Journal of Nursing and Care
ISSN: 2167-1168

Gina Reiners, J Nurs Care 2012, 1:5
DOI: 10.4172/2167-1168.1000118

Review Article Open Access

Alcohol Withdrawal Assessment Training Protocol: A Case Study

Gina Reiners*

Assistant Professor Of Nursing, University of Saint Joseph, 1678 Asylum Avenue, West Hartford, CT 06117, USA

Abstract

It has become exceedingly challenging for nurses to manage alcohol withdrawal syndrome because their patients' clinical symptoms have become much more complicated, especially when they present with complex co morbidities. Additionally, it is critical that nurses and physicians work collaboratively with alcohol withdrawal assessment protocols, so that patients receive the most effective detoxification treatment. The purpose of this case study is to present one approach to implementing an alcohol assessment training protocol using the CIWA/Ar at a southern New England acute care hospital on the psychiatric unit. Consequently, the planning and implementation process created a more cohesive team among the nurses and physicians, which may potentially contribute to positive patient outcomes.

Introduction

According to the Substance Abuse and Mental Health Administration [1], during 2010, there were 361,160 admissions for alcohol detoxification in free standing residential centers, acute care hospitals and ambulatory centers in the United States. Furthermore, the Substance Abuse and Mental Health Administration [1] reported, "In 2010, 17.9 million persons aged 12 or older were classified with alcohol dependence or abuse. This represented 7.0 percent of the population (p.70)".

Additionally, it is estimated that 20% of general hospital admissions meet the criterion for alcohol dependence or alcohol abuse [2]. Alcohol withdrawal symptoms can complicate the clinical presentation of acute medical patients, especially since the withdrawal symptoms can be mistaken for serious medical conditions, which include sepsis, hypoxia, stroke, and hypoglycemia, pneumonia, uremia, pancreatitis, adverse drug reactions, and postoperative delirium [2]. Alcohol withdrawal symptoms, which can be detected about 6 to 12 hours after the patient's last drink, can range from mild to severe. Mortality rates from Delirium Tremens (DTs) that have not been treated can be up to 20%. [3]. Mortality rates can be reduced to1% to 5%.if treatment is administered [3]. Knowledge deficits in alcohol withdrawal assessment can have detrimental effects on patient outcomes; especially since the complications from alcohol withdrawal can be fatal [4]. According to a study completed at the Mayo Clinic, which was to determine if hospitalized medical and surgical patients were appropriately ordered the CIWA/Ar; the findings reported that fewer than half of the 124 randomly selected patients met the inclusion criteria for the CIWA/Ar instrument. These results lead the researchers to conclude that more stringent evaluation for the CIWA/Ar was needed [5]. Hence it is imperative that nurses assess, manage, and evaluate the process in concert with the prescribing physician, so that patients will receive adequate medication coverage. Consequently, it can be very challenging for nurses to manage alcohol withdrawal in critically ill and psychiatric patients [4].

At a southern New England hospital there has been much frustration among the physicians and nurses related to the most effective administration of alcohol withdrawal assessments, especially since many more patients, who are admitted to the medical floors have an alcohol dependence disorder which is not readily detected and patients that present to the psychiatric unit for detoxification have far more complex medical co morbidities. The nurses have asserted that they have not received sufficient training and education about the administration of alcohol withdrawal assessments through their hospital orientation or on the psychiatric unit. Furthermore, they voiced strong concerns that the institution had not adopted a standardized protocol.

The purpose of this article is to present a case study about planning and implementing an alcohol assessment training program to conduct symptom-triggered alcohol withdrawal assessments using the revised Clinical Institute Withdrawal Assessment (CIWA/Ar) [6] tool at a southern New England acute care hospital on the psychiatric unit. The rationale for the planning and implementation of this training program is to prescribe safe and appropriate detoxification treatment for the patients and ensure that the nurses and physicians practice the procedures of the protocol, which the hospital has adopted. Additionally, the physiology of alcohol withdrawal syndrome and the methods and results of the case study will be described.

Background

Alcohol withdrawal syndrome

In order to be prepared to care for alcohol withdrawal syndrome patients, it is crucial that the nurse understands the definition and signs and symptoms of the syndrome of alcohol withdrawal. Alcohol withdrawal syndrome develops after the cessation of or reduction in heavy and prolonged alcohol use. The syndrome includes at least two of the following symptoms: (a) autonomic hyperactivity: elevated blood pressure, pulse, respirations, (b) nausea or vomiting, (c) visual, tactile, or auditory hallucinations, (d) agitation, (e) anxiety, and (f) seizures, (g) hand tremor, and (h) insomnia. Additional symptoms include impairment in social and occupational functioning and symptoms that cannot be attributed to a general medical or psychiatric condition [2].

Delirium tremens (DTs), which is a severe complication of alcohol withdrawal syndrome, characterized by a disturbance in consciousness and perception with marked autonomic hyperactivity has a mortality rate of 5% to 25%. Alcohol dependence may go unnoticed on triage and when left untreated acute withdrawal symptoms can emerge in hours to days after the cessation of alcohol ingestion, which can cause the potentially fatal symptoms of delirium tremens, the most severe and life-threatening of all complications related to alcohol withdrawal syndrome [2].

***Corresponding author:** Gina Reiners, PhD, APRN, University of Saint Joseph, 1678 Asylum Avenue, West Hartford, CT 06117, USA, Tel: 860-231-2080; Fax: 860-231-6755; E-mail: ginareiners@usj.edu

Received July 10, 2012; **Accepted** August 20, 2012; **Published** August 30, 2012

Citation: Reiners G (2012) Alcohol Withdrawal Assessment Training Protocol: A Case Study. J Nurs Care 1:118. doi:10.4172/2167-1168.1000118

Methodology

Sample and setting

The symptom-triggered revised Clinical Institute Withdrawal Assessment (CIWA/Ar) tool was adopted as the nursing protocol for alcohol detoxification at a southern New England hospital. The initial unit where the CIWA/Ar was implemented was a 20 bed inpatient psychiatric unit. The participants consisted of 7 female registered nurses, 1 female assistant nurse manager, two psychiatrists, one male and one female, one female director of nursing and one male medical director. Three of the nurses were assigned to the day shift, 2 were assigned to the evening shift and one on the night shift.

Measurement tools

The CIWA/Ar is a symptom-triggered standardized assessment tool utilized by the nurse for scoring 10 progressive alcohol withdrawal signs and symptoms. The CIWA/Ar score triggers a medication treatment protocol designed to eliminate delirium tremens. The clinical advantage to quantifying the alcohol withdrawal syndrome through a monitoring instrument is to prevent morbidity and mortality in high-risk alcohol withdrawal patients [2].

Data collection

The implementation plan consisted of four phases. The first phase included permission and completion of a needs assessment, the second phase was the formation of a planning committee, the third phase was the design of the CIWA/Ar assessment-training program and the fourth phase was the launch and evaluation of the training program. The major purpose of phase 1 (Appendix A) was to receive permission from the nursing director and medical director to complete an application to request and obtain permission from the Institutional Review Board (IRB) of the hospital to distribute two surveys to the nursing and medical staff, one to determine their CIWA/Ar training needs, and one survey to assess the effectiveness of the protocol, which was completed and obtained. It was critical to gain the cooperation and collaboration of the nursing director and medical director, so that the completed surveys could determine the educational needs of the staff and the effectiveness of the protocol.

Discussions and collaboration between the nursing director and the medical director were facilitated in order to empower them to reflect on their practice regarding implementation of new protocols to facilitate change. Confidential surveys were placed in each staff members' (nurses and physicians) mailboxes. The survey informed the staff that the administration had adopted the CIWA/Ar as the alcohol withdrawal assessment tool. The survey asked the staff to comment on their CIWA/Ar educational needs. The staff had the opportunity to check off and list methods of teaching they preferred, which included handouts, role plays, PowerPoint and case scenarios. There was a comment section on the survey, so that staff could share their recommendations and suggestions. The staff completed the surveys anonymously and voluntarily. In safeguarding the confidentiality of their responses, the staff was directed to place the surveys in a designated locked box in the staff lounge. The purpose of the survey was to allow the staff time to reflect on their current practice and think about what educational information and methods would be helpful in implementing the CIWA/Ar.

The results of the survey were presented to the nursing director and the medical director. Both managers were encouraged to discuss any concerns or feelings about the survey results. After the managers met to review the survey results, separate meetings were scheduled with the nursing and medical staff, so that the results of the survey were presented. The researcher encouraged discussions to empower them to reflect on their own practice and ask any questions about the CIWA/Ar training. The goal was to build trust and open communication among the staff, so that they would feel empowered to collaboratively engage in creating solutions to their everyday problem of treating their patients.

The major goal of the second phase of the action plan (Appendix B) was to invite the nurses, and physicians to join a volunteer committee to plan the symptom-triggered CIWA/Ar training program. E-mails were sent to the staff and memos were placed in their mailboxes and on the staff bulletin board in the staff lounge. The nursing manager and medical director encouraged and informed their staff to join the committee. The planning committee meetings were made available for all staff to attend. Staff shifts were taken into consideration when the planning times were scheduled.

The third phase of the action plan (Appendix C) invited the planning committee to design the CIWA/Ar training program. The volunteer planning committee decided on the educational content, materials, methods, and duration of the sessions for teaching the symptom-triggered CIWA/Ar tool based on the staff educational survey. The committee reviewed training materials that were available and the methods of their delivery. Multimedia methods included lecture, discussion, handouts, videos, case scenarios, role-plays and PowerPoint presentations. Due to the diverse life experiences of the staff varied methods of training were utilized.

The planning committee asked committee members to volunteer to be trainers. At the end of the training program all staff was asked to sign a declaration of understanding that they completed the training and understood the protocol, which was placed in their personnel file. The training program was secured in a three ring binder on each medical floor and in the hospital administration office for the staff's review. Lastly, the planning committee created a symptom-triggered alcohol withdrawal CIWA/Ar competency based test. At the completion of the training the nurses and physicians were mandated to complete the competency-based test with a passing grade of 80%.

The fourth phase of the action plan (Appendix D) launched the symptom-triggered revised CIWA/Ar training program, the utilization of the CIWA/Ar and the evaluation component of this case study. The launch date of the training was announced and publicized in many media forms. It was vital that all staff were notified of the training start date. Multiple training dates were scheduled so that all shifts would be able to attend. The selected training locations were comfortable and free of distractions. Once staff was successfully trained, the nursing manager and medical director announced that the CIWA/Ar was a mandatory assessment tool that would need to be completed on every patient with a history of alcohol abuse or exhibiting signs and symptoms of withdrawal. In order to evaluate the training program, open ended surveys were distributed to the staff in their mailboxes three weeks after the launch of the CIWA/Ar. They were instructed to complete the surveys anonymously and place them in the designated locked box in the staff lounge. The open ended training surveys asked the staff the following questions: (1) did the training plan meet your needs, (2) were there any concerns in any of the areas of the four stages, (3) would you make any changes, (4) any comments that you would like to share.

Results

The evaluation plan included staff feedback from the needs assessment survey, which assisted in determining the educational approaches used to implement the CIWA/Ar. Additionally, the

Participants	Comments
Female RN 1	Created a team, glad the MDs were involved
Female RN 2	Learned a great deal, everyone is on board. Feel like the physicians understand our concerns better
Female RN 3	Thanks, glad both disciplines did this together; feels like a team
Female RN 4	Very helpful, we should update again in the future. Glad the MDs worked with us.
Female RN 5	I feel more comfortable talking to the MDs; they seem to understand our concerns better.
Female RN 6	Very organized, great team work. I am so grateful the physicians agreed to collaborate.
Female RN 7	Better understanding, hope we can continue to review
MD 1	Very helpful; much more aware of the nurses' concerns. Very pleased I was part of the process.
MD 2	Very well organized and implemented. Glad to be a part of the process. Hopefully, our team effort will provide great care for our patients.
Nurse Manager	Glad to see everyone working together.
Medical Director	Very enlightening. Helpful in understanding our need to improve and stay current.

Table 1: Staff Comments about the Alcohol Training Plan.

evaluation plan included the training survey, which assisted in determining if the four stages of the protocol for teaching the CIWA/Ar were met. Once the training program was implemented, the training survey of the nurses and physicians were reviewed. All twelve participants completed the two surveys.

Data analysis

All staff preferred PowerPoint, handouts and case scenarios as educational materials and approaches to utilizing and implementing the CIWA/Ar, which they indicated on the open-ended educational needs survey. The staff did not make any comments about their preferences related to educational materials.

All twelve participants reported that the training plan met their needs; all twelve participants reported that they did not have any concerns about the four stages, and all twelve participants reported that they would not make any changes. The general comments of the staff are presented in table 1.

Discussion

As reflected by the open ended comments from the staff of this case study, the nursing and medical staff reported that the four stage alcohol training plan promoted a positive partnership among the staff. The nurses were satisfied that the physicians were included in the development and implementation of the training protocol, which aided in alleviating their concerns that they may not be assessing the patients appropriately. Having the physicians involved in the planning and implementation of the training plan offered the medical staff the opportunity to engage with the nurses, who sought to successfully assess their patients using the CIWA/Ar. Additionally, the physicians were pleased that they were an integral part of the planning and implementation process, because they could more effectively collaborate with the nurses in assessing the patients. The physicians' investment and commitment in collaborating with the nurses was promoted through their involvement in the planning and implementation process. Cooperation, collaboration, and team work among the nurses, physicians, and managers may potentially assist in successfully sustaining this training program and others programs in the future. Hence, supporting and validating all disciplines by allowing them to work together and voice their opinions may potentially empower them to work together to implement current and future protocols.

Future recommendations

In the future, when staff has completed the training, and the protocol is adopted, a retrospective chart audit measuring clinical outcomes could determine if there was a decrease in length of stay and delirium tremens. Patient satisfaction questionnaires could be distributed to the patients at discharge to determine if they believed that their detoxification was completed in a safe, timely, and effective manner. These results would be shared with the managers and the staff. Based on the evaluation results the training program would be modified and revised.

Conclusion

As one would suspect, when people become frustrated by their inability to meet the expectations of their job, tension and demoralization may occur. Building a solid team provides all members with employment expectations, in this specific case, the protocol, which may potentially improve patient outcomes and decrease workplace dissatisfaction.

As an advanced practice registered nurse who has assessed and treated many alcohol withdrawal syndrome patients, it is crucial that staff nurses are adequately trained to care for their patients to prevent severe medical complications. During the beginning of my career as a registered nurse, I witnessed and experienced the challenges and struggle that nurses experience daily in caring for their alcohol withdrawal syndrome patients. My experience as a nurse practitioner with prescriptive rights is that it is critical that nurses effectively assess their patients, so they are appropriately medicated. A strong collaborative team of physicians and nurses may potentially support excellence in the delivery of patient care.

References

1. Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and health Summary of National Findings, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011.
2. Elliott DY, Geyer C, Lionetti, T, Doty L (2012) Managing alcohol withdrawal in hospitalized patients. Nursing 42: 22-30.
3. Riddle E, Bush J, Tittle M, Dilkhush D (2010) Alcohol withdrawal: development of a standing order set. Critical Care Nurse 30: 38-47.
4. Hecksel KA, Bostwick JM, Jaeger TM, Cha SS (2008) Inappropriate use of the symptom-triggered therapy for alcohol withdrawal in the general hospital. Mayo Clin Proc 83: 274-279.
5. McKinley MG (2005) Alcohol withdrawal syndrome overlooked and mismanaged? Critical Care Nurse 25: 40-48.
6. Sullivan J, Sykora K, Schneiderman J, Naranjo C, Sellers E (1989) Assessment of alcohol withdrawal: The revised Clinical Institute Withdrawal Instrument for Alcohol Scale (CIWA-Ar). British Journal of Addiction 84:1353-1357.