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Screening, brief intervention and referral to treatment (SBIRT) training for nurses in acute care settings: Lessons learned

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1. Introduction

Behavioral health and substance use disorders (SUDs) represent a substantial portion of global disease burden and are the leading causes of years lived with disability across the world (Whiteford, Ferrari, Degenhardt, Feigin, & Vos, 2015). In the United States, tobacco and alcohol use are associated with leading causes of morbidity and mortality (Johnson et al., 2014) and fatal drug overdoses (excluding alcohol) are a significant contributor to injury deaths (Ruhm, 2018). These data highlight the importance of developing sustainable models of care and the necessary workforce to implement those models across healthcare systems. Screening, brief intervention, and referral to treatment (SBIRT) is an evidence-based practice framework to enable the identification of at-risk substance users (Babor et al., 2007) that offers a streamlined protocol for integrating substance use prevention and treatment into routine medical care (McCance-Katz & Satterfield, 2012). SBIRT includes three primary components: 1) Screening for risk using one or more validated instruments; 2) Brief intervention (motivational counseling) for patients with moderate risk; and 3) Referral to treatment for patients with severe risk or probable dependence (Substance Abuse and Mental Health Services Administration, n.d.).

Nurses are well-equipped and positioned to deliver SBIRT interventions. While training strategies have been developed and are feasible across a variety of settings (Cook et al., 2018; Mitchell et al., 2017), several challenges remain for SBIRT in nursing, including inadequate training and knowledge, an absence of implementation and workflow protocols, concerns about the time needed to deliver interventions, a lack of common data elements in the electronic medical record (EMR), role ambiguity, and reimbursement policies (Wamsley, Satterfield, Curtis, Lundgren, & Satre, 2018). As part of a waitlist randomized cluster trial for implementation of SBIRT in a large Midwestern hospital system, our team trained one registered nurse (RN) from each adult acute care hospital ($N = 14$) using a train-the-trainer approach (Newhouse et al., 2018) and collected post-training feedback. The purpose of this research brief is to share evaluation data and site coordinators' feedback to advance understanding of how best to structure SBIRT train-the-trainer events for nurses, especially those in managerial roles.

2. Methods

The Conceptual Model for Considering the Determinants of Diffusion, Dissemination and Implementation of Innovations in Health Services Delivery and Organization was used as a framework for this study (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). This model offers a guide for the adoption and implementation of innovations within organizations based on a narrative synthesis of theory and research. It posits that interventions that are based on assessment of barriers, use multiple strategies, and are system focused are more likely to be effective.

Chief Nursing Officers of each participating hospital selected one RN as a study site coordinator who was best positioned to lead study activities at their organization. Individual characteristics of site coordinators was not collected. The post-training evaluation was completed to solicit feedback about the training approach and learning outcomes and was not intended to link characteristics to evaluation data or SBIRT implementation.

Twelve of the fourteen site coordinators attended one of two face-to-face training sessions ($n = 6$ intervention, $n = 6$ waitlist). Sessions were separated by six months because the waitlist protocol called for an equivalent but staggered SBIRT implementation process for two randomly-selected clusters of seven hospitals. Trainings were led by the same interdisciplinary team composed of two doctorate-prepared university nursing faculty, one doctorate-prepared health behavior and SBIRT specialist, the Program Manager for Pain Services and Chemical Dependence from a participating system hospital (not from a study unit), and the Executive Director of Discovery and Contemporary Nursing Practice within the healthcare system. Both the waitlist and

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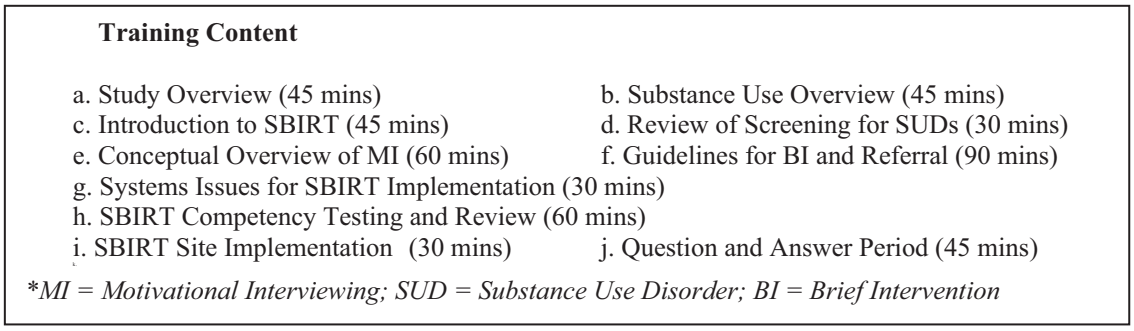

Fig. 1. Training content
*MI = Motivational Interviewing; SUD = Substance Use Disorder; BI = Brief Intervention.

intervention group received the same one-day, 8-h training in their respective sessions (Fig. 1). The two site coordinators who were not able to attend a face-to-face training completed an online training module and received 1:1 instruction from a study team member.

Principles of adult learning theory were used to guide the development and implementation of the training. Training activities were focused on the SBIRT process and implementation strategies (e.g., use of screening tools, motivational interviewing). Site coordinators were encouraged to discuss specific barriers to implementation related to their respective organizations, and strategies to overcome the identified barriers. In addition, training team members actively engaged participants in role play, skills validation, self-reflection and individualized feedback to promote knowledge and skill retention (Lane, Hood, & Rollnick, 2008). Prior to attending the training, all site coordinators completed a baseline assessment of their hospital for structural capacity (e.g., stakeholder buy-in), staff capacity (e.g., staff competencies), organizational support (e.g., leadership support), technical capabilities (e.g., access to technology), and fiscal capacity (e.g. locked cabinet for study materials).

Post-training evaluation data were collected at the end of each session from site coordinators who attended the face-to-face training session using a 22-item questionnaire designed by the principal investigator. Site coordinators indicted the degree to which they agreed with the overall quality of the training ($n = 7$ questions) on a 5-point Likert scale from 1 (strongly agree) to 5 (strongly disagree), and their satisfaction with the training materials, facilities, and presenters ($n = 12$ questions) ranging from 1 (extremely satisfied) to 5 (extremely dissatisfied). Three open-ended questions were included to solicit additional comments. Descriptive statistics and frequencies were assessed, and qualitative data summarized.

3. Results

3.1. Descriptive

The majority of site coordinators strongly agreed that the training objectives were met (75%), information was presented in a logical manner (67%), training prepared participants to implement SBIRT at their own facility (58%), and the training facilitated knowledge and idea-sharing among participants (100%). In addition, site coordinators were extremely satisfied with the presentation content (83%) and length of the training (50%).

3.2. Qualitative

Site coordinators provided consistent responses when asked what topics were most beneficial, emphasizing motivational interviewing (MI) and introduction to SBIRT. One respondent identified the “tools and resources available to site coordinators” as being especially helpful. In response to the prompt, “what subjects would you have liked to have more content on,” replies varied widely and reflected a level of discomfort with their supervisory capacity within the planned SBIRT implementation program. While two individuals identified MI/brief intervention as the most important topic of interest, other responses focused on implementation protocols including, change readiness in relation to teaching staff to implement SBIRT, interacting with, and readiness of, patients, a need to understand the current process before implementation, burden of planning, the expectation of participating in synchronous meetings and site visits “on top of actual work hours,” and the methods needed for implementation. One site coordinator highlighted general concerns about SBIRT implementation stating, “training was very informative, but I'm scared about not being able to implement it correctly.”

4. Discussion

Site coordinators' positive opinions of the SBIRT training were consistent with numerous published studies focused on nursing students as trainees (Gotham, Knopf-Amelung, Krom, Stilen, & Kohnle, 2015; Knopf-Amelung et al., 2018; Mitchell et al., 2013). The curricular aspects, described in Fig. 1, appeared to match coordinators' expectations, and the order in which they were taught was perceived as logical. The general content and length were also seen as acceptable. Although 58% of site coordinators agreed they were ready to implement SBIRT after the training, others were hesitant, and several coordinators qualitatively expressed concern regarding their ability to support SBIRT implementation. This is not surprising given the training challenges identified in prior research (Wamsley et al., 2018). At the same time, the site coordinators were provided with an atypically high amount of systematic and implementation-related content within the training (e.g., versus clinically-focused content), even compared to robust, strategically-developed SBIRT curricula for nurses (Broyles, Kraemer, Kengor, & Gordon, 2013). We included this content to support site coordinators' supervisory needs within the larger research project, however, an SBIRT train-the-train approach may need even more preparatory implementation education. In addition, site coordinators' concerns about SBIRT implementation lend credence to the need for formalized partnerships between site coordinators and nursing leadership to ensure evidence-based implementation at the unit level.

The evaluation data must be interpreted within the context of several limitations. First, the data were collected to inform future SBIRT implementation projects and were not intended for generalizable conclusions. Second, the study sample of trainees was small, and the evaluation of training was not powered for statistical analysis related to training components or trainee characteristics. Finally, the site coordinators were selected because of their demonstrated leadership in clinical and quality initiatives and their ability to successfully lead their unit in SBIRT implementation. As a result, they may have had a higher degree of readiness to serve as a site coordinator.

Evaluation data yielded important information for future similar

trainings. While a standardized training approach for SBIRT implementation is recommended and sufficient for baseline training, multiple training methods (e.g., in-person site visits, training materials designed specifically for the unit setting, monthly calls and occasional synchronous or in-person booster sessions) are needed to enhance implementation efforts. An important next step might be a qualitative assessment to test specific training features and methods that work best when implementing new clinical practices using a comparative design. The results of such as study would lend support to unit/organizational implementation of SBIRT.

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