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Adapting Screening, Brief Intervention and Referral to Treatment (SBIRT) for Alcohol and Drugs to Culturally Diverse Clinical Populations

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Abstract

OBJECTIVE—To review the literature on the Screening, Brief Intervention, and Referral to Treatment (SBIRT) approach to alcohol and drug use with racial and ethnic subgroups in the United States and to develop recommendations for culturally competent SBIRT practice.

METHODS—Articles reporting on the use of SBIRT components (Screening, Brief Intervention, Referral to Treatment) for alcohol and drug use were identified through a comprehensive literature search of PubMed from 1995–2015.

RESULTS—A synthesis of the published literature on racial and ethnic considerations regarding SBIRT components (including motivational interviewing techniques) was created using evidence-based findings. Recommendations on culturally competent use of SBIRT with specific ethnic groups also are described.

CONCLUSIONS—Based on the literature reviewed, SBIRT offers a useful set of tools to help reduce risky or problematic substance use. Special attention to validated screeners, appropriate use of language/literacy, trust building, and incorporation of patient and community health care preferences may enhance SBIRT acceptability and effectiveness.

PRACTICE IMPLICATIONS—Providers should consider the implications of previous research when adapting SBIRT for diverse populations, and use validated screening and brief intervention

methods. The accompanying case illustration provides additional information relevant to clinical practice.

Keywords

SBIRT; cultural competence; alcohol; substance use disorders; motivational interviewing

1. Introduction

Screening, Brief Intervention and Referral to Treatment (SBIRT) is an evidence-based, public health approach widely used in health care settings (Babor et al., 2007). The term evidence-based practice is defined as, "...the integration of best research evidence with clinical expertise and patient values," (Institute of Medicine, 2001; p.147) and this understanding informs our approach to examining the SBIRT literature. SBIRT is designed to reach a broad pool of patients who use substances at a range of levels, including those who are at risk for substance-related consequences but may not meet criteria for an alcohol or drug use disorder. The literature on SBIRT outcomes includes mixed findings: Trials of SBIRT indicate that it can reduce alcohol use (Academic ED SBIRT Research Collaborative, 2007) and is associated with health care cost savings (Barbosa et al., 2013). However, recent trials indicate that SBIRT may be less effective in reducing drug use (Roy-Bryne et al., 2014; Saitz et al., 2014), suggesting that additional research in health care settings is needed. Although there is a relative dearth of studies on culturally competent SBIRT delivery, a number of studies have examined screening instrument validity and brief intervention outcomes across ethnic groups, and a review of these data are timely given the pressing importance of substance use interventions for underserved minorities in the U.S. (Lo & Cheng, 2011). This review article describes the evidence collected to date regarding this important clinical area. It incorporates both a review of SBIRT outcome studies and recommendations based on the literature for working with specific ethnic groups. In the accompanying case illustration and expert discussion, SBIRT adaptations are further described in the case of a Latino patient with hazardous drinking and drug use presenting for medical treatment in a primary care setting.

1.1 Race, Ethnicity and Substance Use

The racial and ethnic landscape of the U.S. has changed in recent years. From 2000 to 2010, the percentage of Hispanics increased from 12.5% to 16.3% of the population. During this same time frame the percentage of non-Hispanic Whites decreased from 69.1% to 63.7%. Regarding race, the percentage of Whites decreased from 2000 to 2010 while Black/African Americans, American Indian and Alaskan Natives, Asians, Native Hawaiian or other Pacific Islanders or individuals from two or more races has increased or remained constant (Humes, Jones & Ramirez, 2010). This increasingly diverse population composition underscores the importance of understanding patterns of alcohol and drug use by race and ethnicity and the extent to which interventions may need adaptation for different racial and ethnic groups.

Recent epidemiologic findings indicate that problematic substance use varies by race and ethnicity. According to the 2012 National Survey on Drug Use and Health (SAMHSA, 2013), the rate of substance abuse or dependence among individuals 12 years or age and

older was highest among American Indians or Alaska Natives (21.8%), followed by Whites (8.7%), Hispanics (8.8%), African Americans (8.9%) and individuals reporting two or more races (10.1%). Asians had lower rates of substance abuse or dependence (3.2%) as did Native Hawaiians or Other Pacific Islanders (5.4%).

The consequences of substance use also appear to vary. A review (Caetano, 2003) found that Hispanic men had greater alcohol-related problems and deaths due to cirrhosis than White men. Hispanic patients screened in a Level-1 trauma unit reported heavier drinking patterns and increased drinking-related problems when compared to non-Hispanic White patients (Field, Cochran & Caetano, 2013). In addition, African-American men had higher rates of deaths due to cirrhosis than White men. Another study comparing alcohol-attributable mortality by race revealed that Native Americans experienced higher rates of death and potential years of life lost than other races; and African Americans experienced higher alcohol-related mortality than Whites (Shield et al., 2005). Therefore, not only do minority groups often have higher prevalence rates of substance problems than whites, but health consequences may also be greater.

Substance use treatment is underutilized by members of all racial-ethnic groups (Cook & Alegria, 2011), with some variability. African American patients tend to have higher rates of specialty substance use care than White patients, but Hispanic patients have lower rates than non-Hispanic White patients (U.S. Department of Health and Human Services, 2009). Field, Cochran and Caetano (2013) reported that Hispanic hospital patients were less likely to receive prior alcohol treatment compared to non-Hispanic White patients even after controlling for insurance status. Both patient and system factors potentially contribute to underutilization in behavioral health care, including socioeconomic status, stigma, distrust of providers, poor identification, and lack of culturally competent services (Alegria et al., 2002). Effectively delivered SBIRT can be a key tool in enhancing service utilization, as we describe below.

1.3 Cultural Considerations and SBIRT

SBIRT can work well with many groups (Madras et al., 2009), yet consistent screening and culturally competent care often is not practiced. Fortunately, SBIRT may be acceptable to diverse medical patient populations (Broyles et al., 2012; Rahm et al., 2014). For example, Broyles et al. (2012) found that African American patients were less likely than other ethnic groups to report discomfort while discussing alcohol use. Brief interventions may be more likely to be delivered to racial and ethnic minorities compared to non-Hispanic White patients (Dobscha et al., 2009; Williams et al., 2012). These discrepancies highlight the importance of improving training to help providers offer alcohol and drug use interventions broadly and based on substance use severity, without regard to patient race or ethnic group. According to the U.S. Department of Health and Human Services Office of Minority Affairs (2012), "Cultural competency is one of the main ingredients in closing the disparities gap in health care.... Services that are respectful of and responsive to the health beliefs, practices and cultural and linguistic needs of diverse patients can help bring about positive health outcomes." The current review examines the evidence base on SBIRT in order to inform culturally competent care in working with a range of patient populations.

2. Methods

This review focused on articles reporting on the use of specific SBIRT components (Screening, Brief Intervention and Referral to Treatment) with racial and ethnic minority populations. Studies of SBIRT components were identified through a literature search of PubMed from 1995–2015. For the Screening section, common SBIRT screening measures (AUDIT, ASSIST, CAGE, DAST-10, and the NIAAA and NIDA single item screeners) were reviewed for use with racial and ethnic minority adult patients. Thirteen articles reporting on the use of alcohol and drug assessment, including reports of translated screening measures used outside the U.S., were included in the current review. For Brief Intervention, search terms included “brief intervention” OR “motivational interviewing” AND “racial” OR “race” OR “ethnicity” AND “alcohol” OR “drug” OR “substance.” To be included, articles must have reported on brief interventions or motivational interviewing with adult patients in the U.S. seeking treatment for alcohol or drug use. This search resulted in eight studies. Search terms for Referral to Treatment included “Referral to treatment” AND “racial” OR “race” OR “ethnicity” AND “alcohol” OR “drug” OR “substance.” Articles were included if they specifically discussed referral to alcohol or drug treatment with racial or ethnic minority adult patients in the U.S. Our search for Referral to Treatment studies resulted in four relevant studies. In reviewing the studies, a small number of additional articles (one on referral to treatment and initiation of care) were identified that did not initially appear in PubMed search results, including studies on adaptation of treatments to specific ethnic groups (N=9). These also were included in the review.

3. Results

3.1 Screening Measures

Appropriate screening questions are key to accurate identification of substance use problems. Fortunately, several measures have been evaluated for use with non-English speakers and/or racially diverse patient populations. See Table 1 for an overview of these SBIRT screening measures.

Alcohol Use Disorders Identification Test (AUDIT)—The AUDIT (AUDIT; Babor & Grant, 1989) was developed with the intent of creating an instrument that would be useful in many countries and cultural groups. It is a ten-item measure that screens for risky drinking and alcohol use disorders and has been evaluated among various racial/ethnic groups. Results indicate that it is a reliable, valid (Leonardson et al., 2005) and unbiased (Volk et al., 1997) measure for detecting at-risk drinking. In a study among Mexican Americans and Mexicans in emergency rooms in California and Mexico respectively, the AUDIT showed sensitivity for detecting alcohol dependence in both samples (Cherpitel & Borges, 2000). In a study of African American and Hispanic emergency room patients, the AUDIT also demonstrated acceptable sensitivity and specificity for detecting alcohol dependence (Cherpitel & Bazargan, 2003).

The AUDIT has been translated into five Chinese languages and may be used with many Chinese populations living in the U.S. Translations of the AUDIT in Chinese language populations indicate that translations developed in Beijing, Tibet, Taiwan, and Hong Kong

demonstrated high sensitivity and moderate specificity for harmful/hazardous drinking and alcohol dependence; however, the Min-Nan Taiwanese version demonstrated low specificity for detecting alcohol dependence (Li et al., 2011). The AUDIT has also been translated into Arabic (Al Marris et al., 2009) and Korean (Kim et al., 2008). Based on this work, use of the AUDIT seems well supported.

Alcohol Use Disorder Identification Test – C—The AUDIT-C is a three-item version of the AUDIT. This abbreviated measure was evaluated in a sample of White, African American and Hispanic primary care patients. It had adequate sensitivity and specificity in all three racial/ethnic groups. However, it was more sensitive in Hispanic women than African American or White women. Sensitivity was somewhat higher for White men than African Americans and did not differ from Hispanic men (Frank et al., 2008). These limited findings indicate that the AUDIT-C is a useful brief screening measure across race/ethnic groups in primary care.

Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)—The ASSIST is a validated measure designed for use in health care settings. The ASSIST queries lifetime and past 3-month use of substances (tobacco, alcohol, cannabis, cocaine, amphetamine, inhalants, sedatives or sleeping pills, hallucinogens, opioid, or other drugs), craving, substance-related problems, and attempts to cut-down on substance use (World Health Organization http://www.who.int/substance_abuse/activities/assist/en/) and has demonstrated acceptable reliability among international samples (WHO ASSIST Working Group, 2002). See Table 1 for details on the ASSIST including translations of this measure.

The CAGE Questionnaire—The CAGE (Ewing, 1984) consists of four questions: Have you ever felt you should Cut down on your drinking? Have people annoyed you by criticizing your drinking? Have you ever felt had or Guilty about your drinking? Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (Eye opener)? The CAGE was tested with Hispanic, African American, and White/other individuals. The sensitivity and the specificity of the CAGE were compared using ICD-10 and DSM-IV criteria for alcohol dependence and did not vary by age or gender (Cherpitel, 1999). While primarily intended to screen for alcohol dependence, the CAGE may be useful in working with multiple groups.

The Drug Abuse Screening Test (DAST)—The DAST (Skinner, 1982) is a 28-item self-report measure adapted from the Michigan Alcohol Screening Test (MAST). The DAST queries use of drugs and potential consequences in the prior 12 months. The DAST-10, an abbreviated version of the DAST, has been translated into Spanish and was found to be reliable in differentiating drug abusers from non-abusers (Bedregal, Sobell, Sobell, & Simco, 2006).

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) single-item screener—The NIAAA single item screener for unhealthy alcohol use (“How many times in the past year have you had X or more drinks in a day?” where X is 5 for men and 4 for women, and a response of > 1 is considered positive) has also been validated in an ethnically diverse, English-speaking primary care sample (Smith et al., 2009). Sensitivity and

specificity in detection of alcohol use disorders were similar across ethnic groups, indicating that this single-item screener may be broadly useful as an initial step in alcohol problem detection.

The National Institute on Drug Abuse (NIDA) Single Question Screening for Drug Use—The NIDA single question screener asks, “How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?” A response of one or greater is considered a positive result and should be followed by more detailed screening and potentially an intervention. The NIDA single question screener was validated in a diverse sample of adult primary care patients (Smith, Schmidt, Allensworth-Davies, & Saitz, 2010).

Summary—While further research is needed to assess the reliability and validity of alcohol and drug screening measures with individuals in a variety of settings and from various countries, previous findings indicate that there is a pool of available measures that have been preliminarily tested with diverse patients, ranging from single-item to more extensive measures. The AUDIT has been examined with the greatest number of racial and ethnic groups and is recommended as a screening measure in primary care settings. The review above highlights the range of tools available to the clinician in screening and assessment of alcohol and drug use across diverse populations.

3.2 Brief Interventions

Results identified studies that examined the efficacy of brief interventions or motivational interviewing (MI) with racial or ethnic minority adult patients. Brief interventions in the context of SBIRT usually refer to 1-2 brief provider-patient discussions with the goal of enhancing a patient’s motivation to decrease or abstain from alcohol or drug use. Brief interventions vary in their approach, but generally include information or recommendations on how to reduce use or abstain from substances, a discussion designed to enhance motivation, and a focus on teaching the patient behavior change skills (Babor et al., 2007). MI is often utilized as a brief intervention in SBIRT protocols. There is evidence that MI can be used with minority clients as well as with Caucasians, based on a recent meta-analysis of alcohol and drug treatment outcomes (Hettema, Steele, & Miller, 2005). This meta-analysis found that MI demonstrated greater effects with samples comprised either completely or predominantly with individuals from ethnic minority groups.

Brief Interventions and Motivational Interviewing with Diverse Populations—Bernstein et al. (2005) studied brief interventions for cocaine and heroin users screened in a routine medical visit in a public hospital, in a large sample (N=1175) that was 14% white, 62% African American and 23% Latino. Cocaine levels in the intervention group, as measured by assay of hair, were reduced by 29% for cocaine and 25% for heroin. White and Latino ethnicity (vs. African American) were each significant predictors of reduction in heroin and cocaine use. However, the sample included a large percentage of homeless individuals and results may not generalize to other populations.

Saitz and colleagues (2014) examined the efficacy of brief counseling for unhealthy drug use (defined as any illicit drug use or misuse of prescription drugs) in an urban academic hospital-based primary care clinic. The sample (N=528) was 70% male. Regarding race/ethnicity, 69% of the participants were African American, 10% Hispanic, and 20% White. Participants were randomized to one of three conditions: brief negotiated interview, an adaptation of MI, or a no-intervention control condition. The brief negotiated interview consisted of a 10–15 minute structured interview conducted by health educators with a high school education or a bachelor's degree. The brief negotiated interview utilized some MI components combined with feedback and a change plan. The adaptation of MI condition was conducted by a counselor with a master's degree and consisted of a 30–45 minute motivational interview combined with the offer of a 20–30 minute booster session. Results indicated that neither of the brief intervention conditions were associated with decreases in substance use at six months.

Similarly, Roy-Bryne and colleagues (2014) tested the efficacy of a single brief intervention versus an enhanced usual care condition. The brief intervention condition was a 30-minute MI-based discussion of the participants' substance use and potential for behavior change. Participants in the brief intervention condition also received a handout with their DAST-10 score and a list of substance abuse resources and a 10-minute telephone booster session. Participants in the enhanced usual care condition received a handout with their DAST-10 score and a list of substance abuse resources. Participants were recruited from safety-net primary care clinics. Participants (N=868) were 70% male, 45% White, 37% African American, 18% of other race, and 9% Hispanic. No significant differences were found between the two conditions at follow-up, nor was there a significant decrease in substance use at 12 months.

Patients from an inner-city emergency department were screened with the CAGE questionnaire for risky drinking (Bazargan-Hejzi et al., 2005). Patients who screened positive were randomized to receive a brief MI session (15–20 minutes) versus a control condition consisting of health information. Of the sample, 64% of the participants were African American and 30% Hispanic. Results indicated that participants in the brief motivational interview condition decreased the odds of at-risk drinking among moderate drinkers but reductions were not evident among high-risk drinkers.

Field and colleagues (Field, Caetano, Harris, Frankowski, & Roudsari, 2010) tested a MI-based brief motivational intervention (BMI) for alcohol use in a diverse sample of patients admitted to trauma care (N=1493; 19% African American, 36% Hispanic, 45% White). Participants were randomized to either BMI or treatment as usual. All participants received standard written information on at-risk drinking and quitting strategies. The BMI intervention was delivered in English or Spanish. At 12 months, Hispanic participants who received BMI had significant alcohol use reduction across multiple measures (e.g., average weekly consumption and maximum consumption in a day). While African American and White participants reduced alcohol use from baseline to 12 months, there was no treatment effect observed. The treatment effects on alcohol reduction among Hispanic participants were independent of drug dependence status at baseline (Field, Cochran, & Caetano, 2012), as well as prior treatment utilization or subsequent treatment use at 6 or 12 months (Field,

Cochran, & Caetano, 2013). While abstinence was not emphasized as a treatment goal, Hispanic participants with drug dependence who received BMI reported more days of alcohol abstinence than those received TAU, and this effect was not observed in other ethnic groups (Field et al., 2012). A secondary analysis of the trial (Field et al., 2010) including only Hispanic participants (n= 537) with 47% preferring speaking Spanish, 54% foreign-born, and 65% had less than a high school education, revealed ethnic-concordance yielded enhanced treatment efficacy for BMI in alcohol use reductions at 12 months after adjusting for immigration status and acculturation (Field & Caetano, 2010). Although the intervention protocol was not culturally adapted for Hispanic participants, the authors suggested that cultural tailoring of the intervention may have naturally taken place when it was delivered by a Hispanic provider.

Culturally Adapted Brief Interventions and Motivational Interviewing—One study tested a personalized motivational intervention (PMI), delivered in two 60-minute sessions for English- and Spanish-speaking participants (n=281, 48% Latinos, 26% African American) who returned for follow-up care for facial injuries treated at a level 1 trauma center (Shetty, Murphy, Zigler, Yamashita, & Belin, 2011). PMI was tailored to an individual's readiness for change and involved invoking relevant cultural values and providing feedback on substance use level in the context of national and community patterns. Comparison group participants received two 15-minute sessions providing health information. No treatment effect was observed for alcohol use. PMI participants had lower drug use at 6 months, but treatment effect was not maintained at 12 months. Dropout rates at 6 and 12 months were high for both PMI (48% and 57%, respectively) and comparison groups (38% and 43%, respectively). Thus, it is difficult to determine how representative of the overall sample these results were.

A recent study (Lee et al., 2011) reported on adopting MI to address heavy drinking among Hispanics. This project began from the perspective of specific social stressors in the context of acculturation, in order to develop treatment adaptations. Key stressors included the cultural context of immigration, and an increased focus on cultural context; changing family dynamics; social support, and alcohol health literacy. For instance, rather than inquiring about the participant's daily patterns of alcohol use, therapists adapted the intervention to include discussion of potential stressors such as discrimination, limited employment, or loss of close family members and friends from their home country. Typically individual-oriented exercises such as exploring pros and cons of drinking were broadened to include the potential negative effects of drinking on family members.

Lee et al. (2013) later examined the efficacy of culturally adapted MI (CAMI) versus un-adapted MI in a community sample of heavy drinking Latinos (N=58). Both interventions, CAMI and un-adapted MI, were manualized, single-session approaches lasting approximately 90 minutes. Both conditions included structured therapeutic tasks including The Typical Day exercise, personalized feedback on drinking, discussion of the pros/cons of drinking, and a change plan. The CAMI approach was adapted to include a specific focus on the cultural and social aspects of drinking and the role of acculturation-related stressors. Other adaptations included involving child-care and transportation services, after-hour appointments, and a focus on participants' cultural values, social context, and other

environmental aspect including employment and social isolation. Participants in both CAMI and un-adapted MI reported significant decreases in drinking days, heavy drinking days, and consequences of alcohol use, with greater reductions in the CAMI intervention at the two- and six-month follow-up periods. Some of the adaptations described above may also be relevant to working with other immigrant groups. Printed materials in patients' native language may facilitate a discussion on drinking and drug use. Furthermore, the consideration and explicit integration of patients' cultural and familial contexts in the patient-provider interaction may allow patients to be more trusting and willing to discuss drinking and drug use.

3.3 Referral to Treatment (RT)

Our review identified four recent studies reporting on treatment referral for racial and ethnic minorities. In a study from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), a survey of over 43,000 U.S. residents 18 years of age and older, participants were queried on their use of alcohol and drugs and use of treatment services (Perron et al., 2009). Of those with a lifetime drug use disorder (11% of total sample), 16% had received at least one type of substance use treatment service. African American participants were more likely to report receiving addiction specialty care services (21%) compared to Hispanics (17%) and Whites (16%). African American participants were more likely to use 12-step meetings, drug/alcohol rehabilitation programs, outpatient clinics, and clergy services compared to Whites, who were more likely to utilize professional services. White participants were more likely to report seeing a private physician, psychiatrist or other professional for treatment. Yu et al. (2014) found that Asian individuals were more likely to be admitted to outpatient substance use treatment when compared to Hispanic, African American and White individuals. Moreover, Asian individuals were less likely to be admitted to detoxification or residential treatment than Hispanic or African American individuals.

The results of a recent epidemiological study indicated that non-Hispanic White and Hispanic individuals were more likely to enter specialty substance use care when compared to Asian and African American individuals (Lo & Cheng, 2011). Furthermore, White individuals were less likely to access substance use treatment through non-specialty facilities, defined as a discussion with a medical doctor or other healthcare professional who was not a specialty substance use provider, other healer, religious leader or self-help group. Thus, members of minority groups were more likely to access treatment via a conversation with their health care provider (Lo & Cheng, 2011), indicating that these providers are in an ideal position to discuss their patients' substance use and refer to specialized treatment settings.

Delays in admissions are another barrier to treatment entry. Recent evidence suggests that minority opiate users may be more likely to experience an admission delay to an outpatient methadone treatment program. Specifically, African American and Hispanic individuals were more likely to experience a delay in admission when compared to non-Hispanic Whites (Lo & Cheng, 2011). Furthermore, in a recent study of admission delays to outpatient

methadone treatment programs, African American and Hispanic patients had higher odds of an admission delay compared to non-Hispanic Whites (Gryczynski et al., 2011).

These delays in treatment may be due to a number of circumstances, including insurance coverage and financial resources; however they do suggest that minority individuals are more impacted by these factors. Given that delayed admissions have been identified as a barrier to treatment entry (Peterson et al., 2010) it is important that the potential reasons for admission delays be considered when referring minority substance users to specialized treatment. For example, providers may need to provide additional assistance to patients with language or literacy barriers in order to link patients with care in a timely way. Furthermore, providers may want to discuss the potential for an admission delay with patients so that they can develop a plan on how to cope with such a delay if it arises.

3.4 Cultural Adaptations of SBIRT

Our review also considered articles that explored cultural adaptation. While not identified in our initial search of SBIRT components, these empirical studies provide valuable information relevant to clinical practice. As these studies show, SBIRT may benefit from small but important cultural adaptations in order to maximize impact. Cultural adaptation may be defined as “the systematic modification of an evidence-based treatment (EBT) or intervention protocol to consider language, culture, and context in such a way that it is compatible with the client’s cultural patterns, meanings, and values” (Bernal, Jiménez-Chafey, Domench Rodríguez, 2009, p. 362). Below we highlight key cultural adaptations by racial or ethnic group based on the literature described above. Although these adaptations are empirically based on population generalizations, it is important to recognize substantial intragroup variation and the individuality of each patient. Clinically, these SBIRT adaptations should serve as a starting point that is further refined based on each patient’s unique characteristics, personal history and social context.

3.5.1 Native American/Alaskan Native populations—Adaptations to SBIRT may be required to make it more acceptable to American Indian/Alaskan Native populations. In a review of the SBIRT initiative in California, Davoudi and Rawson (2010) noted that American Indian/Alaskan Native organizations may be “inherently distrustful of collecting and retaining what they believe to be potentially self-incriminating data about their clients, which they fear may adversely be used by government entities against their clients.” (p. 244). In addition, recent research practices may have further increased American Indian/Alaskan Native distrust and promoted discord between providers and patients within the American Indian/Alaskan Native community (Mello & Wolfe, 2010). According to Gone and Calf Looking (Gone & Calf Looking, 2011), “...throughout ‘Indian Country,’ it remains an overwhelming challenge to persuade tribal members with substance use disorders to enter residential treatment [and] motivate American Indian clients to complete the prescribed duration of treatment” (p. 292). These challenges highlight the importance of sensitive application of SBIRT techniques, and the potential usefulness of SBIRT-compatible tools such as MI that emphasize a patient-centered and empathic approach to engaging patients with needed services.

3.5.2 Latinos—Common themes exist among African Americans and Latinos, which stand in the way of seeking treatment for substance use. These themes include a mistrust of the healthcare system, often referred to as the ‘White system’, and stigma associated with seeking mental health and/or substance treatment (Nicolaidis et al., 2010). In a recent study of individuals who sought treatment, both African Americans and Latinos reported that the provider did not show care or empathy, and that they felt inferior and were not given adequate information regarding their health (Nicolaidis et al., 2010). Therefore, SBIRT providers may need to be especially careful in providing feedback or information, to make sure that Latino and African American patients receive all the information they need. In addition, providers should take care to use an empathic approach and avoid taking on an “expert” stance in which patients potentially could feel that they were not treated with respect. Providers should also be aware of potential variation in drinking norms based on acculturation and/or immigration (Mills & Caetano, 2012). For example, one study found that place of birth (in the U.S. vs. Mexico) and neighborhood context (living in a neighborhood with fewer Latinos) was associated with a greater rate of binge drinking among Latinos (Markides et al., 2012). Spanish language and provision of care in community service settings may be needed for recent immigrants (Ornelas et al., 2014). Thus, providers should be aware of these factors when tailoring brief interventions to Latinos. Additional details regarding cultural factors and recommended adaptations of SBIRT for Latino patients are provided in the accompanying article that includes a case illustration and discussion.

3.5.3 African Americans—In a recent qualitative study of African American women, Nicolaidis et al. (2010) found that participants were more open to seeking treatment if the following adaptations were in place: inclusion of African American providers or providers who were sensitive to the socioeconomic and psychological struggles they have faced, inclusion of a creative-arts program that addresses life issues (e.g., arts, crafts, journaling, self-care activities), and information about and access to social resources (e.g., housing, employment, education, domestic violence, and education). Participants also expressed the need for access to transportation and childcare, in addition to clinical services for their family and/or support systems (Nicolaidis et al., 2010). For providers working in the SBIRT model, addressing these priorities in describing referral options may help enhance motivation to initiate care for specialty services when needed.

3.5.4 Asian Americans—Yu et al. (2009) described an approach to SBIRT adaptation for Asian Americans. Recommendations included screening with culturally sensitive materials in informal settings, using translated materials and specifically addressing misunderstandings that Asian Americans may have about alcohol and drug use. It was noted that there is variability in the way heavy alcohol use is sanctioned (it may be considered acceptable unless overt family problems result), and that alcohol use in some cultures is a normative way of managing stress. Similarly, qualitative interviews with a diverse sample of Asian American clients in treatment for substance use disorders revealed that many respondents recognized the need to address their substance use only when they had experienced significant familial consequences or when they were mandated by the criminal justice system (Masson et al., 2013). Thus, incorporating patients’ cultural and familial

contexts in screening and motivating them to reduce substance use is an important adaptation. When referring individuals to treatment, discussing the financial and practical aspects of family obligations, and addressing the concerns about loss of confidentiality and impact on immigration status have been identified as relevant considerations in working with Asian American patients.

4. Discussion and Conclusion

4.1 Discussion

In recent years there has been a shift in the delivery of substance use assessment and treatment interventions to health care settings. SBIRT has become a popular model, and a growing body of evidence supports the use of this approach with diverse ethnic and cultural groups. In this paper, we reviewed the literature on the validity of measures, intervention outcomes, and cultural adaptations for SBIRT components. While research in this area is limited, previous studies indicate that patterns of substance use and substance-related consequences vary by ethnicity (Han et al., 2011), with minority individuals often reporting higher rates of substance-related consequences than Whites (Caetano, 2003; Pacek, Malcolm & Martins, 2012). Therefore, SBIRT's focus on universal screening has the potential to identify and address substance use problems among patients who are especially in need of assistance. Interestingly, previous research (Dobscha et al., 2009; Williams et al., 2012) indicates that brief interventions are more likely to be delivered to racial and ethnic minorities and that minority patients are less likely to report that they are uncomfortable with provider-patient discussions regarding alcohol use (Broyles et al., 2012). While the reasons for this discrepancy are not understood, it may be a positive development that minority patients appear to be participating in discussions about substance use with their providers.

This review examined key recent findings on SBIRT, and is limited by a focus on studies of components of the SBIRT intervention identified primarily through PubMed. Within this framework we endeavored to summarize key results relevant to clinical practice. Further research should examine the reliability and validity of alcohol and drug screening measures with diverse populations. Currently, the AUDIT has the most extensive evidence base, but research could continue to examine the need to adapt substance use screening tools. Studies reviewed indicate that brief interventions are efficacious with diverse populations (Bernstein et al., 2005; Field et al., 2010) and that cultural adaptations such as ethnic-concordance - matching (Field & Caetano, 2010) and culturally tailored interventions (Lee et al., 2013) lead to greater reductions in substance use post-treatment. Research findings also indicate that minority patients may be more likely to experience treatment admission delays compared to White patients (Lo & Cheng, 2011; Gryczynski et al., 2011). Thus, providers may need to help patients better navigate treatment systems, or assist in connecting patients with specialty care providers, as a way of reducing potential delays. Furthermore, providers may consider ways to prepare patients for potential delays in treatment, to reduce the likelihood that patients may give up on seeking needed services.

4.2 Conclusion

In summary, the research to date on SBIRT with diverse populations indicates that this approach may be improved with the careful selection of a validated screener and skillful tailoring of brief interventions and treatment referrals. Additional research is greatly needed, however, to identify further ways this approach may be adapted to appropriately assess and treat patients from all backgrounds. In particular, future research should examine whether the efficacy of specific components of effective brief interventions vary among ethnic groups and how patients can best be prepared to seek treatment and engage in services once given a referral to specialty substance use care.

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Table 1**Alcohol and Drug Screening Measures for Diverse Populations**

Measures	Overview of Measure	Validation	Translations
AUDIT	10-item measure of alcohol use and drinking-related problems	<ul style="list-style-type: none"> White, African-American and Mexican-American primary care patients (Volk et al., 1997) Northern Plains American Indians (Leonardson et al., 2005) Mexican Americans (Cherpitel, 1995) African American and Hispanic patients (Cherpitel & Bazargan, 2003) 	Chinese (Beijing, Tibet, Taiwan, and Hong Kong, Min-Nan Taiwanese; Li, Babor, Hao & Chen, 2011); Arabic (Almarras, Oei, & Amimr, 2009); Korean (Kim, Gulick, Nam & Kim, 2008)
AUDIT-C	3-item version of the AUDIT	<ul style="list-style-type: none"> White, African American, and Hispanic primary care patients (Frank et al., 2008). 	Chinese (Beijing, Tibet, Taiwan, and Hong Kong, Min-Nan Taiwanese; Li, Babor, Hao & Chen, 2011); Arabic (Almarras, Oei, & Amimr, 2009); Korean (Kim, Gulick, Nam & Kim, 2008)
ASSIST	This measure queries use of tobacco, alcohol and drugs in previous 3 months	<ul style="list-style-type: none"> International sample of participants from Australia, Brazil, Ireland, India, Israel, the Palestinian Territories, Puerto Rico, the United Kingdom and Zimbabwe (WHO ASSIST Working Group, 2002) 	Arabic, Chinese, Farsi, German, Hindi, Portuguese, Russian, Spanish and Ukrainian (World Health Organization, 2015)
CAGE	4-item measure of alcohol dependence risk	<ul style="list-style-type: none"> Hispanic, White and Black individuals (Cherpitel, 1999) 	n/a
DAST-10	10-item measure of substance use	n/a	Spanish (Bedregal et al., 2006)
NIAAA single-item screener	Single-item screening question for risky drinking	<ul style="list-style-type: none"> Black, White, Hispanic primary care patients (Smith et al., 2009) 	n/a
NIDA single question screener	Single-item screening question for illicit drug use	<ul style="list-style-type: none"> Sample comprised of predominantly Black primary care patients (Smith, Schmidt, Allensworth-Davies, & Saitz, 2009) 	n/a

Table 2**Brief Interventions and Motivational Interviewing (MI) with Diverse Populations: Key Outcomes**

Brief Interventions/Motivational Interviewing	Findings
MI with diverse cocaine and heroin users (Bernstein et al., 2005)	<ul style="list-style-type: none"> White and Latino ethnicity significantly predicted reductions in heroin and cocaine use (versus African American ethnicity)
Brief interventions for unhealthy drug use in urban hospital-based primary care clinic (Saitz et al., 2014)	<ul style="list-style-type: none"> Two brief interventions (10–15 minute brief negotiated interview versus 30–45 minute adaptation of MI) were compared with no treatment control condition in diverse sample of adult primary care patients. Brief interventions did not result in reduction in substance use.
Brief intervention versus enhanced care as usual in safety-net primary care clinics (Roy-Bryne et al., 2014)	<ul style="list-style-type: none"> MI-based brief intervention was compared to enhanced care as usual. Reductions in drug use were not observed as a result of MI-based brief intervention.
Brief MI with diverse patients from inner-city emergency department (Bazargan-Hejzi et al., 2005)	<ul style="list-style-type: none"> Participation in Brief MI was associated with reductions in drinking among moderate drinkers but not high-risk drinkers.
Brief MI (BMI) in English or Spanish for alcohol use in trauma care patients (Field et al., 2010)	<ul style="list-style-type: none"> Compared efficacy of English or Spanish delivered BMI versus treatment-as-usual. Hispanic patients in BMI reported significant reductions in alcohol use compared to treatment-as-usual. This finding was not found for African American or White patients.
Personalized MI in English or Spanish patients treatment for facial injuries at a trauma center (Shetty et al., 2011)	<ul style="list-style-type: none"> Two 60-minute sessions of MI compared with two 15-minute sessions of health information Participants in MI had greater reduction in drug use at 6-months, no difference between conditions in alcohol use
MI with heavy drinking Latinos (Lee et al., 2013)	<ul style="list-style-type: none"> One session of Culturally-Adapted MI (CAMI) versus un-adapted MI (both conditions were 90 minutes long) Both conditions reported reductions in drinking and consequences Participants in the CAMI condition reported greater reductions in drinking and consequences at 2 and 6-months follow-up