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Staff Education on the Use of Screening, Brief Intervention, and Referral to Treatment (SBIRT) for the Identification and Management of Excessive Alcohol Use

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Walden University

College of Nursing

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Vivienne Nkengafac

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Executive Summary: Staff Education Project

Staff Education on the Use of Screening, Brief Intervention, and Referral to Treatment (SBIRT) for the Identification and Management of Excessive Alcohol Use

by

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BS, Ohio University, 2021

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Summary

The project was a practice-focused quality improvement project endeavor aimed at augmenting staff utilization of an evidence-based screening instrument for alcohol use disorder (AUD). The problem under study in an outpatient behavioral health setting stemmed from insufficient staff understanding and poor implementation of established screening and intervention protocols, heightening the risk of under identification and ineffective management of AUD. Resolving this issue is crucial in nursing practice because nurses play a pivotal role in early identification, brief intervention, referral to treatment, and fair care provision for patients with substance problems.

The project was centered on the following practice-focused question: Will postintervention staff survey show improvement after staff receive training on using an evidence-based alcohol use screening tool? The objective of the doctoral evidence-based project was to improve staff proficiency in screening, brief intervention, and referral to treatment (SBIRT) framework. In the project, I employed pre- and post-test design alongside descriptive statistical analysis to assess alterations in staff knowledge after a 1-hour SBIRT educational session. The findings revealed a sizable increase in participants' mean scores from 3.67 to 9.33, signifying enhanced staff comprehension of evidence-based AUD management.

The findings of this evidence-based project support SBIRT instruction as a potent approach to enhance nursing practice. The implications of the project include enhanced patient safety, culturally attuned care, and beneficial social transformation via diminished alcohol-related harm achieved using evidence-based screening and intervention protocols for patients served by informed nursing staff.

Background

Consuming excessive amounts of alcohol constitutes a substantial public health issue with considerable health, social, and economic ramifications (Chi et al., 2022). The detrimental consequences of alcohol abuse transcend the individual, impacting families, companies, healthcare systems, and communities (Varghese & Dakhode, 2022). From a health standpoint, excessive alcohol consumption correlates with a heightened risk of chronic diseases, acute medical problems, and preventable fatality (Davis et al., 2024). Social repercussions encompass compromised functioning, strained interpersonal connections, and reduced quality of life. Alcohol misuse economically results in heightened healthcare costs, diminished productivity, and a substantial allocation of resources for treatment and recovery (Davis et al., 2024). Mitigating excessive alcohol use is crucial for enhancing public health and alleviating long-term socioeconomic burdens (Hammock, 2020).

For almost 20 years, public health groups have advocated the use of SBIRT framework as an evidence-based approach to identify and mitigate hazardous alcohol consumption in adult healthcare environments (Gainey et al., 2022). The SBIRT framework enhances the early identification of hazardous drinking patterns, enables concise motivating interventions, and aids in prompt referral to specialized treatment when required (Bednar et al., 2023). Research has illustrated the efficacy of SBIRT in diminishing alcohol use and enhancing health outcomes (Chi et al., 2022).

Notwithstanding this evidence, alcohol-related damage has persisted to increase. Throughout the COVID-19 pandemic, there was a significant rise in alcohol consumption and mortality, with alcohol-related deaths increasing by around 29% from 2017 to 2021

and over 35% among women (Davis et al., 2024). These results underscore the pressing necessity for the systematic application of evidence-based alcohol screening methodologies. Individuals with concurrent mental health disorders are especially susceptible to excessive alcohol consumption. Research has demonstrated that individuals diagnosed with depression, anxiety disorders, and eating disorders are more prone to surpass recommended alcohol consumption thresholds than those who use alcohol in moderation (Palzes et al., 2020). According to the World Health Organization, hazardous alcohol consumption was responsible for 5.3% of all fatalities worldwide in 2016 (Varghese & Dakhode, 2022). Excessive alcohol use hastens the advancement of chronic medical illnesses, intensifies psychiatric symptoms, and diminishes the efficacy of medical and behavioral health interventions (Palzes et al., 2020). AUD may manifest clinically with nonspecific symptoms, including nausea, agitation, anxiety, tremors, diaphoresis, hallucinations, seizures, delirium, and autonomic instability, necessitating precise and standardized assessment for optimal care planning (Varghese & Dakhode, 2022).

The utilization of established, evidence-based screening tools is essential for mitigating risks linked to substance use disorders. Standardized tools facilitate early detection, direct prompt interventions, and enhance uniformity in care provision (Boness et al., 2023). Despite national programs advocating substance use screening, numerous healthcare organizations have not comprehensively adopted SBIRT training or incorporated structured screening protocols into standard practice (Gomez et al., 2023). Consequently, opportunities for early intervention are often overlooked, leaving people at risk for unrecognized AUD. Despite SBIRT's proven enhancements in health and social

outcomes, its application in clinical practice is still inconsistent and restricted (Keen et al., 2021).

Efficient management of AUD necessitates a thorough, evidence-based strategy that incorporates established screening instruments, concise behavioral therapies, and referral mechanisms. Instruments, like the CAGE questionnaire, alongside motivational interviewing techniques and referrals for medication-assisted treatment when appropriate, are essential elements of evidence-based management for AUD (Feulner et al., 2024). Nonetheless, in the absence of systematic implementation and personnel training, these strategies are improbable to be utilized consistently or efficiently.

A notable gap in practice was identified within the outpatient behavioral health setting at the project site. While staff routinely assess and manage various mental health concerns and substance use disorders, including opioid use disorder, AUD is often underrecognized and inadequately addressed. Currently, at this project site, there is no standardized protocol for screening, diagnosing, or managing hazardous alcohol consumption or AUD, and personnel had limited familiarity with the SBIRT framework. This lack of standardized structure resulted in inconsistent evaluation methods and missed opportunities for early intervention.

Research has robustly endorsed the utilization of proven screening tools, like SBIRT and the CAGE questionnaire, to augment the detection of alcohol misuse, facilitate brief treatments, and improve referral results (Paschall et al., 2022). The lack of standardized screening at the project site highlighted the necessity for systematic staff training and the adoption of a cohesive, evidence-based methodology. Increasing staff

proficiency is crucial for maintaining consistent, high-quality service and compliance with evidence-based standards.

The aim of this quality improvement initiative was to augment staff proficiency in utilizing an evidence-based screening instrument for the management of AUDs. With the project, I sought to enhance staff expertise through focused education to improve the diagnosis of hazardous alcohol consumption, enable prompt intervention, and elevate the standard of care for behavioral health populations. The central inquiry of the study was: In an outpatient behavioral health context, will the outcomes of postintervention staff surveys improve following the provision of education on the application of an evidence-based screening instrument for alcohol use management?

The SBIRT framework has been shown to improve alcohol-related outcomes across multiple settings. In mental health and pediatric primary care, SBIRT produced modest reductions in substance use and healthcare utilization, supporting its role in early intervention and prevention (Karno et al., 2020; Sterling et al., 2022), while in community health centers it resulted in large decreases in harmful alcohol consumption when systematically implemented (Zhai et al., 2022). The educational intervention was structured according to the Analyze, Design, Develop, Implement, and Evaluate (ADDIE) instructional design model, providing a systematic framework for assessing learner needs, planning and creating specific content, executing training, and evaluating outcomes (Li & Cheong, 2023).Li and Cheong (2023) substantiated the efficacy of ADDIE-based educational interventions in enhancing clinical knowledge and skill performance. Abbass et al. (2023) revealed that educational techniques focused on SBIRT, based on a structured training program utilizing the ADDIE instructional design

paradigm, effectively enhanced clinical competence among healthcare professionals. According to Karno et al. (2021), Zhai et al. (2022), Davis et al. (2024), and Sterling et al. (2021), Level I and II research demonstrates that SBIRT education, delivered via structured instructional design models, improves staff competency, increases treatment engagement, and promotes sustained advancements in the management of AUD within clinical settings.

Staff Education Project Development

This quality improvement project encompassed a limited cohort of three personnel, comprising two dual-certified nurse practitioners and one administrative staff member. I recruited participants via email and text message invitations sent by the chief executive officer of the project site, detailing the project's goal, objectives, and expected advantages. Participation was voluntary, and the participants' informed consent was secured before collecting any data. Confidentiality was preserved via the assignment of de-identified numerical codes to each participant.

I developed the educational intervention using the ADDIE instructional design model to ensure it addressed the identified practice gap and project question. The preintervention survey was used to evaluate participants' baseline knowledge and guide the creation of specific learning objectives and instructional materials for the outpatient behavioral health context. The intervention comprised a systematic teaching session centered on SBIRT principles, screening techniques, brief interventions, and referral procedures, which was followed by an interactive discussion. I conducted a postintervention survey immediately following the education session to assess alterations in participants' knowledge, attitudes, and perceived competence. The comprehensive

intervention, encompassing pretesting, training, discussion, and post testing, was executed in 60 minutes, with complete participant attendance. Descriptive analysis revealed a substantial enhancement in participants' SBIRT knowledge, with mean scores rising from 3.67 on the pretest to 9.33 on the posttest. Despite constraints imposed by the sample size, these results indicate that concise, organized SBIRT instructions improve staff knowledge, confidence, and preparedness to execute evidence-based alcohol use screening and intervention strategies in an outpatient behavioral health environment.

Results

This educational intervention for staff led to an improvement in participants' knowledge and perceived proficiency in executing SBIRT. Participants' mean scores increased from 3.67 on the pretest to 9.33 on the posttest, reflecting improved comprehension of SBIRT procedures and heightened confidence in implementing evidence-based screening and intervention techniques for AUD. The findings indicate that the educational program successfully addressed the identified knowledge gap and enhanced staff preparation to incorporate SBIRT into clinical practice.

Enhanced staff proficiency is especially crucial in the outpatient behavioral health environment, where patients often exhibit intricate mental health and substance use issues. Augmented SBIRT knowledge facilitates the prompt recognition of hazardous alcohol consumption, timely intervention, and suitable referral to treatment, potentially diminishing alcohol-related problems and enhancing patient outcomes. The findings indicate the importance of systematic, evidence-informed staff training in facilitating the consistent integration of SBIRT into standard clinical practices.

Several limitations of the project must be acknowledged, including the limited sample size, single site recruitment, dependence on self-reported variables, and utilization of a singular in-person teaching method. Notwithstanding these constraints, the results offer initial evidence that focused SBIRT instruction enhances staff readiness. Wider implementation may lead to decreased alcohol-related morbidity and mortality, fostering favorable public health and social results due to the significant burden of excessive alcohol consumption in the United States (Davis et al., 2024).

Descriptive analysis indicated an enhancement in staff knowledge after the SBIRT educational intervention, as depicted in Table 1 and Figure 1, which compare pre- and posttest results. Table 1 delineates the minimum, maximum, and mean results for both assessments, facilitating a clear comparison of staff knowledge and perceived competence prior to and after the training. The noted enhancements in all descriptive metrics signify substantial improvements in SBIRT-related knowledge and skills after the educational session.

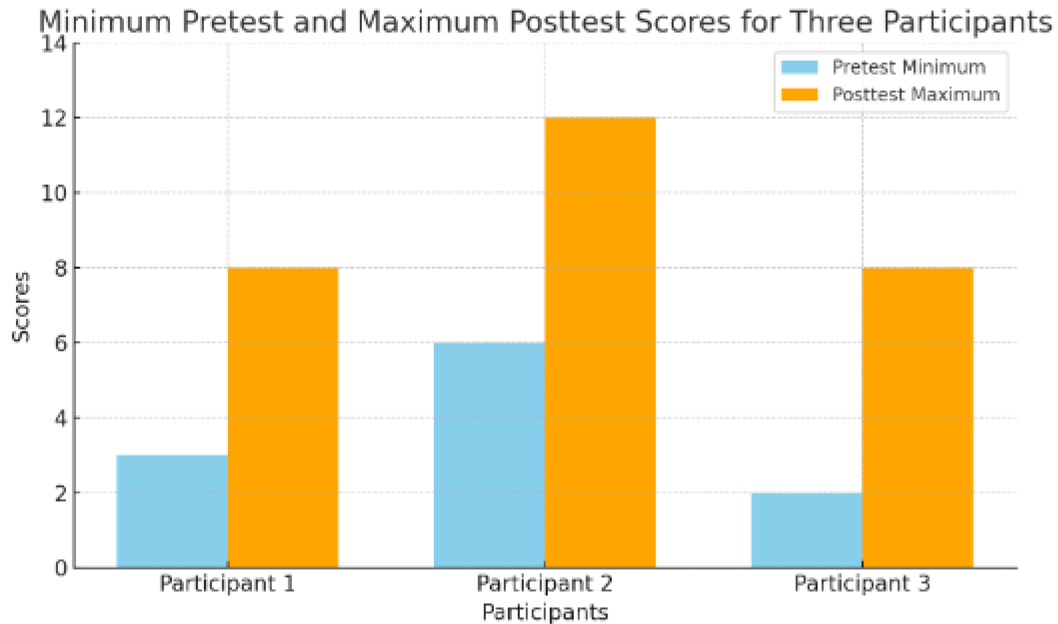
Table 1

Comparison of Staff Pre- and Posttest Scores Following SBIRT Education

Scores	Pretest	Posttest
Minimum Score	2	8
Maximum Score	6	12
Mean	3.67	9.33

Figure 1

Minimum Pretest and Maximum Posttest Scores for Three Participants



The results demonstrate an improvement in all assessed parameters after the intervention. The minimal score escalated from 2 in the pretest to 6 in the posttest, but the maximum score advanced from 8 to 12. The mean score increased from 3.67 to 9.33, indicating a considerable improvement in staff knowledge and comprehension of SBIRT techniques due to the instructional session.

Conclusions

This doctoral project illustrated that a systematic staff education program based on the ADDIE instructional design model enhanced staff knowledge and perceived proficiency in utilizing SBIRT framework for AUD. I developed educational intervention to target a substantial practice deficiency in an outpatient behavioral health environment where AUD has been insufficiently acknowledged, leading to enhanced staff readiness to incorporate evidence-based screening and intervention into standard clinical practice.

The results endorse SBIRT education as a viable and efficacious approach for fortifying nursing practice, improving early detection of alcohol-related hazards, and facilitating prompt intervention and referral. My recommendations entail broadening future training via blended learning modalities, augmenting participant numbers, and integrating continuous feedback to improve sustainability and generalizability.

In addition to enhancing clinical practice, the project fosters positive social change by diminishing stigmas, advocating for culturally competent and equitable care, and encouraging healthier individuals and communities. This highlights the importance of structured, evidence-based staff training in improving care quality, augmenting nursing competencies, and alleviating the broader health, social, and economic impacts of alcohol consumption.

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