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Teaching SBIRT to Nurses in a Mental Health Setting for Improved Assessment and Management of Patients With Substance Use Disorders

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Executive Summary: Staff Education Project

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Summary

Addressing the knowledge gap is essential in nursing practice, as RNs are the first point of contact for patients in mental health settings where substance use significantly influences overall health and recovery. This Doctor of Nursing Practice project focused on the need for staff education in an inpatient mental health unit regarding the assessment and triage of patients with substance use disorders (SUDs). The guiding question for this project was: "In nurses working within an inpatient mental health setting, does the implementation of Screening, Brief Intervention, and Referral to Treatment (SBIRT) training improve knowledge in assessing, managing, and providing care for patients with substance use disorders?" This project aimed to help at least 90% of the RNs demonstrate improved knowledge through 10-item pre- and post-training assessments. The goal was to reflect at least a 30% increase in average scores by the program's conclusion. The results revealed an average pretest score of 6.76, which increased to an average posttest score of 9.38, a 38.76 percentage change. Furthermore, the paired *t* test revealed a significant difference between pretest and posttest scores, with a *p* value of less than .0001. The mean difference was -3.69, with a 95% confidence interval of -3.96 to -3.41. The *t* value was 27.39, based on 34 degrees of freedom, and the standard error of the difference was 0.135. Conclusions drawn recommended ongoing education initiatives. The implications for nursing practice include that improved training enhances knowledge and promotes a more inclusive and equitable healthcare environment by prioritizing substance use treatment in mental health care. By advancing the understanding and management of SUDs, this project sought to facilitate positive social change, ensuring that diverse populations receive fair and informed care in inpatient settings.

Background

The leaders of the inpatient unit observed over the years that many mental health patients with SUDs did not receive the appropriate level of care. This was primarily attributed to the nursing staff's knowledge gap regarding the complexities of managing such patients (Morales et al., 2019). As a result, individuals experiencing complicated withdrawal symptoms, who would have required interventions such as IV fluids, IV medications, and seizure precautions, were frequently admitted to a psychiatric unit that was ill-equipped to provide the necessary care due to institutional policies and the current skill set of the unit staff.

The guiding question for this project was, "In nurses working within an inpatient mental health setting, does the implementation of Screening, Brief Intervention, and Referral to Treatment (SBIRT) training improve knowledge in assessing, managing, and providing care for patients with substance use disorders?" This project aimed to implement SBIRT training for nurses in the unit to address the gap in their knowledge, ultimately enhancing the quality of care provided to this vulnerable patient population (Floyd et al., 2020). The intent was to enhance knowledge regarding assessing and managing patients with SUDs within an inpatient mental health setting. The objective of this project was for at least 90% of RNs to show enhanced knowledge as measured by pre- and post-training assessments consisting of 10 items. The targeted goal was to achieve a minimum 30% increase in the average scores by the end of the program.

For this project, I examined two experimental, nine quasi-experimental, and one qualitative study. The findings demonstrated that SBIRT training for nurses significantly improves their knowledge and skills in managing patients with SUDs. A study by Saitz et

al. (2021) demonstrated that nurses who participated in SBIRT training exhibited improved knowledge and confidence in conducting screenings and interventions, resulting in a more practical approach to patient care. Similarly, a systematic review by O'Connell et al. (2022) concluded that specific training programs, including SBIRT, lead to measurable increases in nurses' knowledge and application of evidence-based practices for substance use. The review highlighted the importance of integrating such training into nursing education to ensure improved patient outcomes and address the critical knowledge gaps in the field. Additionally, a randomized controlled trial by Nilsen et al. (2023) demonstrated the impact of SBIRT training on nursing staff in various clinical settings, revealing that participants who received the training scored significantly higher on knowledge assessments than those who did not.

The findings from these studies offered robust evidence supporting the effectiveness of SBIRT training in increasing nurses' knowledge and readiness to manage SUDs. This body of research underscored the value of targeted training programs in enhancing nursing practice and improving patient care-related outcomes.

Staff Education Project Development

The project involved 35 RNs in a large healthcare facility inpatient mental health unit. These participants exhibited a range of clinical experience, educational backgrounds, and familiarity with SUD concepts, from newly graduated RNs to those with several years of specialized practice in mental health.

The development and implementation of the project followed several vital procedures. Initially, I consulted with an assistant nurse manager to confirm staff availability for the training and created a training schedule. For the SBIRT training

program, I collaborated with leadership to design the curriculum and delivered it with slide presentations incorporating evidence-based guidelines, case studies, and practical scenarios. Education included didactic components, role-playing activities, and interactive discussions, providing the nurses with theoretical knowledge on screening techniques, brief intervention strategies, and referral processes for patients with SUD. The training was delivered in a workshop format in seven sessions.

To evaluate the effectiveness of the training, participants completed a 10-item knowledge assessment tool as a pretest to measure their baseline knowledge, followed by a posttest to assess knowledge gains after the training. Evidence collection involved analyzing pre- and post-training test scores using descriptive statistics to evaluate immediate impacts—the evaluation process aimed to assess short-term impacts of the training. The short-term evaluation was achieved by comparing pretest and posttest scores to identify significant improvements in critical areas related to SUD management.

Results

All participants demonstrated an improvement in scores from pretest to posttest, indicating the effectiveness of the SBIRT training in enhancing the knowledge being assessed. The pretest scores ranged from 4 to 7, with most nurses scoring between 5 and 7. The posttest scores ranged from 8 to 10, with several participants achieving the highest possible score of 10. To better understand the improvement, I calculated the average scores before and after the training: The average pretest score was 6.76, while the average posttest score was 9.4.

Many participants demonstrated remarkable gains, with a number of nurses improving their scores by 5 points (from 5 to 10 or from 4 to 10). The data also showed

some variability, with scores like 8 or 9 indicating that while improvement was consistent, not all participants achieved the maximum score. Notably, several nurses achieved a posttest score of 10, showcasing a solid grasp of the material after the training. Those who scored lower in the pretest (particularly scores of 4 or 5) benefitted immensely, raising their scores to near-perfect levels post-training.

The average percentage improvement in scores from the pretest to the posttest after SBIRT training was approximately 38.74%. The paired *t*-test results indicate a highly significant difference between the pretest and posttest scores, with a two-tailed *p* value of less than .0001. This difference is considered statistically significant. The mean difference between pretest and posttest scores was -3.69, with a 95% confidence interval ranging from -3.96 to -3.41. The calculated *t* value was 27.39, based on 34 degrees of freedom, and the standard error of the difference is 0.135 (GraphPad Software, n.d.). Therefore, the introduction of a 10-item pre- and post-training test revealed a marked improvement in the participants' knowledge, indicating that structured training effectively equipped nurses with the necessary knowledge to recognize and intervene in cases of substance abuse (Kooreman et al., 2022).

The impact of the project on the organization is significant. By fostering such essential knowledge, the training enhanced patient care and cultivated a culture of continuous learning and adaptation within the nursing team. This is crucial for delivering holistic health services, as it encourages staff to stay informed about the latest practices and methodologies, ultimately leading to better patient health outcomes. Moreover, the project has broader relevance, as it can serve as a model for implementing SBIRT in various healthcare settings, demonstrating the need for standardized training across

disciplines to improve patient outcomes related to substance use (Biivor & McCaffrey, 2021).

Regarding the limitations of this project, the staff may be accustomed to specific routines and practices, leading to reluctance to adopt new information or methods presented during the project. This resistance can stem from various factors, including time constraints and the perceived relevance of the training content. Consequently, when staff members do not actively engage with the material, the intended educational outcomes may not be realized, rendering the projects less effective (Gonzalez et al., 2022). Another limitation is the potential need for follow-up and support for staff members after the educational initiative concluded. Thus, without ongoing reinforcement or resources, the impact of the training can diminish over time. Research indicates that knowledge retention is often short-lived without consistent reinforcement and application in real-world practice (Smith & Roberts, 2023).

Conclusions

In conclusion, implementing SBIRT training for RNs in the inpatient mental health unit yielded significant positive outcomes pertinent to the organization. The project markedly improved the nurses' knowledge of managing patients with SUDs. The paired *t* test showed a highly significant difference between pretest and posttest scores ($p < .0001$), with a mean difference of -3.69 and a 95% confidence interval of -3.96 to -3.41. The *t* value was 27.39 with 34 degrees of freedom, and the standard error was 0.135. This knowledge enhancement fosters improved patient care within the unit and contributes to establishing a culture of continuous professional development and knowledge sharing among staff. Such an environment encourages nursing teams to engage in lifelong

learning, enhancing the quality of care delivered to vulnerable populations with complex health needs. Notably, the success of this Doctor of Nursing Practice project offered a replicable model for other healthcare facilities looking to incorporate similar training programs, reinforcing the essential role of evidence-based education in nursing practice.

Further recommendations include exploring the integration of long-term follow-up assessments to measure knowledge retention and skills translation into practice over time. Additionally, expanding the scope of training to encompass interdisciplinary collaboration could optimize care coordination for patients with SUDs and ensure a more comprehensive approach to treatment. Future projects might also consider incorporating patient feedback mechanisms to gauge the effectiveness of nursing interventions and refine educational programs based on real-world outcomes. By prioritizing education in this dynamic area of healthcare, organizations can ensure that all staff are equipped to respond to the evolving challenges posed by substance use, thus promoting a resilient workforce.

Finally, the implications of this project extend beyond immediate nursing practice, embracing broader concepts of positive social change, diversity, equity, and inclusion in healthcare. By equipping nurses with the necessary tools to recognize and manage SUDs, this training directly addresses existing disparities in care for populations affected by SUDs, often marginalized in health systems. It thus contributed to fostering equitable healthcare environments where all patients receive appropriate and compassionate care. Furthermore, as nursing practice evolves to accommodate diverse patient needs, such educational initiatives are foundational in cultivating a workforce that is not just skilled but also culturally competent and attuned to the complexities of social

determinants of health. Ultimately, transformative educational practices like the SBIRT training champion a holistic approach to nursing that lays the groundwork for a more inclusive and responsive healthcare system.

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Appendix

Pre/Post Anonymous Questionnaire

RN Number…..

1. What does SBIRT stand for?
    A. Screening Brief Intervention Referral Treatment
    B. Substance Abuse Brief Intervention Referral Treatment
    C. Screening Brief Intervention Recovery Treatment
    D. Substance Abuse Brief Identification Referral Treatment

2. Which of the following is NOT a step in the SBIRT process?
    A. Screening
    B. Brief Intervention
    C. Residential Treatment
    D. Referral

3. When is it recommended to use SBIRT in a healthcare setting?
    A. Only for patients with substance abuse disorders
    B. Only for patients with mental health disorders
    C. For all patients, regardless of substance use
    D. Only for patients with physical health disorders

4. What is the purpose of the screening phase in SBIRT?
    A. To diagnose a substance use disorder
    B. To assess the severity of substance use
    C. To provide treatment options
    D. To refer the patient to a specialist

5. Which healthcare professionals are typically trained to conduct SBIRT?
    A. Pharmacists
    B. Physicians
    C. Nurses
    D. All of the above

6. What type of interventions are used in the “Brief Intervention” phase of SBIRT?

   A. Long-term therapy sessions

   B. Medication management

   C. Short, motivational conversations

   D. Inpatient hospitalization

7. What is the main goal of the “Brief Intervention” phase in SBIRT?

   A. To persuade the patient to stop using substances completely

   B. To increase motivation and awareness of substance use

   C. To provide immediate treatment options

   D. To refer the patient to a specialist for further evaluation

8. In the Referral phase of SBIRT, where are patients typically referred to for treatment?

   A. Outpatient therapy

   B. Inpatient rehabilitation

   C. Self-help groups

   D. All of the above

9. How can SBIRT help reduce healthcare costs?

   A. By providing preventative care for substance abuse disorders

   B. By reducing hospital readmissions related to substance abuse

   C. By connecting patients to appropriate treatment earlier

   D. All of the above

10. Which of the following populations may benefit most from SBIRT interventions?

   A. Adolescents

   B. Older adults

   C. Pregnant women

   D. All of the above.

Answers

1. A. Screening Brief Intervention Referral Treatment
2. C. Residential Treatment
3. C. For all patients, regardless of substance use
4. B. To assess the severity of substance use
5. D. All of the above
6. C. Short, motivational conversations
7. B. To increase motivation and awareness of substance use
8. D. All of the above
9. D. All of the above
10. D. All of the above.