2015

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Authors' Note

The authors wish to acknowledge the trainers, whose participation was made possible through funding from the Alcohol and Aging Awareness Group, Commonwealth of Virginia Department of Alcoholic Beverage Control:

1) Michael Weaver, MD, FASAM, Professor in the Department of Psychiatry and Behavioral Sciences at the University of Texas Health Sciences Center in Houston and Medical Director at the Center for Neurobehavioral Research on Addiction
2) Caitlin K. Barthelmes, MPH with the Brief Negotiated Interview-Active Referral to Treatment (BNI-ART) Institute, School of Public Health at Boston University Medical Center

BRIEF REPORT

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ABSTRACT: Screening and Brief Intervention (SBI) is increasingly available to older adults who engage in at-risk drinking. This study examined the extent to which SBI training influenced the willingness of healthcare providers in a community-based hospital and other clinical settings to promote the implementation of SBI. Ninety-three healthcare practitioners (primarily physicians, nurses, and social workers) who attended SBI training were asked about their intentions to apply the information in their professional practice, as well as their enthusiasm about recommending the training to others in their profession. Although there were no differences among the professions in terms of commitment to apply the information or level of comfort using the techniques, physicians were less interested in promoting SBI training among their colleagues. Although it may be more difficult to promote SBI in locations that don't primarily provide mental health services, results suggest that primary care settings are precisely where training may be most useful.

KEY WORDS: alcohol; substance abuse treatment; continuing medical education; elderly; at-risk drinking.

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Introduction

The Center for Substance Abuse Treatment (1999) in the Substance Abuse and Mental Health Services Administration (SAMHSA) issued best practice guidelines on brief interventions and therapies in substance abuse treatment. The approach was characterized as focused on reducing or stopping substance use disorders and facilitating treatment. Interventions are time limited in that they require as little as five minutes or may be as extensive as five brief sessions. The motivational discussions aimed to provide insight and increased awareness regarding substance use, while inducing behavioral change. The most common goal is to eliminate binge drinking and/or moderate levels of consumption.

Both the National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2005) and the American Society of Addiction Medicine (1997) recommend routine screening and physician intervention for recognized problem drinking (see www.effectivehealthcare.ahrq.gov). Yet, a national survey of primary care physicians, obstetrician-gynecologists, and psychiatrists found that less than half (47%) regularly asked patients about maximum daily alcohol consumption, and only 13% used standardized screening instruments as a tool to discuss alcohol use with their patients (Friedmann, McCulloch, Chin & Saltz, 2000). The U.S. Preventive Services Task Force (2004) recommends (Grade B) screening for behavioral counseling to reduce alcohol misuse. However, a subsequent 2011 Behavioral Risk Factor Surveillance System survey found that, only 16.7% of adults (including binge drinkers) ever discussed alcohol consumption with a health professional (McKnight-Eily et al., 2011)

The cost-effectiveness of implementing brief alcohol interventions in community-based physician practices for the general population (ages 16 – 65) has been demonstrated, both through community-based physician practices (Fleming et al., 2002) and hospital emergency departments (Estee & Huber, 2010; Estee, Wickizer, He, Shah, & Mancuso, 2010). The Washington State Screening, Brief Intervention and Referral to Treatment (WASBIRT) initiative, implemented in nine hospitals, found an estimated reduction in Medicaid costs per member per month of $366 ($p$ = .05). For patients who had no chemical dependency treatment in the year before or after the emergency department visit, the estimated reduction in Medicaid per member per month costs was $542 ($p$ = .06). The WASBIRT program was also associated with decreased inpatient utilization (p = .04). The Trial for Early Alcohol

Treatment (Project TrEAT), which studied managed care settings, found that an investment of $70,000 resulted in a cost savings of $301,000 (Fleming et al., 2002).

Comparable results in adults older than age 65 receiving physician delivered brief intervention have yet to be reported. In one large study of the cost-effectiveness of physician brief advise in 24 community-based primary care practices (Mundt, French, Roebuck, Manwell, & Barry, 2005), the total cost of health care and social consequences were estimated to be $5,241 (95% CI, $2,995 to $7,487) per patient in the treatment group. While costs among control group participants were higher, $6,289 (95% CI, $3,549 to $9,029) per patient, this difference was not statistically significant ($p > .05$). Although the intervention cost per patient was low ($236), the authors concluded that older problem drinkers may require more intensive and costly interventions to achieve economic benefits similar to the general population.

Concerted efforts have been made in the U.S. and at the World Health Organization to provide an evidence base for alcohol screening and brief intervention (SBI) in primary healthcare settings (see Babor et al., 2007 for a review of the literature). The Guiding Older Adult Lifestyles (GOAL) Project (Fleming, Manwell, Barry, Adams, & Stauffacher, 1999; Mundt et al., 2005) and the Healthy Living as You Age study (Lin et al., 2009, 2010; Moore et al., 2010, 2011) were cited in Babor's landmark comparative effectiveness review as providing evidence to support the effectiveness of SBI in older adults. In addition, another large elder-specific study was conducted at the University of Michigan in between the Project GOAL and Healthy Living as You Age studies. The Health Profiles Project supported by the NIAA (Blow & Barry, 2000) produced results similar to those found in Project GOAL. Outcome analyses showed that, when compared to a control group that did not receive brief advice from health professionals in primary care settings, those in the intervention group reported less excessive drinking in the previous 7 days and less binge drinking episodes in the previous 30 days.

Beyond primary care settings, some evidence showing reduced consumption among older adults has come from other community based-sites (Barry, Blow, Cullinane, Gordon, & Welsh, 2006). In addition, the Florida BRITE pilot and demonstration project (Schonfeld et al., 2010), combined SBI with brief treatment as an adjunctive therapy to decrease alcohol risk scores (Center for Substance Abuse Treatment, 2005). The SBI component employed specialists in aging, substance abuse, and social services, as well as generalists (e.g., personnel in emergency departments, trauma clinics, and urgent care centers). A total of 556 older adults were flagged using the first three quantity and frequency questions included as part of the Alcohol Use Disorders Identification Test (Bush,

Kivlahan, McDonnell, Fihn, & Bradlely, 1998), and were then administered the ten-item Short Michigan Alcoholism Screening Test, Geriatric Version (SMAST-G; Blow, Gillespie, Barry, Mudd, & Hill, 1998). Alcohol risk scores were significantly decreased to levels no longer qualified as hazardous. Of the 80% of participants who initially screened positive on the SMAST-G, only 18.9% were still positive when discharged from the program, and these gains were maintained into the 30-day follow-up period as well. The Administration on Aging, Department of Health and Human Services lists the Florida BRITE program within the tier of highest-level criteria evidence-based disease prevention and health promotion programs that may be implemented under Title III-D of the Older Americans Act (http://www.aoa.gov/AoARoot/AoA_Programs/HPW/Title_IIID/index.aspx).

Although older adults are significantly more likely to seek and accept substance abuse services in primary care versus specialty mental health care settings (Institute of Medicine, 2012), typically they have not been screened by their physicians for problem drinking (Sharp & Vach-Haase, 2011; Sorocco & Ferrell, 2006). Virginia has a robust history of providing and evaluating training on alcohol detection and prevention for a variety of service providers (Coogle, Osgood, & Parham, 2000, 2001); until recently however, there was no mental health and aging coalition in the Commonwealth. The Virginia Alcohol and Aging Awareness Group (AAAG), established under the Virginia Department of Alcohol Beverage Control, was created in March 2007 as a result of a Governor's mandate, HB 110 (2006 Session) which amended the Virginia Code (§2.2-5510). The AAAG consists of range of stakeholders including state agencies, as well as for-profit and not-for-profit organizations that provide services to the aging population in Virginia. Awareness of previous SBI initiatives focused on older adult populations prompted the AAAG to support and assist with training in alcohol-related SBI for community-based healthcare providers statewide. This brief report summarizes the training evaluation data comparing the willingness of physicians and other practitioners to promote widespread dissemination of SBI for older adults.

Methods

Curriculum. The training was offered four times, each in a different region of the Commonwealth. The first training was held at a Level 1 regional trauma center in northern Virginia, two were held at community mental health clinics, and the last session was organized by an independent regional center on aging. Ideally, the curriculum is delivered in 4 hours; however, a condensed version of the content can be delivered in 2 hours. The first and last trainings were half-day sessions, while the intervening sessions were two hours in length. The training content at all sessions was identical; except, the first training also provided instruction on conducting the Brief Negotiated

Interview including the OARS principles (Open Ended Questions, Affirmations, Reflective Listening, and Summaries). This agenda item was dropped in subsequent training session in deference to the proprietary nature of the content. The training sessions began with a didactic presentation of the problem in older adults and a complex case study presentation illustrating the content related to alcohol and prescription drug abuse in older adults. This was followed with instruction on SBI, including the rationale and evidence base. The FRAMES (feedback, responsibility, advice, menu, empathy, and self-efficacy) elements were each reviewed (Miller & Rollnick, 1991; Miller & Sanchez, 1993), with special attention to the issues particularly relevant in older adults. Finally participants were broken into small groups and engaged in role-playing exercises. Detailed instructions were provided for the participants assuming the roles of patient and provider, and observers were asked to evaluate the use of SBI techniques as demonstrated in the role-play. In addition to the identification of at least two of the FRAMES elements, observers looked for non-judgmental attitudes, the use of open-ended questions, and indications of the ability to recognize state of change readiness. Training participants were then asked to share their experience with the reconvened large group, commenting on what aspects of the role-play felt most awkward and which seemed more natural.

Participants. Approximately three quarters of the 93 training participants were female, and their average age was 50. About 60% were Caucasian, with African Americans accounting for an additional 30%. Professional group membership was as follows: physicians (17.6%), residents (2.2%), medical students (1.1%), nurse practitioners (4.4%), nurses/licensed practical nurses (26.4%), social workers/therapists (41.8%), physician assistant (4.4%), and home care (2.2%). Approximately one quarter of participants had a doctorate or doctor of medicine degree, but the majority had a Master's (38.4%) or Bachelor's degree (16.3%). The remaining 20% had a two-year college degree, or attended college without obtaining a degree. Although 10.8% worked for a social or human services agency, almost half worked for a substance abuse/mental health agency or outpatient facility (46.2%). About two thirds worked mainly with older adults (65.6%), and a similar proportion worked with economically disadvantaged groups (63.1%). Although relatively few served geographically isolated areas (7.8%), 40% spent the majority of their time serving minority populations.

Measures. The three primary outcome measures were defined as follows: 1) Commitment = I plan on using one or more of the approaches I learned today in my professional practice, 2) Intention to Recommend Training = I would recommend this session to others in my profession, and 3) Level of Comfort = I feel comfortable using this

technique in my professional practice. All measures were rated using a Likert-type scale (1 = Strongly Disagree; 5=Strongly Agree).

Results

Site Equivalence. A little more than half (52.6%) of the participants at the hospital based training were physicians or physicians in training. At the subsequent training sessions, this proportion was substantially less (12.5%), $\chi 2(1) = 14.66$, $p < .001$. In addition, an examination of individual job titles revealed that none of the physicians at the hospital training site were psychiatrists, while almost half (44.5%) of the physicians at the other training sites were. The data were analyzed to establish the initial equivalence of the evaluation ratings provided by participants. A Multivariate Analysis of Variance (MANOVA), examining site differences with respect to the three outcome measures taken collectively (i.e., participants' intention to use the approach, their levels of comfort with the technique, and their willingness to recommend the training to colleagues), revealed that the hospital site did not differ from the other three sites, Pillai's Trace = 0.06, $F(3, 81) = 1.79$, $p > .05$. There were also no differences with respect to ratings of the training effectiveness (i.e. introducing the brief intervention concept and teaching the technique) or the presenters (i.e., preparation, organization, knowledge, and clarity of communication), Pillai's Trace = 0.03, $F(5, 80) = 0.56$, $p > .05$.

Session Ratings. Evaluation results demonstrated that the sessions were highly rated. The average ratings ranged from 4.60 to 4.91 on a five-point Likert-type scale (1 = Strongly Disagree; 5=Strongly Agree). Open ended responses indicated that trainees planned to be more attentive to potential problems, screen patients/clients for substance abuse problems, and be more focused when potential problems were revealed. They planned to implement motivational interviewing techniques and incorporate particular aspects of the brief intervention framework into their practice. There was also an indication that collectively, participants intended to share the information with their colleagues and co-workers or staff members.

Professional Group Differences in Outcome Measures. Physicians and physicians in training ($n = 19$, 20.9%) were compared with those in the other health professions ($n = 72$, 79.1%) using the MANOVA procedure, and there were no statistically significant differences in the session ratings, Pillai's Trace = 0.14, $F(5, 78) = 0.22$, $p > .05$. However, statistically significant differences with respect to the three outcome measures were obtained, Pillai's Trace = .13, $F(3, 79) = 3.78$, $p < .05$. An examination of accompanying univariate ANOVAs showed that although the professional groups did not differ with respect to their levels of commitment to apply the information or levels of

comfort using the techniques ($p > .05$), physicians were less interested in promoting the SBI training among their professional colleagues ($M = 4.44$, $SD = 0.62$) than those in the other primary care disciplines or related supporting professions ($M = 4.77$, $SD = 0.43$), $F(1,82) = 6.67$, $p < .05$. Univariate ANOVAs comparing participants who strongly agreed that they would use SBI in their practice with those who were less committed to applying the information did not reveal any differences in their levels of comfort using the techniques ($p > .05$). However, those who were more invested in applying SBI were more likely to recommend the SBI training ($M = 4.93$, $SD = 0.32$ vs. $M = 4.29$, $SD = 0.52$, respectively), $F(1,89) = 50.73$, $p < .001$.

Discussion

Although physicians and physicians in training were not different from other health professionals in terms of their session evaluation ratings or levels of commitment to using SBI, they were less likely to recommend the training to their colleagues. Given that participants who were determined to use SBI in their practice were more likely to promote the training, a question remains about the extent to which physicians are interested in promoting the use of SBI techniques with older adults in primary and psychiatric care. It is worth considering the barriers to widespread implementation that can be systematically addressed to influence engagement and actualization of these approaches in practice.

A Veterans Health Administration survey (Barry et al., 2004) of primary care physicians in management positions indicated that among the barriers to SBI implementation, the least available resources were in the areas of skills training, practice opportunities, and individual-level expert assistance with questions. Similarly, 56% of the key informants in a survey conducted by the Physician Leadership on National Drug Policy (2002) felt that physicians' lack of training, skills, and knowledge about substance abuse screening and treatment was a barrier to increased screening rates. Resources that were initially developed for Level I and II Trauma Centers could help overcome these barriers include: A Quick Start Guide (American College of Surgeons Committee on Trauma, 2006) (http://www.facs.org/trauma/publications/sbirtguide.pdf) and a step-by-step manual was developed by the CDC (Higgins-Biddle, Hungerford, & Cates-Wessel, 2009).

Reimbursement for SBI services (Fussell, Rieckmann, & Quick, 2011) is available from Medicaid (H0049 & H0050 or CPT99408 & CPT99409).) In October, 2011, the Centers for Medicare & Medicaid Services made the decision (#CAG-00427N) to allow G codes (G0396 and G0397) to be applied when Medicare patients make annual wellness visits in a primary care setting. This option has been available since January, 2012. The decision

memorandum (http://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=249) declared that there is adequate evidence to conclude that screening and behavioral counseling to reduce alcohol misuse is reasonable and necessary for the prevention or early detection of illness or disability.

Surveys conducted by the Physician Leadership on National Drug Policy (2002) and Barry et al. (2004) cited a lack of time as the greatest perceived obstacle to physician screening and intervention for substance use problems (cited by 68% of respondents). However, Friedmann et al., (2000) found no evidence of perceived time constraints. Although none of these surveys examined the influence of time constraints on the practice of SBI in older adults, it would be no less of an issue for practitioners with geriatric caseloads. Certainly, geriatricians and others who treat older adults struggle with time constraints, but they have come to accept that affording more time with this patient population is a given. It would be advantageous to replicate these surveys in practices predominated by Medicare recipients ages 65 and older.

Although the Physician Leadership on National Drug Policy (2002) found that stigma or prejudice against individuals with addictions was cited the least often (27%), the group concluded that negative attitudes would be a persistent obstacle. Physicians with more positive attitudes toward problem drinkers are more actively involved in their care (Anderson, 1985; Casswell & McPherson, 1984; Clement, 1986). However, Warburg et al. (1987) and Friedmann et al. (2000) both concluded that alcohol education and supervised clinical experience were more important contributors to the likelihood of treatment or referral.

The national survey of primary care physicians and psychiatrists (Friedmann et al., 2000) found that concern about alienating patients was the only barrier statistically related to widespread implementation of alcohol screening (OR = .78; CI 0.67 - .91). The Veterans Health Administration system survey (Barry et al. 2004) found providers' fear of patient reactions to SBI to be one of the least important barriers endorsed. Yet, patient defensiveness was the second most important barrier endorsed. There is also important evidence to support the contention that few patients are perturbed when their physicians ask about substance use problems (Zimmerman, Farber, Hartung, Lush, & Kuzma, 1994; Zimmerman et al., 1996). In one national landmark study, almost three-quarters of adults dealing with an alcoholic family member were in favor of physician intervention (Peter D. Hart Research Associates, 1998). Unfortunately, these findings have not been widely disseminated among physicians.

The Physician Leadership on National Drug Policy survey (2002) found resistance to the medicalization of addiction treatment as an additional major barrier to effecting greater rates of screening in clinical settings.

Historically, physician-led medical management of addiction has been marginalized and discounted. Roy and Miller (2010 & 2012) have provided a thorough review and discussion of how recent healthcare legislation contributes to the medicalization of addiction. But as chronic disease management has come to be recognized as key in assuring sustainable outcomes for patients, an ever-increasing number of those who need addiction treatment are beginning to receive it in general medical settings. Of course, there are those who advocate for behavioral, rather than medication-based, approaches. But physician resistance stems largely from the traditional lack of medical education about addiction as a disease. Studies suggest that this resistance on the part of primary care providers is waning. The perception that "These problems are not a physician's responsibility" was found to be the least cited barrier to the practice of regularly asking patients about maximum daily alcohol consumption in the national survey of primary care physicians and psychiatrists (Friedmann et al., 2000). Similarly, the Veterans Health Administration system survey (Barry et al. 2004) found the view of alcohol screening as beyond the purview of the primary care clinician's job to be one of the least important barriers endorsed. However, they also noted that the lack of specialty staff available to conduct brief alcohol interventions contributed to a lower percentage of patients receiving brief interventions. This suggests a perception that screening may be the appropriate providence of physicians, but that brief interventions should instead be assigned to specialty staff. Indeed, physicians should not be expected to bear the sole responsibility for widespread implementation of SBI (Anderson, Aromaa, Rosenbloom & Enos, 2008).

Initiatives to promote physician involvement with alcohol use disorders should include strategies to address all of these barriers. More education about the avenues for reimbursement will certainly promote more frequent SBI with older adults. Recent advances in the Patient Protection and Affordable Care Act should help address the time constraint issues as well (SAMHSA, 2011). But there is also a need to address attitudinal barriers. Resistance to the medicalization of addiction will undoubtedly continue, hopefully without an over-reliance on needlessly expensive residential in-patient hospitalizations and potentially addictive prescription drugs. But initiatives to increase physician confidence in managing these problems, improve their familiarity with expert recommendations, and dispel concerns about patient sensitivity around substance issues will go far in facilitating the implementation of SBI in a variety of clinical and community-based sites. These initiatives should examine different types of interventions including medical chart reminders, feedback regarding adherence to practice guidelines, and focused incentives (Friedman et al., 2000).

Our results reinforce all of the issues suggested here. Certainly, they underscore the need for relevant skills training and dissemination of information about the newly established reimbursement opportunities. They also highlight questions related to the relevance of barriers that stem from time constraint concerns, as well as physician, patient, and professional attitudes.

Further research is needed to sort out how training might moderate the direct and indirect influences on pessimism about treatment effectiveness and other attitudinal barriers such as greater perceived (but perhaps not actual) time constraints, lack of specialty staff, and patient defensiveness (Rush et al., 1994). Richard Brown, MD, MPH, Associate Professor in the University of Wisconsin School of Medicine and Public Health and Clinical Director of the Wisconsin Initiative to Promote Healthy Lifestyles, which includes the state's federally-funded SBIRT program, provides this insightful observation:

> After doing lots of [SBIRT] training over lots of years, it's become very obvious that training itself is not the answer. It's difficult to attract primary care people to come to these kinds of trainings. Research shows that most physicians tend to attend trainings in areas of prior interest and keep growing in those areas. So it's hard to get someone interested in a new topic if they're not coming to the training to begin with. (Anderson et al., 2008, p.11)

But the picture is not completely bleak. One of the critical care surgeons at our SBI training remarked, "This training has helped us to expand our pool of clinicians who can conduct screenings and brief interventions on trauma patients. It improves awareness of at-risk drinking that is not as obvious as those with chronic alcohol-related issues." Social workers, who comprised the largest group of our trainees (41.8%), may be more willing than physicians to promote SBI since social workers are often the ones who connect hospital patients to community-services, including substance abuse treatment providers. Although it may be more difficult to promote SBI training in locations that don't primarily provide mental health services, our results suggest that hospitals and other primary care settings are precisely where training may be most useful. They point directly to the challenge of improving receptivity to training and addressing the barriers that dampen enthusiasm for SBI. An examination of the particular barriers that might influence those who are most likely to encounter older adults at risk is also called for. Multiple chronic diseases and complex older patients propel the physician-patient relationship as a central focus of geriatric medical practice.

In September 1999, the Accreditation Council for Graduate Medical Education (ACGME) established the requirement for graduate medical education programs to assess residents' competencies related to communicating effectively. The standard for physician-patient interactions entails the ability to: 1) demonstrate caring and respectful behaviors when interacting with patients and their families, 2) counsel and educate patients and their families, 3) use effective listening skills, and 4) elicit and provide information using effective non verbal, explanatory, questioning and writing skills. In practice, however, the varieties of medical professionalism involve different role relations that span from paternalistic to collegial (Hui, 2005). Physicians interested in SBI are presumably more open to taking the role of friend or counselor in the relationship, but this has not been the dominant model historically. Our participants who were particularly reluctant to recommend the training to their colleagues may not have been inclined to automatically assume such interpersonal competencies among their colleagues in the profession. Developing a sustained partnership with patients is an essential aspect of primary care (Barry et al., 2004), and it is certainly a desirable element in psychiatry as well as. Perhaps if our question had specifically focused on recommendations to colleagues in primary care or psychiatry the responses would have been more positive.

To the extent that SBI lends itself to collaborative relations between the professions, the notion of physician centrality as a dynamic in geriatric interdisciplinary teams is relevant here. If physician trainees were reticent to promulgate the training, it may have been related to a lack of confidence in their colleagues' interest or ability to disavow physician centrality in the interest of better team functioning.

In conclusion, it's important to consider the issue of advanced qualifications. Although we didn't inquire about this directly, the participating physicians presumably had some interest in geriatrics or geropsychiatry since the training was marketed as an intervention for older adults. Geriatricians and geriatric psychiatrists tend to distinguish themselves in at least two dichotomous respects (Arie, 1984). First, there is the need to justify the legitimacy of geriatrics within the context of other specialty areas ("me-tooism"). This may be contrasted with the sentiment that medical professionals are ennobled by working with geriatric patients who are inadequately served and often rejected altogether (elitism). Those of our physician training participants distinguished by these characteristics may have been less likely to recommend the SBI session to professional colleagues they perceived as not sharing an interest in geriatrics. Future research examining advanced qualifications will allow us to determine if the trend is specific to geriatricians and geriatric psychiatrists or more generalizable to all physicians. In addition,

pretest/posttest comparisons on knowledge of and attitudes toward SBI will allow us to determine more definitively whether changes in these constructs were achieved through the training. It is possible that preset perceptions and biases are contributing to a reluctant to promote training and more widespread use of SBI. Further exploring the possible attitudes and perceptions of role relations within the healthcare system and among interdisciplinary team members will allow for further confirmation of the possible hypotheses that could help explain why physicians and physicians in training are less likely than those in the supporting professions to recommend SBI training to others in their profession.

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