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Preventing Disparities in Alcohol Screening and Brief Intervention: The Need to Move Beyond Primary Care

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Abstract

The alcohol treatment field has focused on promoting screening and brief intervention (SBI) in medically based settings, particularly primary care. In this Commentary, we consider the potential unintended consequences for disparities in access to care for alcohol problems. National data show significant racial/ethnic and socioeconomic differences in the rates at which at-risk drinkers and persons with alcohol use disorders come into contact with primary care providers. This suggests that implementing SBI in mostly primary care settings could inadvertently widen the gap in alcohol-related health disparities. To ensure that all populations in need benefit from this evidence-based treatment, SBI should be considered and adapted for a wider range of service venues, including Federally Qualified Health Centers and non-medical venues frequented by racial/ethnic minorities and the uninsured.

An estimated 89 percent of the 17.9 million Americans with a current alcohol use disorder (AUD) do not perceive a need for treatment and therefore do not seek care (Clark et al., 2008). This makes it essential that we extend alcohol interventions beyond specialty addiction treatment settings. Alcohol screening and brief intervention (SBI) offers an evidence-based, cost-effective approach for doing precisely that (Bradley et al., 1993; Fleming et al., 2002; Fleming et al., 2000). An SBI can be as brief as 5 to 10 minutes. It begins with assessment of an individual's alcohol use. Persons who screen positive for at-risk drinking or an AUD are advised to cut down or abstain. Those with an AUD may also be referred for further professional evaluation, or recommended for detoxification or pharmacotherapy (National Institute on Alcohol Abuse and Alcoholism, 2005).

There is a strong evidence base documenting the efficacy and effectiveness of SBI in reducing heavy alcohol consumption both in the U.S. and abroad, and particularly in primary care settings (Ballesteros et al., 2004a; Ballesteros et al., 2004b; Bien et al., 1993; Madras et al., 2009; Wilk et al., 1997; World Health Organization Brief Intervention Study Group, 1996). Consequently, the World Health Organization, Institute of Medicine, Substance Abuse and Mental Health Services Administration, and National Institutes of Health all currently advocate for the adoption of SBI in primary care (Babor, 1990; Babor et al., 1994; Institute of Medicine, 1990; Perl, 2000). To further promote SBI in the healthcare system, the American Medical Association and Centers on Medicare and Medicaid recently adopted new billing codes that directly reimburse physicians for providing SBI services (Knopf, 2007; Substance Abuse and Mental Health Services Administration, 2008).

While there is little doubt that primary care-based SBI programs are good for the whole, we should be concerned about their potential unintended consequences for increasing disparities in access to care for alcohol problems. It is not surprising to find that the proliferation of evidence-based medical treatments, while improving health outcomes for the population as whole, at the same time can widen the gap in related health disparities (Casalino et al., 2007). A case in point is the successful spread of tobacco cessation programs since the 1970s, which has contributed to steady declines in smoking in the U.S. population while inadvertently widening the gap in tobacco-related health disparities for racial/ethnic minorities and low socioeconomic status (SES) groups (Blas and Kurup, 2010). This dynamic is largely due to the fact that persons with more economic resources and education tend to have better access to emerging medical knowledge and new treatments. As the health of more advantaged groups improves from the spread of new evidence-based treatments, there is a growing gap in health outcomes between those at the top and bottom of the social hierarchy (Deaton, 2002; Link, 2008).

Given the tendency for medical history to repeat itself, we need to consider whether the spread of SBI in primary care could inadvertently widen existing disparities in alcohol treatment access and, by extension, alcohol-related problems. It is already well documented that, for a given level of alcohol consumption, racial/ethnic minorities and low-SES groups bear a greater burden of alcohol-related illness and mortality than their better-off counterparts (Hilton, 2006; Mäkelä, 1999; Mulia et al., 2009; Blas and Kurup, 2010; Yoon et al., 2003). Disparities in access to addiction treatment are less pronounced than they are in the wider healthcare system, but still pertain (Schmidt et al., 2006). Racial/ethnic disparities in access to treatment, for example, are apparent for those with more severe alcohol disorders, and there are lower rates of minority retention in treatment (Bluthenthal et al., 2007; Schmidt et al., 2007). For all these reasons it is important that alcohol screening and brief intervention programs reach minority and low-SES populations.

To better understand the potential “reach” of primary care-based SBI, we analyzed data from the U.S. National Alcohol Survey (NAS) to examine primary care use among Americans with at-risk drinking and AUDs, the key target groups for SBI. The rationale was that, to the extent that racial/ethnic minority and low-SES members of these target groups are less likely to be seen by a primary care provider, they will be limited in their access to a primary care-based SBI. The NAS surveys a probability sample of U.S. adults every 5 years using computer-assisted telephone interviews and random digit dialing, along with oversamples of African Americans and Hispanics (see: Greenfield et al., 2006; Kerr et al., 2009). To achieve more stable estimates, the 2000 and 2005 surveys were pooled (total $N=15,963$). Data were weighted to the U.S. Census and analyses adjusted for oversampling and sampling design using Stata (Stata Corp., 2005).

Primary care use was operationalized as the receipt of medical care in the past year for an illness or injury from a private doctor, clinic or medical setting other than an emergency department. *Drinkers with an alcohol use disorder (AUD drinkers)* were defined as reporting past-year symptoms of either alcohol abuse (at least one negative consequence of drinking, such as problems at work, fights or arguments, injuries or accidents, or legal problems) or alcohol dependence, consistent with criteria in the *Diagnostic and Statistical Manual, Fourth Edition* (American Psychiatric Association, 1994). *At-risk drinkers* were defined as drinking in excess of NIAAA guidelines: men or women who respectively drink 5/4 or more drinks in a day at least once in the past year, or more than 14/7 drinks per week on average (National Institute on Alcohol Abuse and Alcoholism, 2005). We used bivariate analysis and multiple logistic regression to profile the population potentially served by SBI programs in primary care. A potential limitation of the analysis is the use of a primary care measure that could include the receipt of specialty care by sick or injured persons in a private doctor’s office,

while excluding preventive care received by people who are healthy and injury-free. As this would likely have countervailing effects, it is difficult to predict the net effect on estimated rates of primary care use overall. However, estimated *disparities* in primary care use would likely be conservative because the lower utilization of preventive care services by disadvantaged populations (Cherry et al., 2003; Gornick, 2003; Gornick et al., 1996; Potter et al., 2009) would not be reflected in this analysis.

The analysis shows that approximately one-third of at-risk drinkers (32.4%) and persons with a current AUD (31.5%) in the U.S. had at least one primary care visit during the prior year. Among at-risk and AUD drinkers who had at least one primary care visit, large majorities (93.4 and 76.0%, respectively) had never considered seeking help for their drinking, largely because they did not perceive themselves to have a drinking problem (95.8 and 92.6%). As seen in Table 1, however, there are differences in at-risk and AUD drinkers who have at least one primary care visit per year. Higher proportions are female, white, college-educated and privately insured. The adjusted odds ratios suggest that race/ethnicity and insurance coverage remain the strongest predictors of primary care receipt in both the at-risk drinker and AUD groups. Whites have a roughly two-fold greater likelihood of an annual primary care visit than African Americans, and Spanish-speaking Hispanic at-risk drinkers have some of the poorest chances of receiving primary care.

These national data, therefore, show the limits of the potential “reach” of primary care-based SBI programs, and suggest that proliferation of SBI programs in this setting could lead to increased alcohol-related disparities across racial/ethnic lines and insurance status. While SBI programs launched in primary care can potentially serve a large swath of U.S. at-risk and AUD drinkers, the NAS data suggest that even if every at-risk or AUD drinker with at least one annual primary care visit received an SBI, only about one-third of the U.S. at-risk and AUD drinkers would be reached. Moreover, the data suggest that those most likely to access primary care-based SBI will be disproportionately white, college-educated and privately insured. This suggests that there is cause for concern -- that focusing on primary care as the logical venue for SBI could have unintended consequences for widening racial/ethnic and insurance-related disparities in alcohol-related treatment and problems.

All this underscores the need to think more broadly about the potential venues that could serve as launching points for SBI programs. Expanding the frame would not only extend the overall reach of SBI programs, but could reach potentially underserved racial/ethnic and low-SES target populations. Federally Qualified Health Centers are set up to serve disadvantaged populations and have federally mandated requirements that could include expanded SBI initiatives. Elsewhere within the healthcare system, emergency departments (ED) are a likely venue given that acute alcohol-related problems are prevalent and low-income and minority populations often obtain care here (Cherpitel, 1993; Cherpitel and Ye, 2008; Dohan, 2002). Yet efficacy studies of SBI with ED patients have shown mixed results (Cunningham et al., 2009; Nilsen et al., 2008), and therefore it is unclear whether wide dissemination of SBI in EDs is warranted at present (Bernstein et al., 2009). Outside of health care settings, alcohol services have been traditionally targeted to populations in the criminal justice system (CJS) (Weisner and Schmidt, 1993), and since welfare reform, public aid programs have increased their attention to substance abuse as a barrier to employment, making these natural settings in which to also consider SBI. Indeed, there is encouraging movement in the field towards a broadening of SBI venues to target schools, work settings and CJS populations. Future efforts might also consider the involvement of community health outreach workers, similar to programs initiated in the late 1980s to extend HIV prevention to substance users outside of formal treatment settings. In the end, monitoring and ensuring diversity among the target populations of SBI providers may prove

critical to the dual goals of improving population health and reducing alcohol-related disparities.

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Table 1

Primary Care Receipt among At-risk Drinkers and Persons with an AUD (% and adjusted odds of a primary care visit in the past year)

Variable	At-risk Drinkers (N= 3089)		Persons with an AUD (N=805)	
	%	AOR ^I	%	AOR ^I
Gender				
Men	29.9 *	Ref	29.0 †	Ref
Women	34.5	1.21 *	36.5	1.36
Age				
18–29	28.1 †	Ref	30.0	Ref
30–49	34.2	1.14	33.7	1.12
50–64	33.2	1.06	30.5	1.07
65+	35.0	1.12	43.0	2.68
Race/ethnicity				
White	35.2 ****	Ref	35.5 ****	Ref
African American	21.0	0.53 ****	20.0	0.54 *
Hispanic, English-speaking	24.6	0.69 *	18.6	0.43 **
Hispanic, Spanish-speaking	3.6	0.10 ****	16.3	0.58
Education				
Less than HS degree	24.9 ****	1.03	20.1 *	0.66
High school degree	27.3	0.68 **	27.6	0.86
Some college	31.8	0.82 †	36.6	1.15
College degree or higher	38.5	Ref	36.3	Ref
Household Income				
Missing income	29.8 ****	0.85	29.2	1.00
\$20,000	23.2	0.85	28.8	1.02
\$20,001 – 40,000	29.4	0.98	30.7	0.85
\$40,001 – 60,000	38.6	1.29 †	26.2	0.62
> \$60,000	36.1	Ref	38.3	Ref
Insurance				
None	18.3 ****	0.57 **	21.4 *	0.54 *
Medicaid	28.3	0.94	33.7	0.97
Medicare/other Federal	34.4	1.01	23.7	0.47 †
Private	35.3	Ref	36.3	Ref

^I Adjusted for all other variables listed in table.

† $p < 0.10$,

* $p < 0.05$,

** $p < 0.01$,

 $p < 0.001$