Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Moving From Passive Spread to Widespread Adoption

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INTRODUCTION

Clinical strategies have not been widely adopted for disseminating alcohol screening, brief intervention, and referral to treatment (SBIRT) into practice in acute care settings despite the promulgation of guidelines and recommendations from the American College of Surgeons Committee on Trauma (2006), Committee on Health Care for Underserved Women (2011), Department of Veterans Affairs (2008), and National Institute on Alcohol Abuse and Alcoholism (2007). Recently, the American Nurses Association recognized that nurses must address substance use problems and views SBIRT as important for all nurses as part of their charge to protect the health of the public (Karen Daley, letter to the International Nurses Society on Addictions, November 2, 2012). As the most trusted group of professionals and one that has the most contact with healthcare consumers, nurses can contribute to the reduction in the burden of disease though identification of individuals who are at risk because of alcohol use and provide early prevention, intervention, and treatment.

This column provides a review of two articles relating to one or more of the SBIRT components applied in acute care settings. The review informs potential and actual influences on the progress and effectiveness of SBIRT implementation efforts. The review also examines how the authors of the articles addressed the global paradigm shift related to alcohol and health from a focus on treatment of alcohol use disorders to the broader focus of preventing adverse health consequences associated with alcohol use across the continuum of use.

BACKGROUND

Approximately 51% of Americans aged 18 years or older reported current alcohol use, a substance that has the potential to adversely affect health across the life span including but

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not limited to injury, cancer, hypertension, stroke, liver disease, and brain damage (Centers for Disease Control and Prevention [CDC], 2013a). Of those reporting current drinking, almost half reported binge drinking or heavy drinking, currently referred to as excessive drinking. Excessive drinking is defined as drinking alcohol above the recommended limits for healthy adults, underage drinking, and any alcohol use during pregnancy (CDC, 2013b).

The goal of SBIRT is to reduce and prevent related health consequences, disease, accidents, and injuries. The impact of harmful use of alcohol reaches deep into society resulting in significant economic and human costs. This public health approach targets the largest proportion of the population who drink alcohol above the recommended guidelines. The data on the morbidity and mortality associated with excessive alcohol use are compelling. Of the greater than 83,000 deaths associated with excessive alcohol use, over 50% were associated with acute causes of death (CDC, 2012). Furthermore, based on available data from the CDC Web site, only 4% of alcoholrelated deaths were associated with a primary diagnosis of alcohol dependence. The addition of alcohol-related liver disease deaths raised the rate to 16% of alcohol-associated deaths. Alcohol-related cancers accounted for more cancer deaths than the total of all ovarian cancer deaths (CDC, 2013b).

The most severe end of the alcohol use continuum has received the most attention with respect to morbidity and mortality. Likewise, that end of the spectrum has been a dominant focus for healthcare providers. Yet, increased emphasis on universal screening for alcohol use has helped shift the paradigm from a dichotomous view (alcohol use disorder or no alcohol use disorder) to a continuum of alcohol use model. It is important to emphasize that recommended limits for alcohol use are for healthy adults; drinking alcohol above the limits constitutes excessive alcohol use. The CDC (2013b) also defines excessive drinking as alcohol use among those who are underage or pregnant. Yet, patients represented in acute care settings are those who are acutely ill, in need of emergency medical or surgical interventions. The interaction between age, comorbid medical conditions, prescribed medication regimens, and alcohol consumption cannot be overlooked. For example, adults with comorbid conditions such as diabetes or liver disease or those taking medications that potentially interact with alcohol may be at increased risk for adverse consequences.

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Thus, the reported quantity, frequency, and duration of their alcohol use may be important information during the assessment process with patients with comorbid conditions for whom little or no alcohol use is recommended.

Reduction in the burden of disease associated with alcohol use requires a healthcare work force capable of implementing evidenced-based interventions such as SBIRT that can help prevent excessive use or reduce alcohol use, while tailoring them for the unique needs of the patient. The articles reviewed here provide recommendations for translating SBIRT into practice focusing on the provider level and the organizational level.

Makdissi, R., & Stewart, S. H. (2013). Care for hospitalized patients with unhealthy alcohol use: A narrative review. *Addiction Science and Clinical Practice*, 8(1), 11. Retrieved from http://www.ascpjournal.org/content/8/1/11

This clinical article focuses on the use of SBIRT in acute care settings. The stated purpose of the article is to consider five key issues related to implementing SBIRT: (1) the nature of unhealthy alcohol use, (2) the means of detecting unhealthy alcohol use and categorizing the severity of the use, (3) the evidence to support the use of SBIRT in hospital settings, (4) a review of acute treatment for alcohol use disorders, and (5) a review of organizational factors affecting the implementation of SBIRT in a hospital setting. This may be an overly ambitious purpose, yet the article provides a good starting point for introducing SBIRT policies and procedures within a hospital setting.

A central component for reviewing an article related to SBIRT is to examine the terms used by the authors, because these terms vary across publications. In this article, the authors use the term "unhealthy alcohol use," which is congruent with the term used by the Joint Commission and by other authors referenced in the article. In the broader literature, various terms are used such as excessive drinking (CDC, 2013b) and at-risk drinking (American College of Surgeons, 2006; National Institute on Alcohol Abuse and Alcoholism, 2007). The authors' definition of unhealthy alcohol use was slightly confusing. First, they state that it includes "...any pattern of alcohol use that increases risk for or causes physical problems." This could include alcohol use in medically complex patients, such as patients with diabetes, who may not exceed the suggested limits. Then, they categorize unhealthy use into low severity and high severity, thus narrowing the definition to standards related to healthy adults. Their definition of low severity was congruent with the CDC definition of excessive use except that the CDC includes any drinking during pregnancy and any alcohol use under the age of 18 years (CDC, 2013c). Their definition of high severity was similar to most definitions of heavy drinking but is not as specific as the CDC definition. Heavy drinking as defined by the CDC is consuming an average of more than two drinks per day for men and one drink per day for women (CDC, 2013d). When reading this article, it is important to take into account that the definition of unhealthy drinking used by the authors focuses on identification of two groups: those who exceed the recommended limits for healthy adults and those who report exceeding these limits weekly. There is no mention of the term binge drinking. It

is not clear whether individuals with this amount and pattern of alcohol consumption would be categorized as low or high severity. Binge drinking is reported by one in six U.S. adults and those who binge drink to so frequently and with high intensity (Kanny, Garvin, & Balluz, 2012).

Despite the problem with the definitions used by the authors, there are a number of key issues addressed by the authors. One of the advantages of this article is the helpful tables that summarize a number of key components related to introducing SBIRT in the hospital setting. The first two tables include the sensitivity and specificity of screening tools in relation to their ability to detect unhealthy alcohol use and alcohol use disorders. Unfortunately, the authors do not clearly address the order in which these screening tools should be administered. Tables 4–6 provide a helpful summary of treatments for acute alcohol use disorders. Table 7 provides a list of potential research foci relevant to the Joint Commission quality measures.

The authors also address an issue frequently missing from other SBIRT clinical articles: organizational level barriers to implementation, including education of healthcare providers and the inclusion of clinical reminders in the electronic medical records. This discussion would have been enhanced if they had referenced the American College of Surgeon's recommendations for the implementation of SBIRT in trauma units (2006) as a good starting point for implementing SBIRT in an acute care setting.

The main difficulty for the reader is the broad scope of the article. The authors attempt to cover the wide spectrum of issues facing hospitals considering implementing SBIRT. They begin with detection and cover brief intervention for those at risk, treatment for those in the acute phase of an alcohol use disorder, and referral for treatment at discharge for those with an alcohol use disorder. They even cover postdischarge care. They also fall victim to the tendency of healthcare providers to dichotomize patients who screen positive for excessive alcohol use into two groups—those with an alcohol use disorder and those without an alcohol use disorder. In actuality, alcohol use and risk for adverse physical consequences occur across a continuum of use that must take into account the age, gender, and health status of the individual.

Another major issue is that the authors begin with SBIRT as a tool for combating the negative consequences associated with alcohol use but do not follow this model throughout the article. They use the term detection rather than screening and spend time discussing treatment during the hospital stay, an important issue but not an explicit part of the SBIRT model. Despite these issues, the article merits reading and provides additional issues to consider when implementing SBIRT in an acute care setting.

O'Brien, A., Leonard, L., & Deering, D. (2012). Could an advance practice nurse improve detection of alcohol misuse in the emergency department? *International Journal of Mental Health Nursing*, 21, 340–348. doi:10.111/ j.1447-0349.2011.00797.x

This study conducted in New Zealand will resonate with nurses seeking to promote the role of the advanced practice nurse caring for individuals across the continuum of alcohol use. The study was conducted in an emergency department of a metropolitan hospital serving an urban and rural catchment area. This was a predesigned-postdesigned study. An audit tool (provided in the publication) was developed and used to extract data from a random number of medical records to determine the extent to which alcohol assessment was documented, before and after an educational intervention for emergency department nurses and doctors. The education was designed to improve assessment and detection of alcohol problems. The rates of assessment did not improve and actually decreased after the intervention. The study has several limitations, as outlined later, which may raise questions about the authors' recommendation for an advanced practice nurse to "assist with practice development, awareness of alcohol issues, and acquisition of new skills" (O'Brien et al., 2012, p. 344). However, the literature base for support of that nurse expert is well developed in the discussion section of the article.

The authors provided the audit tool used to ascertain the extent to which alcohol assessment was documented. In addition to obtaining demographic data (i.e., age, gender, ethnicity) and day and time of presentation, the medical record audit tool included six questions related to screening (i.e., asked about alcohol use) and assessment (i.e., type, amount, standard drinks, frequency). The audit tool further included questions about severity (i.e., duration, consequences, history of withdrawal) and the level of severity (i.e., misuse, abuse, dependence). Two additional questions focused on the provision of advice and referral to treatment. Thus, the questions were developed to address SBIRT. An additional question related to the administration of thiamine for patients with chronic heavy alcohol use.

As with any medical record review, the results rest on whether the activity was documented. Furthermore, the audit tool drives what data are extracted. In this study, the presence or absence of documentation was recorded. The audit tool could and should be improved before using in other settings. In addition, it would be essential to determine how the items will be scored and utilized in the analyses. For example, the authors indicated that nine questions were used to measure alcohol assessment, yet only the six screening questions were used for the preevaluation and postevaluation of the educational program. With these issues aside, the descriptive results of the preeducation and posteducation screening are important to examine. That is, of the 83 records reviewed before the education, only 32 (39%) of the patients were asked about alcohol use, and after the education, only 9 of the 40 records reviewed had documentation that patients were asked about alcohol use. Was this attributable to the intervention?

The educational intervention included two 1-hour sessions delivered by one of the nurse authors. Session 1 included information about safe drinking, screening and brief assessment, use of the Alcohol Use Disorders Identification Test, and referral to treatment. Session 2 focused on identification and diagnosis of alcohol-related disorders and consequences including prevention and treatment of Wernicke's encephalopathy. Despite the relatively brief sessions, most sessions were reduced to 30 minutes with less in-depth coverage of the material. The proportion of nurses receiving the education was higher (96%) than the physician group (64%). Given the brevity of the education provided and the number of participating nurses (n = 76) and physicians (n = 9), the results of the posteducation alcohol assessment are not surprising.

A key finding of this study is that most patient records failed to document the single assessment, "Has an alcohol assessment question been asked?" The preeducation audit identified this gap for 61% of the records reviewed, and the post education audit identified this gap even greater at 78%. Addressing this significant missed opportunity requires efforts at the provider level and organizational level. The improvements in health associated with screening and brief interventions are irrefutable for persons along the continuum of alcohol use. Yet, if nurses and other healthcare providers fail to inquire about alcohol use, patients will continue to be untreated or undertreated or identified at the point when the most serious consequences (e.g., Wernicke's encephalopathy) are manifested. That is, the full spectrum of alcohol use.

The authors offered several explanations for the lack of change in alcohol assessment after the intervention. They did not discuss that the intended dose of education may have been insufficient to affect nurses' and physicians' knowledge, attitudes, and behaviors related to assessing patients for alcohol use. Despite the study limitations, the authors provide a compelling case for the need of organizational support with institutional commitment for evidence-based alcohol screening, assessment, and intervention with follow-up. With that organizational support, they propose the value for having an advanced practice nurse readily available in the emergency department. This nurse expert would be instrumental in positively impacting staff perceptions of the management of alcohol, providing education, and serving as a model for the emergency department nurses and physicians.

SUMMARY

These two articles underline the fact that provider-level and organizational-level supports are needed for the widespread translation of SBIRT. The articles also show the complexity of implementing SBIRT into the acute care setting. In addition, consideration of the setting was not fully taken into account by Makdissi and Stewart in their discussion on adapting SBIRT into this setting. Unlike other settings, patients in hospitals often do not represent a "healthy adult" and often present with medically complex conditions that must be incorporated into the interpretation of screening results and the plan of care. As indicated in Makdissi's and Stewart's review, introduction of SBIRT into a hospital setting presents numerous challenges.

O'Brien et al. provide a clear picture of the provider-level barriers across professional disciplines. These barriers are well documented in the literature including lack of alcohol-related

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knowledge and skills, lack of time, concerns about negatively impacting the patient-provider relationship, negative attitudes about patients with alcohol and other drug use, and perceptions that screening and intervention are not within the provider's role or responsibilities (Brooker, Peters, McCabe, & Short, 1999; Broyles et al., 2012; Friedman, McCullough, Shin, & Saitz, 2000; Johnson, Jackson, Guillaume, Meier, & Goyder, 2011; Nygaard & Aasland, 2011). Organizationallevel barriers identified in the literature include lack of integration into the existing workflow and record systems and lack of institutional supports (Babor, Higgins-Biddle, Dauser, Higgins, & Burleson, 2005; Broyles et al., 2012; Johnson et al., 2011; Nygaard & Aasland, 2011). The article by O'Brien et al. introduces a potential solution that merits careful consideration, the use of a nurse specialist as a liaison within the institution. The clinical nurse specialist's role was created to provide direct care to patients with complex diseases or conditions, to improve patient care by developing the clinical skills and judgment of staff nurses, and to retain nurses who are experts in clinical practice (Sparacino & Cartwright, 2009). Other advanced practice nurses may be well suited for the role of an alcohol liaison nurse. Because nursing certification represents a specialized body of knowledge and skills, the advanced practice nurse should hold the credential as a Certified Addictions Registered Nurse. These nurse leaders have the potential to lead provider and organizational change related to translating SBIRT into routine practice across all hospital settings.

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