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SCREENING, BRIEF INTERVENTION AND REFERRAL TO TREATMENT (SBIRT) IN A POLISH EMERGENCY ROOM: CHALLENGES IN CULTURAL TRANSLATION OF SBIRT

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Abstract

A randomized clinical controlled trial of screening, brief intervention and referral to treatment (SBIRT) for drinking and related problems among at-risk and dependent drinkers, using nurse interventionists, was undertaken in an emergency room (ER) in Sosnowiec, Poland, the first level-one trauma center in that country. This study was the first outside of the U.S. to test protocols developed in a 14-site collaborative SBIRT study. Because Poland has both a pattern of heavy drinking and a highly accessible specialized alcohol treatment system, it offered a key setting for cultural translation of SBIRT to the international context of a new and emerging health care system. It also offered the opportunity to test the effectiveness of SBIRT with both at-risk and dependent drinkers, and to test the feasibility of using ER nursing staff to provide the brief intervention, serving as a potential model for ongoing implementation of SBIRT in ER settings. Findings suggest that the U.S.-based SBIRT protocols can be successfully translated to other cultures, and that nurses can be successfully trained to provide brief intervention for problem drinking in the ER setting.

INTRODUCTION

The majority of patients meeting criteria for “at risk” drinking or those with an alcohol use disorder do not seek specialized treatment for their drinking problems (Reid, et al., 1999), and a higher prevalence of these patients have been found in the emergency room (ER) setting than in the general population (Borges, et al., 1998; Cherpitel, 1993). Brief interventions have been found to stimulate motivation to change drinking behavior and utilize resources for referral (reviewed in (Ballesteros, 2004; Beich, et al., 2003; Bien, et al., 1993)), and in the ER environment, an intervention that can successfully link drinking and the reason for the ER visit may be sufficient to tip decisional balance in favor of reducing alcohol consumption and future alcohol-related negative consequences (Conigrave, et al., 1991; Academic ED SBIRT Collaborative, 2007a). The ER visit may also provide a window of opportunity for changing drinking behavior for those who are alcohol negative at the time of the ER visit or who present to the ER with conditions unrelated to alcohol consumption, but who have a history of at-risk or dependent drinking.

Because of the substantial number of trauma center admissions related to alcohol (Cherpitel, 2007), the American College of Surgeons Committee on Trauma recently mandated screening, brief intervention and referral to treatment (SBIRT) in all level one trauma centers and screening in level two centers (Committee on Trauma, 2006). As a precursor to this mandate, the National Institute of Alcohol Abuse and Alcoholism (NIAAA) and the Substance Abuse, Mental Health and Services Administration (SAMHSA) funded a study of screening, brief intervention and referral to treatment in 14 U.S. academic-based ERs -- the first multi-site SBIRT study for at-risk and dependent drinking in the ER (called the Academic Emergency Department Research Collaborative (AEDRC) study). This study developed methods to effectively implement a model of SBIRT, screening over 8,000 ER patients, and a model curriculum which trained over 400 ER providers to implement brief motivational interviewing (Academic ED SBIRT Research Collaborative, 2007a; Academic ED SBIRT Research Collaborative, 2007b; Bernstein and Bernstein, 2009).

Although this study demonstrated a net decrease of 3.5 drinks per week as a result of the ED intervention, drinkers with CAGE scores >2, those most likely to be dependent drinkers, did not benefit significantly from intervention. An important focus of brief intervention among dependent drinkers is motivating them to make contact with the treatment system through providing a list of potential resources and referral sites for alcohol treatment and counseling, and the AEDRC may have been less effective for dependent drinkers due to limited referral options and differential access to specialized care for dependent drinkers, in addition to a lack of designated staff members to develop and utilize a network of treatment service contacts and to address the issues of stigma (Academic ED SBIRT Research Collaborative, 2007b).

Poland, unlike the U.S., has a specialized alcohol treatment system which is highly accessible to all, and an earlier study in a Polish ER demonstrated high rates of heavy drinking (25% consumed more than 12 liters annually and 16% met diagnostic criteria for an alcohol use disorder) (Cherpitel, et al., 2005; Moskalewicz, et al., 2006). Cultural translation of SBIRT in an international context such as Poland, which has a new and emerging health system, provided an opportunity to evaluate performance across differences in culture and language, and test the effectiveness of SBIRT with both at-risk and dependent drinkers in an ED with demonstrated high prevalence of dependence.

Cultural Context of Drinking in Poland

In Poland as in other Central and Eastern European countries, both alcohol consumption and the health care system have undergone enormous change over the last decade, and the prevalence of heavy problem drinking and alcohol dependence are high (Wedzicha, 1998), as is the prevalence of heavy and problem drinking in ER caseloads, especially among injured patients (Morawski and Moskalewicz, 1989). Poland has historically been a predominantly spirits drinking country, with a drinking pattern characterized by infrequent, but heavy, consumption, with high levels of intoxication acceptable among males, leading to high rates of acute alcohol-related problems (Moskalewicz, 1993). This pattern of drinking is especially predominant in the more traditional Southern region of the country, which includes Sosnowiec, site of this study. This area has been inhabited by those employed for generations in traditional heavy industry (mining and steel), but has undergone an economic downturn with substantial unemployment. Drinking patterns in this region are characterized by high consumption per drinking occasion (now coupled with the more modern trend of frequent drinking), binge drinking (drinking “to the bottom of the bottle”), and social pressure to drink like (i.e., as heavy as) others. The more traditional pattern of vodka drinking is now combined with beer consumption which is drunk virtually after each shift of hard work.

Within this context, and given that research is limited on the effectiveness of brief intervention for drinking and related problems in the ER, especially among dependent drinkers, it was felt

that both clinicians and health care policy makers would benefit from additional data from implementation of brief intervention in the ER setting internationally. This study also provided the opportunity to test the feasibility of using ER nursing staff to provide the brief intervention, serving as a potential model for ongoing implementation of SBIRT in ER settings.

METHODS

Developing the Cultural Translation of SBIRT

Pilot study—In order to test the feasibility of carrying out a brief intervention study in Sosnowiec, a pilot study was conducted in the same ER every other day over a 10-week period, to determine the proportion giving consent to be screened, the proportion screening positive (on a 10-item questionnaire) and therein eligible for recruitment into the study, the proportion agreeing to a follow-up at six months, and the proportion that could be re-contacted at six-months and complete a short questionnaire.

Focus groups

Two focus groups conducted by the Polish investigators were held to inform the study, one with the interviewers who conducted the feasibility study and the second with patients to explore their reactions to screening and interventions. The first focus group, which included the three interviewers who collected the feasibility pilot data, explored issues which arose during the pilot study via a semi-structured interview. Items for discussion included questions about patient responsiveness to participating in a brief intervention, about who would be most acceptable to the patient for delivering the intervention, and about difficulties with contacting patients for follow-up. Consensus was reached that nurses were most acceptable in providing the brief intervention, and ER staff, in discussions during the feasibility study, concurred that that brief interventions should be offered by nurses rather than physicians (who claimed to have no time for any extra interventions), because intervention originating from nurses was more likely to be recognized by patients as normal and acceptable in the ER setting, and also because nurses normally devote much more time to a patient compared to physicians.

Issues related to follow-up centered on a wrong or non-working telephone number as the primary reason for failure to re-contact the patient at 6-month follow-up. The vast majority of contact failures occurred among patients who provided only a mobile phone number. In Poland, those who utilize mobile telephones change their telephone company relatively frequently, and a recommendation was made to obtain alternate non-cellular phone numbers. Twenty-five percent (25%) of the respondents (primarily those living in villages and small towns surrounding Sosnowiec) were not able to provide a telephone number, but successful follow-up contact was made by home visit in 83% of these cases.

A second focus group was held with patients screening positive in the feasibility study, and thus being eligible for a brief intervention, to explore the specific context of Polish drinking, for informing the brief intervention, and barriers to changing drinking behavior and/or obtaining alcohol treatment. Patients identified opportunities for drinking in the workplace and the prevailing social environment of drinking in excess as a major reason for drinking and as a barrier to changing drinking patterns. The group recommended moderation rather than abstinence as a negotiation goal, with a separate (higher) norm for special celebrations lasting more than six hours. Patients reported not seek treatment because of unfamiliarity with treatment resources, and because of stigma associated with accessing specialized alcohol treatment services.

Training and Implementation of SBIRT

A cadre of interviewers (primarily university students or young graduates) were trained by the authors (both the U.S. and Polish collaborators) and supervised by survey research staff from the Polish Institute of Psychiatry and Neurology to carry out patient recruitment, screening, assessment and randomization procedures.

Training in SBIRT was provided by Drs. Edward and Judith Bernstein, utilizing protocols established at all sites in the AEDRC SBIRT study (Academic ED SBIRT Research Collaborative, 2007b), which trained a variety of ER practitioners (physicians, nurses and physicians' assistants), to provide the brief intervention during regularly scheduled time in the ER. Pre- and post-training evaluation of these practitioners found exposure to the SBIRT curriculum decreased perceived barriers to addressing high-risk drinking and increased competency, perception of responsibility and use of SBIRT (Academic ED SBIRT Research Collaborative 2007a; Academic ED SBIRT Research Collaborative, 2007b). Eight nurses normally working in the ER were trained to provide the intervention, using brief motivational interviewing techniques. The Bernsteins first trained the bilingual Polish collaborators on site at the ER in Poland, who then in turn provided a one-day training for intervention nurses, with trainers available onsite to answer questions as they arose. Curriculum and training materials were previously developed by the Bernsteins (Bernstein et al., 1997; Academic ED SBIRT Research Collaborative, 2007a; Bernstein and Bernstein, 2009) to address ER time pressures and issues common to ER patients (such as linking injury to drinking).

Nurses were trained in brief motivational intervention, based on the FRAMES model (*F*eedback, *R*esponsibility, *A*dvice, *M*enu or choice, *E*mpathy and *S*elf-efficacy) (Miller, 1999; Miller and Rollnick, 2002). This model of intervention, Brief Negotiation Interviewing (BNI) (Bernstein, et al., 1997), with it's emphasis on respectful listening, open-ended questions, choice and negotiations, was designed to take about 15–20 minutes to complete, and integrated the elements of motivational interviewing and readiness to change (Prochaska and DiClemente, 1992) with specific action, providing a therapeutic technique that is patient-oriented, builds on self-efficacy and utilizes the patient's existing strengths and resources to facilitate and support positive behavior change (Rollnick, et al., 1992). The intervention generally took place while the patient was waiting for medical treatment. Based on information from the assessment (including estimated blood alcohol concentration using a breathalyzer, and self-reported alcohol use at the time of the event, causal attribution of alcohol to injury and propensity for risk taking), and information obtained from the focus group of patients screening positive for dependent or at-risk drinking (reasons for drinking, barriers to changing drinking patterns and attitudes toward treatment in the Polish culture), the intervention nurse asked the patient to explore the pros and cons of use of alcohol and to self-report his/her readiness to change amount of drinking and/or seek treatment on a scale of 1–10 on the Readiness Ruler. This information was then used to direct the interventionist's strategy for interaction, using an interview format which consisted of the following elements: engagement and permission; feedback, information and norms for non-hazardous drinking (based on Polish drinking norms); decisional balance and pros and cons; readiness to change, using the Readiness Ruler; eliciting reasons to change and steps to change; exploring a menu of options, including advising follow-up with a referral and resource list; and, prescription for change. Both the nurse and the patient signed an action/discharge plan, which included a stop-date or goal for reducing the risks of drinking, as well as strategies to achieve the specified goal. Nurses were instructed to then provide to the patient a list of AA groups and specialized services for alcohol treatment and counseling, an important focus of the intervention among dependent drinkers in motivating them to make contact with the treatment system.

Training included four related approaches to reinforce learning: 1) didactic materials, including the rationale for intervention, evidence of its effectiveness, and presentation of the protocols

for screening and intervention; 2) exposure to training videos and discussion about key points; and 3) an interactive component in which nurses then had the opportunity to role play common situations and then to pilot test intervention procedures in the ER, followed by; 4) a debriefing session, prior to commencement of the study. Booster training sessions were also provided by study staff as needed throughout the study.

As a measure of integrity of the intervention, interventions were initially observed by the authors with a patient's consent and, following the intervention, immediate feedback was offered to the nurse in order to assure high quality of the intervention. In addition, several interventions per nurse were taped to monitor integrity, and any deviations from the original intervention protocol which appeared to affect the integrity of the intervention were discussed with the intervention nurse.

The integrity of the intervention was also evaluated by a brief exit interview with patients receiving the intervention just before leaving the ER, as an additional quality control measure, which included the following three questions: "Did the nurse talk to you about your drinking?" "Were you satisfied with that talk?" "Was a contract agreement reached?"

Study protocols also called for the taped sessions to be scored according to an adherence protocol based on the FRAMES construct, a procedure successfully used by Bernstein, et al. (2005) in prior BI studies in the ER (Bernstein and Bernstein, 2009).

CULTURAL ADAPTATIONS

Some adjustments to the brief intervention protocols were required to meet the needs of the nurses and patients in delivering the brief intervention in this cultural context. During the brief intervention training nurses professed that they felt patients would not accept a referral to alcohol treatment or counseling unless the patients, themselves, initiated such a request (due to a certain level of stigma associated with the use of alcohol treatment resources). They were not willing to make an offer to refer without a patient request for one, because they were convinced that an unsolicited offer to refer would jeopardize the nurse-patient relationship, put up a wall of resistance and undermine the possibility of effectiveness of the intervention. Consequently, such referrals were not frequently made, and only one patient sought outside treatment at three-month follow-up. This paradox—the accessibility of treatment resources without acceptability—made it difficult to assure effective outcomes for dependent drinkers.

Both investigators and trainees agreed that the most difficult part of the intervention for the ER nurses who participated in the training sessions was the active listening component. The depth of the internal struggle to explore the context of drinking rather than revert to the more comfortable style of closed-ended questions and premature advice was apparent even to those on the investigative team who had only a rudimentary grasp of the Polish language, suggesting that the culture of medicine, with its hierarchical power relationships, persists across ethnic and national differences. This experience also validated the importance of measuring patient talk time versus practitioner talk time for evaluating fidelity to an intervention protocol based on a motivational interviewing style.

While nurses expressed that they did not feel comfortable with being monitored via tapped sessions which were scored according to 12 elements deemed essential in the brief motivational interview, they requested a copy of the adherence protocol scoring form which they reported served as a useful guide during the patient encounter for including all elements of the intervention.

DISCUSSION

Despite these adjustments, the study findings and post-study communications with the ER nurses providing the intervention and other ER providers suggest that SBIRT was successfully translated into this Central European ER setting. Similar to findings in North American and Western European cultures, both the intervention and control group showed significant decreases in the proportion positive for dependent and at-risk drinking, and significant reductions in quantity and frequency of drinking and negative consequences of drinking, with no significant difference between the two groups when controlling for baseline measures and demographic characteristics (Cherpitel, et al., 2008). Findings in this study also suggested, however, that intervention may have added benefits above assessment for specific subgroups of patients in the ED, including those admitted to the ER with an injury and those with a positive BAC at the time of ER admission.

Despite these positive findings, an important consideration in the cultural translation of SBIRT is the sensitivity of behavior change models to cultural beliefs and values. Prior research in the U.S. has found cultural differences in the constructs of the meaning of drinking that influence alcohol use among ethnic minorities (Strunin, 2001), and recognizing the social context and normative patterns of drinking and culturally sanctioned drinking behaviors will improve efforts aimed at prevention and intervention (Strunin, 1999b). This U.S.-based research suggests that policies and strategies developed to address substance use would benefit from disaggregating the norms, beliefs and behaviors about drinking among those from different ethnic and racial backgrounds (Strunin, 1999a) and intervention efforts need to be framed within the broader socio-cultural contexts that influence the health and wellbeing of different ethnic or cultural groups (Strunin and Demissie, 2001).

Some important factors that are relevant to the cultural translation of SBIRT also bear noting here. These include such issues as reach, uptake, feasibility, flexibility, adaptability, outcomes, cost, and sustainability, as described in the RE-AIM model designed for translation of behavioral interventions (Glasgow, et al., 1999). Factors that determine successful identification of those meeting criteria for a brief intervention (reach) and factors that influence the individual's and ER's acceptance of SBIRT (uptake) also need to be identified. Factors affecting the feasibility of implementing SBIRT (such as cost, time and space required, and number and type of training of staff to provide the intervention) need to be evaluated. Components of the intervention or institutional organization may need to be modified to increase uptake (flexibility and adaptability), without loss of fidelity of the intervention. Lastly, improved patient outcomes and associated costs of providing the intervention are important to consider for determining the extent to which SBIRT becomes part of routine practice in the ER (sustainability).

In the present study, since the nurses were provided "extra pay" for providing interventions outside of their regularly scheduled work shifts in the ER, a next step in implementing brief intervention on an on-going basis in the ER would be to include brief intervention training into the regular training curriculum and monitor implementation of intervention with and without "extra pay". Nevertheless, this project suggests that nurses were successfully trained to provide a brief intervention for patients in the ER, and this may serve as a future model for ongoing implementation of SBIRT in emergency room settings internationally. Governmental and private health insurance policy that allows for coding and reimbursement for SBIRT services will be important for sustainability, however.

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