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d. Improved Management of Patients Experiencing Alcohol Withdrawal

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Improved Management of Patients Experiencing Alcohol Withdrawal

PSJH SoCal Regional Nursing Research Day
September 17, 2020

Arianna Barnes RN BSN CCRN SCRNP PHN

- About 40% of patients admitted to general hospital worldwide have an alcohol use disorder (Jesse et al, 2016)
- Half will experience symptoms of withdrawal when their alcohol consumption is reduced or stopped suddenly (Schuckit, 2014)
- Alcohol withdrawal is characterized by autonomic hyperactivity (Jesse et al, 2016; Schuckit, 2014)
- The most serious instance of alcohol withdrawal is withdrawal delirium, or delirium tremens (Schuckit, 2014)

- Shared Governance Project (Housewide Practice Council) 2016-2018
- Multidisciplinary team with nurses, physicians, and clinical informatic specialist
- PICOT: What is the best way to manage alcohol withdrawal in adults admitted to an acute care hospital setting?
- New orders sets and management guidelines developed

Purpose of investigation

- Healthstream module developed for staff education ineffective
- Mandatory one-hour in-person education for nurses developed in collaboration with educators and expert nurses
- The purpose of this investigation was to determine if there was a difference in alcohol withdrawal management after nurses attended an in-person education with alcohol withdrawal experts.

- Mandatory one hour in-person education for all nurses offered during 3-month period at various times and locations
- Chart review for month prior and three months after education completed for Clinical Institute Withdrawal Assessment for Alcohol Scale-Revised (CIWA-Ar) score, length of stay (LOS), and transfer to the intensive care unit (ICU) for management with descriptive statistics
- Inclusion criteria were charts with a documented CIWA-Ar score of 8 or higher. Exclusion criteria were records with a highest documented CIWA-Ar of 8 or less or the patient was admitted to a specialized unit.

Results

- 580 nurses attended on of 26 total classes
- 290 charts met inclusion and reviewed

	Pre-education Month 1	Post-education Month 1	Post-education Month 2	Post-education Month 3
Number of patients (n)	63	64	81	82
High CIWA-Ar* Scores (mean)	19.5	16.7	17.2	16.6
Hospital LOS (mean days)	4.4	5.3	5.7	3.4
Transfers to ICU (n)	5	2	3	3

Limitations

- Investigation developed after education
- Step-down unit opened that admitted and transferred this population
- Each month did not have the same number of charts reviewed
- Mixed admitting diagnoses
- No measurement of pre-post nursing knowledge assessment

Conclusions & Implications for Practice

- There was a decrease in high CIWA-Ar scores and transfers to the ICU for management, but not a consistent decrease in hospital LOS.
- An in-person education on severe alcohol withdrawal can improve management of this high-risk population.

References

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- **SHORT BIO:** Arianna has been a nurse since 2008. She started as a bedside nurse on a medical telemetry nurse at St Joseph Hospital for two years before transferring to critical care. She has worked in the Surgical Intensive Care Unit at Mission Hospital in Mission Viejo, CA since 2012. Her current role is a clinical nurse IV. Some of her projects include leading multidisciplinary evidence-based projects on implementing ICU diaries and management of patients experiencing alcohol withdrawal. She has presented at ministry, system, and national events. She has been primary site investigator in multi-site research studies in the neuro-critical care population. She currently is co-chair of the shared governance coordinating council and attending Johns Hopkins University in pursuit of a doctorate in nursing practice.
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