

Adolescent Substance Use: Educating Social Work and Nursing Students at Mansfield University on Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Background

Implementation of the adolescent screening, brief intervention and referral to treatment (SBIRT) training program took place at Mansfield University, a small public, higher education institution which is located in rural North Central Pennsylvania. The student body characteristics include 18% non-white minorities, the average age of full-time undergraduates: 21 years old; 9% age 25 years or older. Many students are lower income with over 75% of undergraduates receiving Federal student loans

(Mansfield University, 2020). Mansfield University's Bachelor of Social Work Program (BSW) initiated implementation of the adolescent SBIRT curriculum in fall 2018 and the Bachelor of Science in Nursing Program (BSN) launched adolescent SBIRT training in spring 2019. Graduates from the Mansfield University social work and nursing programs become part of the workforce serving youth in rural communities across the region. The goal was to train undergraduate junior level students in the techniques used to assess substance use, use

SCHOOL



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motivational interviewing, and provide intervention and referral to adolescents at risk for developing a substance use disorder.

Challenge

Concerns about the health and safety of the youth living in rural areas of Tioga County Pennsylvania prompted the adolescent SBIRT implementation. Research indicates that youth living in rural areas are at higher risk of experiencing alcohol-related harm, including motor vehicle accidents than youth living in urban locations (Cibich, Hines & Carey, 2020). Biennially, the Commonwealth of Pennsylvania conducts the Pennsylvania Youth Survey of youth in 6th, 8th, 10th, and 12th grades to gather information about their knowledge, attitudes, and behaviors regarding substance use. In 2017, the survey was administered in 12 schools in Tioga County. Results showed that almost 67% of youth in Tioga County had used alcohol by 12th grade (Tioga County Health Partnership, 2020).

To reduce alcohol-related harm for adolescents, there is a need to expand the number of providers trained in prevention, early identification and referral for treatment. Rural youth have more difficulty accessing primary care, substance use and mental health services due to provider shortages and transportation challenges (Ferdinand et al., 2015). Nurses and Social Workers who work in a variety of health settings can be trained to better meet the needs

of rural youth with adolescent SBIRT training integrated into the curriculum.

Another impetus for adolescent SBIRT implementation was a perceived gap in the use of computer simulated instruction to teach therapeutic communication skills. Several studies (Koetting & Freed, 2016; Park, Woo and Yoo, 2016) show the value of simulations in nursing education to promote self-confidence in conversing with patients. In particular, Koetting and Freed (2016) found that younger students, under age 22, may be challenged communicating with adolescents on this topic. An online, interactive adolescent SBIRT simulation can address this gap in confidence.

Solution

For the social work program, the adolescent SBIRT curriculum was embedded in a Human Behavior in the Social Environment course over a 3-week period, meeting three times a week for 50 minutes.



Class size was between 26-30 students each fall semester. A pre-test and post-test were administered in an adjacent computer lab. PowerPoints were used to structure instruction on the five modules in the Learner's Guide to Adolescent SBIRT. Students were paired for role plays to practice screening, brief intervention, motivational interviewing and referral. The SBI with Adolescents online simulation was completed independently outside of regular classroom time (Kognito, 2018). The third



scenario in the online simulation tested students' competency in adolescent SBIRT techniques and resulted in an assessment challenge score provided to the student with a certificate of completion.

The nursing program implemented adolescent SBIRT training into a junior level Maternal/Child Health course. Students spent two consecutive 4-hour clinical days in the Nursing Skills Lab. Group size was eight students per training session. Prior to the first day students completed the pre-test online and created an SBI with Adolescents simulation account. Modules 1, 2, and 3 of the Learner's Guide to Adolescent

SBIRT were presented during the first day. Interactive activities included a paired role-playing exercise where students practiced administering the CRAFFT tool to each other. Additionally, using the same partners, students engaged in conducting Brief Negotiated Interviews based on sample scenarios from the adolescent SBIRT curriculum. On the second day Modules 4 and 5 of the Learner's Guide to Adolescent SBIRT were reviewed. Much of the second day was spent reviewing and practicing motivational interviewing techniques. Teaching strategies on both days included PowerPoint enhanced lecture, discussion, and role-plays. At the end of instruction on the second day, similar to the Social Work Program, nursing students completed the SBI with Adolescents assessment simulation and post-test survey.

At the completion of the spring 2020 semester, the total number of students who completed the training was 85, which included 46 social work students and 39 nursing students. The majority of the students were female (83%) and in their earlier twenties (average age 23).

Results

A key achievement of this initiative at Mansfield University was the interdisciplinary collaboration between the social work and nursing programs to implement the adolescent SBIRT curriculum. There was a joint recognition of the need to train students to

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- BSW Student

address adolescent substance use in a variety of settings. The undergraduate students gained confidence in their skills of engagement, building rapport, eliciting pros and cons, providing feedback, assessing change readiness, negotiating an action plan, summarizing and motivating adolescents.

Students were very engaged in the material. Discussions were rich with many students relating the material presented to personal life experiences providing an opportunity for deep learning. Course evaluations from social work students were mostly positive indicating that the adolescent SBIRT training provided them with a chance to interact with "real" clients and work with "real" responses. One student commented, "The role-playing activities were great

because you get to apply things we learned in class about social work and practice for internships and careers after Mansfield."
Another student commented, "I really enjoyed the SBIRT training. I feel I can use this in my field."
One student felt that the training would have been better placed in an addiction studies course.
There were no narrative comments related to adolescent SBIRT from the course evaluations completed by nursing students.

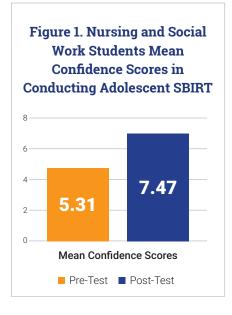
Two areas related to curriculum effectiveness at Mansfield University were investigated using the quantitative data collected from the pre-tests and post-tests as well as the surveys imbedded in the SBI with Adolescents simulation. These included:

- Do undergraduate students rate their level of confidence in conducting SBIRT higher at post-test than at pre-test?
- Is there a change in level of confidence from pre-test to post-test for students receiving the adolescent SBIRT education?

Table 1. Sample Pre-test and Post-test Survey Confidence Items

"How confident do you feel..."

- Reviewing the adolescent's previous substance use-related problems.
- Using information gathered about the adolescent's substance use to provide feedback.
- Reviewing possible reasons for decreasing substance use with the adolescent.
- Asking adolescents if they want to decrease their risk related to substance use.
- Helping an adolescent to agree to cut back or accept referral.



Confidence

Prior to and after receiving training, students used a measure composed of nine items to rate their confidence to perform adolescent SBIRT. Students (N=81) rated each item on a scale from 0 to 10, with 0 representing "not at all confident" and 10 representing "extremely confident" (see Table 1 for sample items). A pairedsamples t-test was conducted to evaluate the impact of adolescent SBIRT education on nursing and social work students' confidence regarding conducting adolescent SBIRT for substance use. There was a statistically significant increase in the confidence scores from pre-test (M=5.31, SD=2.227) to post-test (M=7.47, SD=1.38, t(80)=-8.64, p<.001, See Figure 1). The range of confidence scores at pre-test was 0.00-9.44 versus post-test 4.11-10.00.

Assessment Challenge Scores

The mean overall assessment score was 82.5% (N=85). Over three-fourths of the students

scored over 70%. An independent-samples t-test comparison showed the two undergraduate student groups performed similarly. The mean score was 83.2% (N=46) for social work students and 81.7% (N=39) for nursing students (See Figure 2). There was no significant difference between the two groups (p=0.79).

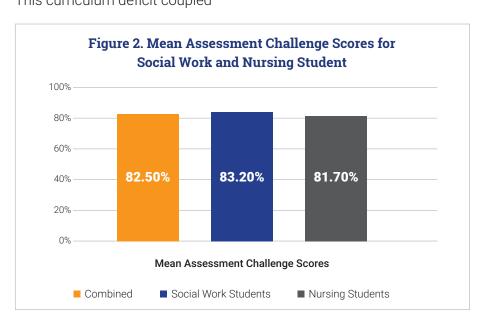
Discussion

Since 2004, rates of substance use and overdose in rural areas have been rising when compared to urban settings. Despite this difference, rural areas are less likely to have medical professionals available to treat substance use disorders and associated conditions (Rubin. 2019). Pre-professional curricula involving the topic of substance use have not kept pace with the rise in substance use among Americans. This results in program graduates who are inadequately prepared to assess and intervene for substance use. This curriculum deficit coupled

with a rural location made the BSW and BSN programs at Mansfield University well suited for the integration of the adolescent SBIRT education.

The Chairs of both programs facilitated curriculum implementation and the necessary administrative approvals. A small delay in implementation was due to a protracted Institutional Review Board (IRB) approval. The team at NORC at the University of Chicago provided good technical assistance during the adolescent SBIRT implementation. Internal and external support is essential for implementation. The sustainability of the adolescent SBIRT training curriculum at Mansfield University will be dependent on funding through grants and other sources.

Limited resources for prevention and treatment of substance use exist in rural communities (Rural Health Information Hub, 2018). Social Workers and Nurses





may encounter adolescents in their practice and can play a key role in identifying those at risk for developing a substance use disorder and promote early intervention. Positive learning outcomes were demonstrated in both programs. The first key study finding was that an increase in student's confidence applying adolescent SBIRT skills was demonstrated from pre-test to post-test. The social work program designated approximately 8 hours of instruction using a traditional classroom format. Although the nursing programs delivered the same number of instructional hours, it was concentrated over two days in a lab setting. This finding suggests the curriculum

can successfully increase skill confidence despite variation in formats.

A second key finding was that the use of the SBI with Adolescents simulation proved effective in reinforcing adolescent SBIRT skills as evidenced by high assessment challenge scores. There was no significant difference in scores between the two groups. Adolescent SBIRT training provided students with a simulated learning experience that is relevant to current practice. Additionally, children and youth related clinical experiences are difficult to obtain for undergraduate students. BSW and BSN programs need to look beyond using only traditional clinical settings in order to provide students with a wellrounded clinical experience.

With the advent of social distancing restrictions due to COVID-19, there was an unexpected greater need for virtual clinical experiences for nursing and social work students. In addition to the benefits stated previously, the use of computer-based simulation could play an important role in providing students with much needed clinical experiences.

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