally distributed data set requiring nonparametric statistical analysis

Results and Limitations

Results

We chose to use the nonparametric 2 tailed Wilcoxon Signed Rank Test at significance level 0.05 to analyze our data due to its abnormal distribution resulting from varying self reported comfort levels between survey subjects. With an average improvement of 21.2% between pre and post data sets the P value was calculated as statistically significant at $P = 0.0477$ with $N = 28$. Based on these findings from our pre and post education surveys, we can reject the null hypothesis that the difference between our pre and post surveys is equal to zero. These findings suggest that written and graphic educational pamphlets provided to nurses may be an effective means of education pertaining to brief subject topics that are compressed enough to take less than 10 minutes to read.

Limitations

The subjective self-reporting tool required nurses to self report knowledge and confidence levels on various topics related to patient care. This type of information is not definitively accurate given the subjective nature of a self report, but results were statistically significant in reporting that the educational tool made a difference in nursing knowledge among participants.

Discussion

One of the most interesting aspects of this project was the way the data was distributed. Acadia inpatient pediatrics has a wide range of RNs of varying experience levels, which may account for the abnormal distribution. In general, RNs self reported either very low comfort or very high comfort on certain tasks with barely any reporting medium levels of comfortability. Further analysis should be done to examine percentages of improvements by experience level to determine what target population this intervention may be best appropriate for. This would involve the addition of a self reported RN experience level on the pre and post assessment tools. With the recent addition of joint practice protocol, nursing assessment skills in a psychiatric setting should be further refined, assessed, and targeted for improvement when necessary.

Conclusion

Following statistical analysis and also accounting for positive RN feedback, the average RN rated the educational tool as helpful for reviewing their skills and improving their practice confidence. This brief evidence based project suggests that pamphlets, when written in an appropriate and user friendly format that integrates the use of graphics as well as text and placed in a convenient location may be effective in educating nurses while on the job. This information if put to appropriate use could set precedent for further more refined educational interventions designed to improve nursing performance.

References

- 6 Pacemaker Therapy Nursing Care Plans • Nurseslabs. Nurseslabs. <https://nurseslabs.com/pacemakers-nursing-care-plans/>. Published September 23, 2017. Accessed April 2, 2018.
- MRSA. Medscape. https://www.medscape.com/viewarticle/741303_2. Accessed April 2, 2018.
- Long QT Syndrome Treatment & Management. Long QT Syndrome Treatment & Management: Approach Considerations, Beta-Blockers, Pacemakers and ICDs. <https://emedicine.medscape.com/article/157826-treatment#d10>. Published December 15, 2017. Accessed April 2, 2018.
- Anticholinergic Psychopharmacology. Encyclopedia of Psychopharmacology. 2015:122-123. doi:10.1007/978-3-642-36172-2_200842.
- Lynch S. Assessment of the Injured Ankle in the Athlete. Journal of Athletic Training. 2002;37(4). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC164372/>. Accessed April 2, 2018.