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## **TREATMENT PREFERENCES AMONG PROBLEM DRINKERS IN PRIMARY CARE**

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### **ABSTRACT**

*Objective:* Alcohol misuse is common among primary care patients, yet many do not receive treatment because doctors believe problem drinkers are “in denial,” or are unwilling to change their drinking habits. The real problem, however, may be that patients are being offered treatment modalities that do not meet their needs. This study was designed to measure the acceptability of various treatment options among drinkers who were currently not receiving treatment. *Method:* Patients in a primary care clinic were given a self-report questionnaire that included: (1) the Alcohol Use Disorders Questionnaire, (2) a measure of readiness to change drinking behavior, and (3) a list of treatment modalities to be rated based on level of interest. *Results:* Within a random sample of 402 patients, 40.2% reported high risk drinking and 16.3% reported problem drinking. Among the latter group, 89.3% were either considering change, or had begun to take steps to make changes in their drinking behaviors. When asked about treatment preferences, the modalities

most frequently recommended by physicians—group therapy and Alcoholics Anonymous—were among the least acceptable. The most popular options were getting help from a primary care doctor and taking a medication that would make it easier to avoid drinking without making them sick if they drank. *Conclusions:* The belief that problem drinkers are unwilling to change was not supported by this study. Treatment for problem drinking should involve a collaborative evaluation of options with an emphasis on patient preference and treatment within the primary care setting.

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**Key Words:** alcohol consumption, primary health care, secondary prevention, drug abuse screening, substance abuse detection, individualized medicine

## INTRODUCTION

Alcohol use disorders and high risk drinking (in which individuals place themselves at substantial risk for psychological, social, and medical problems) are common, with an estimated 12 month prevalence of 8.5% and 28% respectively [1]. The Centers for Disease Control and Prevention estimated that in 2006 excessive drinking cost society \$223.5 billion, and kills 79,000 people in the United States each year [2]. Unfortunately, most people who engage in problem drinking do not receive care [3]. There are a variety of reasons for this problem, one of the most important being a refusal to engage in treatment.

Some studies have found that willingness to participate in treatment is linked to the severity of the substance use problem [4]. This finding supports the popular idea that alcoholics must “hit bottom” before they will be willing to consider changes in their drinking. Although this idea makes intuitive sense, it is contrary to the way most diseases are treated in medicine. With other illnesses, efforts are made to initiate treatment at the earliest possible stage of the disease. Not only does early treatment prevent the morbidity and mortality associated with late stage illness, it is also more likely to be successful. This relationship between early intervention and treatment success is especially relevant to substance use disorders. Long-term drug use causes progressive changes to occur in the brain [5]. These changes underlie the experience of drug craving, which in turn leads to compulsive use. When effective treatment is initiated before these changes take place, there is a higher success rate [6]. However, treatment must not only be effective, it must also be acceptable to patients.

In any area of medicine, some forms of treatment are more acceptable to patients than others. A patient centered approach, in which a patient’s individual values guide treatment, has been associated with higher rates of treatment adherence [7]. Similarly, giving problem drinkers treatment options that are aligned with their own preferences has the potential to increase treatment engagement.

Physicians tend to look for the most serious manifestations of alcohol problems, such as dependence, and neglect the earlier signs of alcohol misuse [8]. One consequence of the focus on more severe pathology is that physicians become most familiar with intensive forms of treatment, such as group therapy within a substance abuse specialty clinic or the fellowship model of Alcoholics Anonymous (AA) which promotes daily meetings, and an acceptance of a life-long diagnosis of alcoholism.

If a range of treatments all have demonstrated efficacy, does it matter which one a patient is offered? Little is known about what patients actually want in terms of treatment for alcohol problems. Research has primarily focused on demonstrating efficacy of interventions; however, much less attention has been paid to patient preferences. A number of studies have evaluated the preferences of patients currently engaged in substance abuse treatment [9-11]; however, the important population of nontreatment-seeking individuals with drinking problems has not been studied. Understanding what might be termed “consumer preferences,” is an important first step in effectively addressing the problem of patient refusal to engage in treatment.

The objective of this study was to survey a group of patients in a primary care clinic who had concerns about the amount of alcohol they were drinking, and ask them to rate the acceptability of a selection of treatment options.

## **METHOD**

### **Participants**

A self-report survey questionnaire was piloted with an initial group of 74 primary care patients, and then modified based on the results. The predominant modification was to eliminate non-essential questions in order to increase the survey completion rate. Study participation with the modified questionnaire was offered to patients who were waiting to see a physician in the George Washington University Medical Faculty Associates primary care clinic. A sample of convenience was used in which participants were recruited at times when a research assistant was available.

### **Informed Consent and IRB Approval**

After a complete description of the study was provided, all participants gave informed consent before starting the study. The study was approved by the George Washington University institutional review board.

### **Procedures**

The questionnaire contained a single question screen for high risk drinking that asked, “Have you had 5 or more drinks (4 or more for women) in a single day

in the past year?" [12]. This single question screen for high risk drinking is based on data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) [13] showing sharply increasing risk for alcohol use disorders when consumption met or surpassed these daily limits at any time in the past year. Participants who had a positive screen on this question were classified as "at risk drinkers."

There were also three questions used to determine readiness for change (Do you think you drink more than you should? Are you interested in drinking less? Has the amount you drink changed in the last three months?) [14]. This questionnaire was used in order to estimate how large of an opportunity there was to help problem drinkers make changes. Participants were also asked to complete the Alcohol Use Disorders Identification Test (AUDIT) [15].

The AUDIT is a 10-item questionnaire designed to distinguish light drinkers from those with harmful drinking. The instrument detects both early signs of harmful drinking, and alcohol dependence with a high degree of accuracy [16]. It contains three questions on the amount and frequency of drinking, three questions on alcohol dependence, and four on problems caused by alcohol, including adverse psychological reactions. The cut-off for a positive score is 8 [17]. Participants who had a positive AUDIT score were classified as "problem drinkers."

Study participants who were thinking about getting help to drink less were asked to consider whether they would be interested in each of seven treatment modalities (Table 1). They could choose Yes, No, or Maybe. The modalities offered as choices were "Talking to my doctor," "Going to a substance abuse program," "Going to an Alcoholics Anonymous (AA) meeting," "Talking to a religious or spiritual helper," "Using an Internet program," "Taking a medication that would make me sick if I drank," "Taking a medication that would make it easier to avoid alcohol (but wouldn't make me sick if I drank)."

## **Analysis**

Data were analyzed using SPSS, version 14.0 for Windows. Descriptive analysis of the interest level in each of the modalities was performed, as well as the overall interest in behavior change among at risk and problem drinkers.

## **RESULTS**

A total of 402 primary care patients were enrolled in the study. One hundred ninety-eight (49.3%) participants were male and 202 (50.2%) were female (two respondents did not report their gender). The average age of participants was 51 years ( $SD = 14$  years) with a range of 18 to 89 years. Demographic characteristics of patients who refused to participate were not available for comparison since data were collected anonymously in order to minimize privacy risk. Three

Table 1. Descriptive Characteristics of Patients by Drinking Risk Status ( $n = 399$ )

	At-risk drinkers <sup>a</sup> ( $n = 147$ )	Problem drinkers <sup>b</sup> ( $n = 65$ )
Percentage male	60.5	67.7
Percentage open to each alcohol treatment modalities <sup>c</sup>		
Getting help from my doctor	61.2	67.7
Taking a medication that would make it easier to avoid alcohol (but would not make me sick if I drank)	44.9	54.8
Using an internet program	36.1	37.0
Substance abuse specialty program	31.3	32.3
Talking to religious or spiritual helper	27.9	24.6
Alcoholics Anonymous	27.2	23.1
Taking a medication that would make me sick if I drank	18.4	20.0
Did not answer	8.8	3.1

<sup>a</sup>Defined as having had five or more drinks (men) or four or more drinks (women) on one or more days in the past year; one drink was defined as 12 ounces of domestic beer or wine cooler, 8-9 ounces of malt liquor, 5 ounces of table wine, or 1.5 ounces of distilled spirits/hard liquor.

<sup>b</sup>Defined by AUDIT score  $\geq 8$ . c. Responded either “maybe” or “yes” to treatment modality; respondents could choose as many or as few modalities as they wanted.

hundred ninety-nine participants provided information on drinking behavior, and data from their questionnaires were used in the analyses.

The mean number of drinks per week reported by participants was 4.6 ( $SD = 7.3$ ). Among the 399 participants who gave information about their drinking, 288 (72.2%) answered “yes” to the question, “Do you drink alcohol?” Of these, 147 (51% of all drinkers or 40.2% of total participants) met criteria for at-risk drinking by reporting at least one heavy drinking day in the past year (four or more drinks for women and five or more for men), and 65 (22.5% of all drinkers or 16.3% of total participants) had a positive score on the AUDIT.

Over 2/3 of at-risk drinkers and nearly 9 out of 10 problem drinkers were at least contemplating changing their drinking behavior over the following six months (Figure 1).

Among the listed treatment modalities (Table 1) “getting help from my doctor” was the most frequently selected, with around 2/3 of at-risk and problem drinkers responding either “maybe” or “yes” to this option. The second most popular treatment option was “taking a medication that would make it easier to avoid alcohol (but would not make me sick if I drank).” Responses to other treatment options by risk status are listed in Table 1.

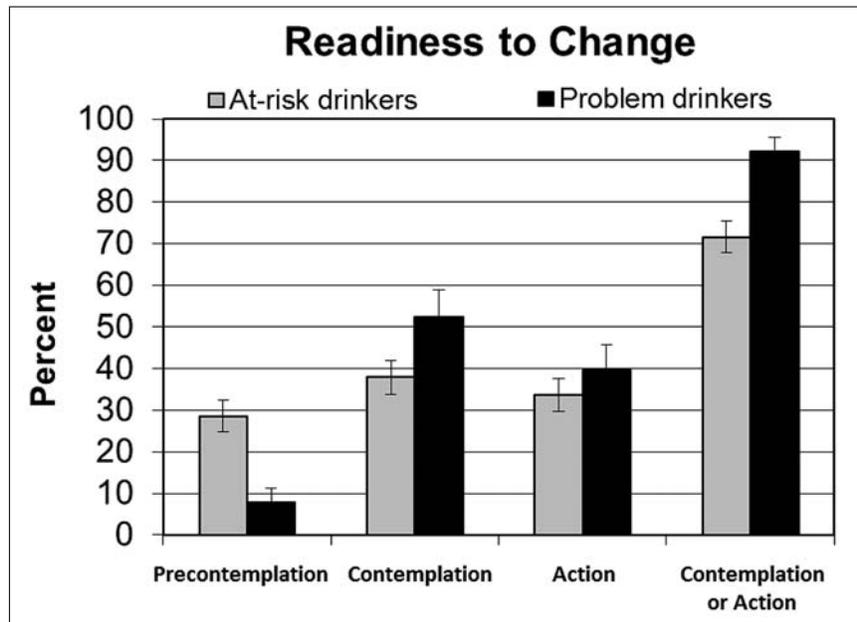


Figure 1. Percent of participants at each stage of change readiness category  $\pm$  the standard error.

## DISCUSSION

Despite the high prevalence of alcohol problems in a primary care setting, it is often unrecognized and untreated [18]. For example, Weisner and Matzger found that almost 2/3 of adult dependent and problem drinkers in the general population had a medical visit during the past year, but their drinking was discussed during only 24% of these visits [19]. Avoiding the topic of alcohol results in a missed opportunity to intervene. This study supports previous studies that found high rates of at-risk and problem drinking among patients being treated in a primary care clinic [18]. Approximately 16% had a positive AUDIT, and 40% were found to be at-risk.

Not only are effective brief interventions available [20], but our study found high rates of willingness to change. In the current study, 68% of participants who reported at least one heavy drinking day in the past year were either engaged in change or willing to consider it. Within the subgroup of these patients who scored positive on the AUDIT, 89% were engaged in change, or willing to consider it. This study suggests that the belief that problem drinkers are unwilling to accept treatment is a myth.

The true problem may be that problem drinkers are offered treatments they do not find acceptable. For example, Friedman and colleagues surveyed 853 primary care physicians, and found that nearly 80% usually or always recommend 12-step groups for their problem-drinking patients [21]. More than half refer to a substance abuse specialty program, and fewer than 20% provide counseling themselves. Results from the current study suggest that these common practices are the opposite of what patients want.

Except for taking a medication like disulfiram, referral to Alcoholics Anonymous (AA) was the least acceptable option, selected by only 23% of problem drinkers. Many people, especially those with early stage drinking problems, dislike being labeled an “alcoholic.” Additionally, the group format of AA meetings can trigger anxiety about embarrassment and privacy issues. Referral to a substance abuse program was acceptable to only a third of problem drinkers, whereas getting help from a primary care doctor was acceptable to 67% of problem drinkers.

Brief treatment delivered in a primary care environment has been shown to be effective—in many cases equally effective to extended interventions [22]. A 2004 Cochrane review found that participants receiving a brief intervention reduced the average number of drinks per week by 13% to 34% more than controls did, and the proportion of participants drinking at moderate or safe levels was 10% to 19% greater compared to controls [23].

Moreover, intervention can be done efficiently in a primary care setting, taking anywhere from 5 to 15 minutes. The National Institute on Alcohol Abuse and Alcoholism recommends using the Five A’s approach similar to tobacco counseling: Ask (about drinking), Assess (problems related to drinking), Advise (regarding safe drinking levels), Assist (change in drinking habits), and Arrange (follow up evaluation). *How to Help Patients Who Drink Too Much: A Clinical Approach* [20] is a clinician’s guide to brief interventions published by the National Institute of Alcohol Abuse and Alcoholism (NIAAA). The NIAAA also provides online training, screening tools, assessment materials, and patient handouts.

The second most frequently endorsed option for treatment was “Taking a medication that would make it easier to avoid alcohol, but would not make me sick if I drank.” Naltrexone, the medication referenced in this question [24], is a mu opioid receptor antagonist. The opioid system is believed to play a role in both the reinforcing effects of alcohol and the experience of craving that can lead to compulsive use. Consequently, naltrexone can make it easier for motivated patients to remain abstinent, and if they have a slip in which they drink, it is easier to stop because much of the pleasure associated with drinking is blocked. Notably, naltrexone does not interfere with pleasure and gratification from normal activities such as socializing or engaging in leisure activities. Although naltrexone is not appropriate for the treatment of high-risk drinking, it has an important role in the treatment of alcohol dependence, and is currently underused.

A National Quality Forum consensus statement endorsed pharmacologic therapy as a standard component of substance use disorder treatment [25]. The need was noted for increased efforts to focus on pharmacologic therapy, including both the development of new treatments as well as implementing currently available medications into practice.

Strengths of this study include the unique population of non-treatment-seeking patients that were surveyed. As noted above, most people who suffer from alcohol use disorders do not receive treatment. Studies that evaluate the needs of patients who are already in treatment may not provide information that can be used to increase engagement with those who are not adequately served by the healthcare system. Another advantage of this study was the use of the NIAAA single question screen to identify at-risk patients. Although it is important to develop effective treatments for individuals with severe illness who are most in need of care, it is equally important to understand how to meet the needs of those who are just starting to have alcohol-related problems so that more serious manifestations can be prevented.

This study has several limitations. First, although the single question measure is robust and validated, it may miss some at risk drinkers who exceed safe limits by spreading out their alcohol use. Next, the sample size was too small to perform subgroup analyses that may have detected differences in treatment preferences based on factors such as gender, age, and the severity of alcohol-related problems. In addition, because participants did not have experience with the treatment modalities listed, the preferences they expressed might change if they were to engage in actual treatment. Finally, findings in a single urban academic medical center sample may not generalize to rural and other populations. More research is needed using multi-site samples.

## **CONCLUSION**

Problem drinking is a medical disorder [26]. Like many other medical disorders it responds well to currently available forms of treatment; however, engaging patients in these treatments remains an important challenge. A substantial number of participants in this study were found to consume alcohol in a problematic way, and reported willingness to change or to consider change. Furthermore, most participants were not interested in the most commonly prescribed modalities of treatment, namely 12-step programs and group therapy provided by substance abuse specialty clinics. Rather, participants expressed a clear preference for treatment by their primary care physicians.

Poor adherence to treatment is not unique to individuals with substance use disorders; it is prevalent in many chronic illnesses. A patient-centered approach in which treatments are selected collaboratively to meet the patient's needs has been shown to be an effective way to support adherence. Findings in this study suggest that problem drinkers prefer to receive treatment from their primary care

physicians over other available modalities. Providing treatment that is consistent with patient preferences is a realistic goal. Brief psychosocial treatments supported by anti-relapse medications have been shown to reduce drinking in clinically meaningful ways. Future studies are needed to identify strategies to make brief treatment more widely available in primary care settings.

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