Utilizing Screening, Brief Intervention, and Referral to Treatment: Teaching Assessment of Substance Abuse

Victoria A. Osborne, PhD, MSW, and Kalea Benner, PhD, MSW, LCSW

Although social workers regularly encounter clients with substance use problems, social work education rarely addresses addictions with any depth. This pilot study explored the use of screening, brief intervention, and referral to treatment (SBIRT) with 74 social work students. Students completed SBIRT training with pre- and post-questionnaires that assessed attitudes, knowledge, and skills concerning substance misuse. Statistically significant differences were demonstrated with students reporting more confidence in their ability to successfully assess for alcohol misuse and subsequently intervene. (*Am J Public Health*. 2012; 102:e37–e38. doi:10.2105/AJPH.2011.300639)

Substance misuse in the United States is high; 30% of adults engage in at-risk drinking.[1] At-risk drinking (typically categorized as "misuse") does not meet diagnostic criteria for abuse or dependence and is inconsistently identified. Because approximately 70% of the US adult population sees a primary care physician at least once every 2 years,[2] a screening and brief intervention model for substance misuse was developed for primary care settings.

Screening, brief intervention, and referral to treatment (SBIRT)[3] is based on the transtheoretical model of change,[4] incorporating motivational interviewing to "briefly intervene" with patients who are at-risk drinkers. The transtheoretical model presents 5 stages of client readiness to change: precontemplation (change is not considered); contemplation (some awareness of consequences but ambivalence to change); preparation (change is planned); action (change begins); and maintenance (change is managed).[4] The idea is to "meet the patient where they are." SBIRT is efficacious with assessing and intervening with at-risk drinkers in primary care settings[5–7] and emergency departments[8,9]; however, SBIRT has not been integrated into social work education or practice.

Social workers are employed in a variety of venues. Like other health care professionals, they are not necessarily trained to identify or treat misuse. Less than 10% of accredited social work programs offer a graduate certificate specific to substance abuse.[10] Research shows similar barriers to screening among health care providers: lack of training to assess alcohol misuse, how to or when to screen for it, and what to do if the client indicates a need for treatment.[11] Training practitioners can be effective in increasing confidence in screening and intervention as well as improving attitudes toward people with alcohol problems.[12–15]

This pilot study assessed social work students' attitudes, perceived skills, and knowledge of alcohol misuse before and after receiving training on SBIRT. We hypothesized that students would improve skills and knowledge of substance misuse as well as improve attitudes toward people who misuse alcohol.

METHODS

The pilot study sample consisted of 41 graduate and 33 undergraduate social work students who voluntarily completed the Attitudes, Self-Perception of Skills, and Knowledge (AKS) survey. The AKS survey is a 13-question instrument designed specifically for use in SBIRT.[16] The instrument is undergoing validity analyses for continued use as a research tool. Students rated their attitudes, skills, and knowledge on a 5-point Likert scale with responses ranging from "strongly agree" to "strongly disagree." Internal consistency was measured with Cronbach α ($\alpha = 0.730$) (Appendix A, available as a supplement to the online version of this article at http://www.ajph.org).

Following the SBIRT protocol used with medical and nursing students, social work students were given the AKS survey as a pretest, then were asked to review a series of 4 PowerPoint training modules before taking the posttest. To ensure confidentiality, no demographic information other than class standing (graduate vs undergraduate) was obtained. The modules covered orientation to SBIRT, types of screening instruments, and motivational interviewing. Students completed the AKS surveys and training modules independently within approximately 30 days.

RESULTS

The paired sample *t*-test revealed statistically significant differences for 8 of the 13 items. Additionally, analysis of variance examined differences in the AKS between undergraduate and graduate students; however, no statistically significant differences were found.

After completing the SBIRT training, students more strongly agreed they had a good understanding of substance use and abuse and felt more confident in their ability to screen for alcohol or drug problems; to assess clients' readiness to change behaviors; to discuss clients' substance use and advise them to change behavior; and to refer clients to specialized treatment. Students also more strongly agreed that their interaction with a client could make a difference regarding substance use and that incorporating screening into routine practice is critical. They more strongly disagreed that clients would be angry if asked about substance use (Table 1).

DISCUSSION

Our results showed that social work students positively changed their attitudes toward working with clients with substance use problems and improved their perceived ability to screen and intervene with clients. Results were similar to other findings regarding training medical students[15] and nurses[12] on screening and brief intervention techniques.

An encouraging finding was the statistically significant scores in agreement that incorporating screening for substance misuse into routine care is crucial for health care. The

TABLE 1—The *t*-Test Results for Attitudes, Self-Perception of Skills, and Knowledge Survey Items, Teaching Assessment of Substance Abuse, 2011

Question No.	Pretest Score	Posttest Score	*t Test* (df)	*P*
1	2.33	2.04	2.438 (70)	.017
2	1.37	1.45	−1.180 (70)	.242
3	1.72	1.59	1.136 (70)	.26
4	4.18	4.34	−1.227 (70)	.224
5	2.70	2.56	1.344 (70)	.183
6	3.55	2.23	10.738 (70)	.001
7	3.04	2.14	7.473 (70)	.001
8	3.08	2.23	7.209 (70)	.001
9	2.75	2.13	5.123 (70)	.001
10	4.34	4.45	−1.210 (70)	.23
11	3.10	3.55	−4.217 (69)	.001
12	2.11	1.54	6.333 (70)	.001
13	1.66	1.34	4.201 (70)	.001

passage of US health care reform[17] makes primary medical homes a critical aspect of preventive care. Screenings for lifestyle behaviors that impact health will be required. SBIRT can be integrated into the medical home, and delivered by health professionals, including social workers.

Study limitations included social desirability bias as well as small sample size, particularly given the number of social work students in the United States. Future research will increase the sample, as well as incorporate use of standardized patients for practicing skills learned in the modules. Training social work students on SBIRT appears to be effective in incorporating a minimum level of substance misuse screening and treatment into social work education. ■

About the Authors

Victoria A. Osborne and Kalea Benner are with the School of Social Work, and Program in Public Health, University of Missouri, Columbia.

Correspondence should be sent to Victoria A. Osborne, St. Louis University School of Medicine, Department of Family and Community Medicine, 1402 South Grand Blvd., St. Louis, MO 63104 (e-mail: vosborne@slu.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

This article was accepted December 16, 2011.

Contributors

V. A. Osborne led the study in the School of Social Work, analyzed the data, and wrote the results and discussion. K. Benner collected the data and administered the surveys, and wrote the literature review and methods.

Acknowledgments

This study was funded by the Substance Abuse and Mental Health Association (grant SAMHSA TI020288).

The authors would like to acknowledge the grant Principal Investigators, Daniel Vinson, MD, and Bruce Horwitz, PhD, University of Missouri School of Medicine.

Human Participant Protection

Human subject protection was not necessary as this training was part of classroom instruction.

References

1. National Institute on Alcohol Abuse and Alcoholism. *(NIAAA). Helping Patients Who Drink Too Much: A Clinician's Guide.* Bethesda, MD: National Institutes of Health; 2005.

2. Center for Alcohol Studies and Addiction. *Missed Opportunity: National Survey of Primary Care Physicians and Patients on Substance Abuse.* New York: The National Center on Addiction and Substance Abuse at Columbia University (CASA); 2000:1–113.

3. Saitz R. Screening and brief intervention enter their 5th decade. *Subst Abus.* 2007;28(3):3–6.

4. Prochaska JO, DiClemente CC. Stages and processes of self-change of smoking: toward an integrative model of change. *J Consult Clin Psychol.* 1983;51(3):390–395.

5. Barrett B, Byford S, Crawford MJ, et al. Cost-effectiveness of screening and referral to an alcohol health worker in alcohol misusing patients attending an accident and emergency department: a decision-making approach. *Drug Alcohol Depend.* 2006;81(1):47–54.

6. Bien TH, Miller WR, Tonigan JS. Brief interventions for alcohol problems: a review. *Addiction.* 1993;88(3): 315–335.

7. Richmond R, Heather N, Wodak A, Kehoe L, Webster I. Controlled evaluation of a general practice-based brief intervention for excessive drinking. *Addiction.* 1995;90(1):119–132.

8. Blow FC, Barry KL, Walton MA, et al. The efficacy of two brief intervention strategies among injured, at-risk drinkers in the emergency department: impact of tailored messaging and brief advice. *J Stud Alcohol.* 2006;67(4): 568–578.

9. Crawford MJ, Patton R, Touquet R, et al. Screening and referral for brief intervention of alcohol-misusing patients in an emergency department: a pragmatic randomized controlled trial. *Lancet.* 2004;364(9442): 1334–1339.

10. Council of Social Work Education's 2009 Statistics on Social Work Education in the United States. Available at: http://www.cswe.org/CentersInitiatives/DataStatistics/ProgramData/47673/47685.aspx. Accessed July 11, 2011.

11. Neushotz LA, Fitzpatrick JJ. Improving substance abuse screening and intervention in a primary care clinic. *Arch Psychiatr Nurs.* 2008;22(2):78–86.

12. Vadlamudi RS, Adams S, Hogan B, Wu T, Wahid Z. Nurses' attitudes, beliefs, and confidence levels regarding care for those who abuse alcohol: impact of educational intervention. *Nurse Educ Pract.* 2008;8 (4):290–298.

13. Weisner C, Matzger H. Missed opportunities in addressing drinking behavior in medical and mental health services. *Alcohol Clin Exp Res.* 2003;27(7): 1132–1141.

14. Fleming M, Olsen D, Stathes H, et al. Virtual reality skills training for health care professionals in alcohol screening and brief intervention. *J Am Board Fam Med.* 2009;22(4):387–398.

15. Truncali A, Lee JD, Ark TK, et al. Teaching physicians to address unhealthy alcohol use: a randomized controlled trial assessing the effect of a web-based module on medical student performance. *J Subst Abuse Treat.* 2011;40(2):203–213.

16. Sprague D, Vinson DC, Horwitz B. Attitudes, Self-Perception of Skills, and Knowledge survey. Unpublished. 2010.

17. The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act. Democratic Policy Committee. Available at: http://democrats.senate.gov/pdfs/reform/patient-protection-affordable-care-act-as-passed.pdf. Accessed July 15, 2011.