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“You should drink less”: Frequency and predictors of discussions between providers and patients about reducing alcohol use

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Abstract

Background—Brief intervention is recommended for individuals who misuse alcohol but studies vary on how frequently patients talk with their providers about alcohol use.

Objectives—We examined whether veterans who had recently screened positive for alcohol misuse reported having conversations about their alcohol use with their providers.

Methods—Following a positive screen for alcohol misuse during a primary care visit in 2013, veterans completed a telephone interview on alcohol use, conversations with their providers about drinking, and factors potentially associated with such conversations. The final analysis sample included 881 veterans; we conducted descriptive statistics and multivariable regression analyses.

Results—Most veterans (83%) reported that their provider asked about drinking. Among these, 65% reported being advised to drink less, and 36% reported being advised to abstain. Veterans who received their healthcare from VA had over twice the odds of reporting advice to reduce/abstain from drinking (AOR=2.34, 95% CI= 1.46, 3.75). Veterans who reported heavy episodic drinking were more likely than those who did not to report advice to reduce/abstain from drinking (AOR=1.83, 95% CI=1.30, 2.57) and veterans who reported heavy drinking were more likely to report such advice (AOR=2.40, 95% CI=1.69, 3.40).

Conclusions/Importance—Most veterans with alcohol misuse reported receiving advice to reduce or abstain from drinking. Veterans with excessive alcohol use and those receiving all or most of their care from VA were more likely to report receiving such advice. Self-report of receiving advice may be an important approach to assessing appropriate follow-up after detection of alcohol misuse.

Keywords

alcohol misuse; substance use disorders; veterans; patient-provider communication; brief intervention

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Introduction

Alcohol misuse, which includes the range of elevated alcohol use from risky drinking to alcohol use disorders (U.S. Preventive Services Task Force, 2013), is common among veterans, with 25% of veteran outpatients screening positive across all Veterans Health Administration (VA) networks (Bradley et al., 2006). Alcohol misuse has been associated with many adverse health outcomes (Harris et al., 2012; Larson, Wooten, Adams, & Merrick, 2012), including direct harm due to intoxication and physiological dependence (Dawson, Grant, & Li, 2005).

The U.S. Preventive Services Task Force (USPSTF) has recommended universal screening for alcohol misuse and recommends that positive screens should be followed by a brief intervention (U.S. Preventive Services Task Force, 2013), typically consisting of advice to drink within the recommended limits or abstain from drinking and feedback about health risks associated with drinking (The Management of Substance Use Disorders Working Group, 2009). In primary care settings, brief interventions have been found to be efficacious in reducing alcohol consumption among risky drinkers (Kaner et al., 2007).

Following the USPSTF recommendations, the VA requires annual screening for alcohol misuse (screening over 90% of veterans seen at the VA) (Bradley et al., 2006) and providers are incentivized to provide a brief intervention to those who screen positive (The Management of Substance Use Disorders Working Group, 2009). However, reports on the extent to which veterans who screen positive for alcohol misuse receive a brief intervention vary. Earlier reports from patient surveys indicated that 30% of veterans with alcohol misuse reported having been given advice about drinking (Bradley et al., 2006; Burman et al., 2004). A more recent report based on chart review data indicated that 71% of veterans who screened positive for alcohol misuse had documented brief alcohol counseling (Williams, Lapham, et al., 2010). The discrepancy in these numbers may be due to time; efforts to increase the use and documentation of brief intervention in the VA are relatively recent. Alternatively, differences may be due to methodology; medical record documentation may be more complete compared to patients' recall of alcohol-related conversations with their providers. Arguably, if patients do not perceive or remember having received advice from their provider about drinking, any advice given may have little effect.

The goal of these analyses was to better understand the extent to which patients report alcohol-related conversations with their providers. We assessed 1) whether veterans who recently screened positive for alcohol misuse recalled having been asked about their alcohol use 2) whether they reported receiving advice about reducing or abstaining from drinking, and 3) which factors were associated with veteran report of having received advice.

Methods

Study population

We conducted a telephone survey of veterans who recently screened positive for alcohol misuse during a primary care visit. Alcohol misuse was measured at the primary care visit

using the Alcohol Use Disorders Identification Test- Consumption (AUDIT-C) (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998), which is conducted as part of a VA-required annual screen during routine health care visits. The VA's electronic medical record system guides primary care providers through the AUDIT-C items, and then prompts the provider to complete a brief intervention if the patient screens positive for alcohol misuse.

A cutoff score of five or more was selected because VA performance measures requires brief counseling for alcohol use for these patients (U.S. Department of Veterans Affairs, n.d.). This cutoff has been tested in previous studies of veterans (Bradley et al., 2003; 2007; Bush et al., 1998) and has been indicated to have a sensitivity of 68% and specificity of 90% for detecting heavy drinking and/or active alcohol abuse or dependence (Bush et al., 1998). Veterans who screened positive were contacted to participate in the study within approximately one month of the positive screen. The BLINDED and the BLINDED Institutional Review Board approved the study.

Veterans were eligible for inclusion into the study if, at the time of the positive screen, they had not been treated for alcohol misuse within the past three months, were engaged in care at GLA, were aged 18 years or older, were not cognitively impaired, and had a viable telephone number recorded in the VA system. Within one week of the positive screen for alcohol misuse, eligible participants received an advanced notice letter with study information, allowing five days to opt out of being contacted. Eligible participants were contacted by phone to complete the interview.

Survey measures

The telephone survey was developed to assess alcohol use and co-occurring mental health symptoms, as well as receipt of treatment for alcohol misuse (Burman et al., 2004). To the extent possible, we selected measures that had been validated and had previously been used among veterans in primary care settings.

Alcohol use was measured using the Alcohol Timeline Followback (TLFB) (Sobell, Brown, Leo, & Sobell, 1996). *Heavy episodic drinking* (HED) was defined as any one day in the past 30 days in which the participant consumed five or more drinks and *heavy drinking* was defined as 14 or more drinks per week on average within the past 30 days. This measure of HED is commonly used in national epidemiological surveys (Courtney & Polich, 2009), and this definition of heavy drinking is used by the Centers for Disease Control and Prevention (Centers for Disease Control and Prevention, n.d.) and others (National Institute on Alcohol Abuse and Alcoholism, 2013).

Probable depression was defined as a Patient Health Questionnaire (PHQ-9) (Kroenke, Spitzer, & Williams, 2001) score of 10 or greater and probable anxiety disorder was defined as a Generalized Anxiety Disorder Assessment (GAD-7) score of 10 or greater (Spitzer, Kroenke, Williams, & Lowe, 2006). In order to measure overall health and experience of pain, we used items from the SF-12v2 Health Survey (Ware, Kosinski, & Keller, 1996). Participants who rated their overall health as good, very good, or excellent were classified as being in good health, compared to participants who self-reported fair or poor health. Pain was measured by asking how much it interfered with the respondent's normal work within

the past four weeks. Those who reported moderate, quite a bit, or an extreme amount of pain were compared with those who reported a little bit or none at all. In addition, respondents were asked to report whether they receive all or most of their care through the VA or through an outside provider. Finally, participants were asked to report advice to drink less or stop drinking received in the past 30 days by a VA healthcare provider (Burman et al., 2004). These items have been used previously to assess delivery of a brief intervention in the VA (Bradley et al., 2006).

Statistical analysis

We present descriptive statistics for patient characteristics and the proportion of veterans who reported being asked about their drinking. Chi-square statistics were used to examine bivariate associations between veteran characteristics, drinking patterns, and health status with veteran report of receiving advice to reduce or abstain from drinking. Multivariable logistic regression methods were used to evaluate factors independently associated with report of having received advice to reduce or abstain from drinking. Both HED and heavy drinking were included in the multivariable model because of the low correlation between these variables ($r=0.28$).

Results

A total of 1,728 veterans were eligible for the survey and 949 consented to participate. Those who did not consent were either unable to be contacted by study investigators due to non-working phone numbers or maximum target attempts, unable to complete the survey due to health problems, or refused to participate. Among those veterans who consented to participate, 936 completed the survey (adjusted response rate = 54.2%). These analyses focus on the 881 veterans who completed the survey within 30 days of the AUDIT-C screening. We narrowed our analysis to those who completed the survey within 30 days of the AUDIT-C because we were interested in assessing the care received in the 30 days following the positive screen. Because the telephone survey asked participants to report on brief interventions received in the past 30 days, those who completed the survey outside of the 30-day window would not have an opportunity to report on care received immediately following the positive screen.

The average number of days between screening positive and completing the survey was 14 days ($SD = 4.7$; range 7–30). The majority of respondents reported being male (97%), White (57%), attending some college or more (68%), and receiving most or all of their care from the VA (87%). The mean age was 55 years. Twenty-one percent met criteria for probable depression, 17% for a probable anxiety disorder, and 10% reported any past 30-day drug use. Sixty-three percent reported HED and 50% reported heavy drinking in the past 30 days. Respondents reported overall good health (72%), while 40% reported having moderate to extreme pain.

Although all of the respondents in our sample had documentation in their medical record that a health care provider had administered the AUDIT-C in the previous month, only 83% reported that a VA health care provider asked about their drinking in the past 30 days. Among those reporting that they had been asked about their drinking, just over half (65%)

reported that a VA health care provider had advised them to reduce drinking, while 36% reported having been advised not to drink alcohol. Seventy percent endorsed at least one of these two items.

Those who endorsed HED were more likely than those who did not to report having been advised to reduce or abstain from drinking (70% vs. 49%, $p<0.01$). Similarly, veterans who endorsed heavy drinking were more likely than those who did not to report receiving advice to reduce or abstain (71% vs. 53%, $p<0.01$). However, in examining the types of advice separately, while those endorsing heavy drinking were more likely to report advice to drink less (69% vs. 45%, $p<0.01$), there was no difference by heavy drinking status in the likelihood of reporting advice to abstain from drinking.

Those with probable depression (72% vs. 60%, $p<0.01$) and those with a probable anxiety disorder (75% vs. 59%, $p<0.01$) were more likely than those without these symptoms to report receiving advice to reduce or abstain from drinking. Veterans reporting moderate to extreme amounts of pain were more likely than those with no or little pain to report advice to reduce or abstain (68% vs. 58%, $p<0.01$), as were veterans reporting any drug use compared to no drug use (74% vs. 61%, $p=0.01$). Veterans who reported receiving all or most of their care through the VA were more likely to report having received advice to reduce or abstain from drinking compared to those who received most of their care outside the VA (65% vs. 46%, $p<0.01$). There was no difference by overall health status in the likelihood of reporting advice to reduce or abstain from drinking, although when the types of advice were examined separately, veterans reporting poor or fair health were more likely to report being advised to abstain from drinking, compared to those with better overall health (42% vs. 28%, $p<0.01$).

After controlling for age, sex, marital status, education, race/ethnicity, probable depression or anxiety, overall health, heavy drinking, drug use, and pain, we found that veterans who received most or all of their healthcare from the VA had over twice the odds of reporting advice to reduce or abstain from drinking (Adjusted Odds Ratio [AOR]=2.34, 95% Confidence Interval [CI]= 1.46, 3.75) (Table 1). Veterans who reported HED were almost twice as likely to report advice to reduce or abstain from drinking (AOR=1.83, 95% CI=1.30, 2.57) and veterans reporting heavy drinking were more than twice as likely to report such advice (AOR=2.40, 95% CI=1.69, 3.40).

Discussion

In this sample of veterans who recently screened positive for alcohol misuse, most veterans recalled being asked about their alcohol use. This provides additional evidence that veterans receiving care from the VA are being routinely screened for alcohol use, and that patients are able to recall this interaction. Still, 17% were not able to recall having been asked about their alcohol use.

Among veterans who screened positive for alcohol misuse and who reported having been asked about their alcohol use, 70% reported receiving advice to reduce or abstain from drinking.

Veterans who reported HED or heavy drinking were more likely than those who did not to report having been advised to reduce or abstain from drinking, which is concordant with clinical recommendations (The Management of Substance Use Disorders Working Group, 2009). Veterans who reported moderate to severe pain were also more likely to report having received advice about drinking. Pain may be a proxy for more complex health care needs and increased health care utilization; it is possible that these veterans had more opportunities than others to receive alcohol-related advice from a health care provider over the recall period.

Veterans receiving all or most of their care at the VA were more likely than those receiving most care outside the VA to report that a VA healthcare provider had provided advice about drinking. Providers may be more willing to take responsibility for regular VA patients compared with veterans who receive VA care infrequently (e.g., only for medication refills). Providers may also have greater opportunity to observe negative consequences from alcohol use in their regular patients, thus spurring advice to reduce or abstain from drinking. Additionally, patients may feel more connected with the provider they see for most of their care and more likely to listen to and remember receiving provider advice. It is concerning that veterans receiving all or most of their care outside of the VA may be less likely to receive counseling about alcohol use, although we note that we did not ask veterans about the care received from non-VA providers. Understanding non-VA care or increasing communication between VA and non-VA providers may help to ensure that veterans with alcohol misuse receive timely interventions.

Our finding that among those who reported having been asked about their alcohol use, 70% reported having received advice to reduce or abstain from alcohol is higher than previous studies of self-report data (Bradley et al., 2006; Burman et al., 2004). In a 2004 study of 5,191 VA outpatients with alcohol misuse in the past year, 30% reported receiving provider advice to either drink less or abstain during the same time period (Burman et al., 2004). One explanation of the higher rate of reported advice in our study could be due to policy and practice change at the VA; since 2007, VA has included brief intervention for alcohol misuse as a national performance measure (Lapham et al., 2012). Alternatively, the difference may be due to timing; in our study, veterans were asked to recall conversations with their provider within the past month of the survey, whereas other studies assessed recall of counseling over longer time periods (Bradley et al., 2002; Burman et al., 2004).

The findings from our study underscore the importance of methodology in assessing whether a treatment process has occurred or not. Assessments of care processes can evaluate what patients report (as we did in this study), what providers document (in the medical record and/or through clinical reminder systems), or what an observer of the visit records. For example, in a study of the use of an alcohol counseling clinical reminder system, among VA patients who screened positive for alcohol misuse and who had documented use of the clinical reminder, 39% had a brief intervention documented (Williams, Achtmeyer, et al., 2010). Another study tape-recorded 68 patient-provider visits at a VA general medicine clinic over a 6-month study period with patients who screened positive for at-risk drinking, finding that providers gave alcohol-related advice during 21% of visits (Bradley et al., 2002). Arguably, what a patient reports may be the most important indicator of whether a

brief intervention has occurred, since it implies that the patient experienced and remembered the conversation (Bradley, Johnson, & Williams, 2011). In other conditions, patient recall has been associated with adherence to provider recommendations (Kravitz et al., 1993).

The results of this study are presented in light of several limitations. These data are based on self-report, where veterans recalled what had happened over the previous month, and are thus susceptible to bias. The survey response rate was 54%, similar to other telephone surveys of veterans (Hepner et al., 2014), and of those who responded, some (6%) did not respond within 30 days of the AUDIT-C screen. The reported experience among non-respondents may differ from that of respondents. The survey did not ask whether respondents received feedback about the adverse health effects from alcohol misuse, another key component of a brief intervention, and did not ask for additional details about patients' conversations with their providers that could explain why some providers did not provide advice about drinking. Finally, our analysis was limited to data from one area of the country. Rates of providing advice may differ elsewhere in the VA, although the factors associated with receiving alcohol-related advice may be similar.

These data provide useful information about veterans' report of having received advice to reduce or abstain from drinking after a positive screen for alcohol misuse and the types of veterans who are mostly likely to report receiving such advice. We found that most veterans who screened positive for alcohol misuse reported having received this advice, and that those at greatest risk for experiencing negative consequences from alcohol use were more likely to report receiving such advice. Yet, 30% did not report having received advice about drinking. Whether this is due to problems with recall (i.e., the provider gave advice and the patient did not remember it) or with provider behavior is unclear. Research to better understand the relationship between what providers do, what they document, and what patients recall can help to improve methods for assessing the use and effectiveness of brief interventions for the treatment of alcohol misuse.

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Table 1

Multivariable logistic regression for predicting receipt of advice to drink less or abstain (n=881)

<i>Characteristic</i>	<i>Odds Ratio</i>	<i>95% Confidence Interval</i>
<i>Age</i>	0.98 *	0.97, 1.00
<i>Male</i>	2.78 *	1.16, 6.64
<i>Married/Living as married</i>	1.46 *	1.03, 2.07
<i>Some college or more</i>	0.64 *	0.46, 0.90
<i>White</i>	0.78	0.56, 1.08
<i>All or most of care through VA</i>	2.34 *	1.46, 3.75
<i>Heavy episodic drinking, past 30 days</i>	1.83 *	1.30, 2.57
<i>Heavy drinking, past 30 days</i>	2.40 *	1.69, 3.40
<i>Probable depression</i>	1.09	0.65, 1.81
<i>Probable anxiety disorder</i>	1.60	0.89, 2.87
<i>Any drug use, past 30 days</i>	1.39	0.79, 2.42
<i>Excellent, very good, or good health</i>	1.40	0.95, 2.08
<i>Moderate, quite a bit, or extreme pain</i>	1.46 *	1.02, 2.09

*
p<0.05