# Remission of Alcohol Disorders in Primary Care Patients

## Does Diagnosis Matter?

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■ BACKGROUND Alcohol use disorders (AUDs) are prevalent in primary care patient populations. Many primary care patients with AUDs can remit without formal treatment. An understanding of the factors that predispose patients to remission may help primary care physicians provide effective brief counseling for those with mild to moderate disorders and more effectively recommend formal treatment for others.

■ METHODS A total of 119 eligible and randomly selected primary care patients with alcohol abuse or dependence in remission (as defined in *Diagnostic and Statistical Manual of Mental Disorders, third edition, revised*) participated in a semistructured telephone interview.

■ RESULTS Of the subjects, 59.7% were women; 50.4% had been alcohol dependent; 66.3% made a conscious decision to modify their drinking; and 62.1%, including 54.2% of the alcohol-dependent subjects, moderated their drinking without abstaining. Family, emotional, and medical issues most often prompted reduced drinking. Nearly one third of the subjects found specific strategies and rules helpful in reducing their drinking, and many cited circumstances that helped or hindered their efforts. Only 10.9% had formal alcohol treatment.

■ CONCLUSIONS A significant proportion of patients with AUDs remitted without formal treatment. Abstinence may not be necessary for a subset of dependent patients. When counseling patients with active AUDs, primary care clinicians are advised to counsel patients about the psychosocial and medical reasons to control drinking, promote rule-setting about drinking, help patients avoid circumstances that trigger drinking, and support patients' attempts at moderating drinking rather than abstaining. Motivational interviewing (motivational enhancement therapy) may provide a useful framework for such counseling.

■ KEY WORDS Alcoholism; substance use disorders; remission, spontaneous; primary health care. *(J Fam Pract 2000; 49:522-528)*

Alcohol use disorders (AUDs) are prevalent in primary care settings.[1,2] Research has shown that appropriately trained primary care clinicians can use screening and brief intervention to identify and assist many patients with risky and problematic drinking.[3,4] Clinicians are advised to refer all alcohol-dependent patients for formal specialized treatment. The traditional teaching is that alcohol-dependent patients must receive formal treatment and must abstain.

Recent studies have suggested that some alcohol-dependent patients remit spontaneously.[5-12] The generalizability of these findings to general populations is unknown, since most of the studies used convenience sampling. Also, the applicability of these findings is unclear with regard to specific AUDs, since many of these studies used screening questionnaires rather than diagnostic assessments to classify subjects.

Our goal was to describe the phenomenology of remission for a randomly selected sample of primary care patients who had been diagnosed with alcohol abuse or had alcohol dependence in remission for at least 1 year. Specifically, we assessed patients' decisions and reasons for modifying their drinking, their decisions regarding whether to cut down or abstain from drinking, the strategies and circumstances that helped or hindered their efforts, and the roles played by professionals in their process of change. Our results are intended to guide the treatment of AUDs in primary care settings.

## METHODS

### Subjects

A total of 702 English-speaking primary care patients aged 18 to 59 years who were not pregnant were randomly selected from 3 family practice clinics to participate in a previous study.[13] For the earlier study, all participants responded to the Composite

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International Diagnostic Interview-Substance Abuse Module, which assesses current and lifetime alcohol and other drug disorders with excellent reliability and validity.[14-17] The response rate was 90.4%.

Subjects were eligible to participate in our study if they met the *Diagnostic and Statistical Manual of Mental Disorders, third edition, revised* (*DSM-III-R*) criteria for alcohol abuse or alcohol dependence in remission. In the previous study, 217 (30.9%) of the 702 participants had these *DSM-III-R* diagnoses. Of those patients, 196 expressed a willingness to participate in further studies, and 179 could be reached. Of those 179, 3 were pregnant, 1 had died, 14 had relapsed, and 6 could not respond to many of the questions because they did not remember reducing their alcohol consumption. Of the 155 remaining eligible individuals, 119 (76.8%) agreed to participate. Demographic information is presented in Table 1.

Eligible subjects were invited to participate with a letter and a follow-up telephone call. Participants received $10 after completing a 30-minute telephone interview. The protocol was approved by the University of Wisconsin Center for Health Sciences human subjects committee.

### Data Collection

Four research assistants were trained to administer semistructured telephone interviews. To enhance interrater reliability, the interviewers were trained together and frequently monitored; they also often listened to each other's interviews. The interview protocol consisted of a sequence of closed-ended and open-ended questions. Initial questions assessed the subjects' current quantity and frequency of alcohol use and alcohol-related diagnoses. They were asked whether they consciously decided to either quit or cut down on their drinking or if their level of drinking decreased without intention. Subjects were asked open-ended, somewhat redundant questions designed to elicit their reasons for quitting or cutting down. The remainder of the questions focused on how the subjects moderated their alcohol use (Table 2).

### Analysis

We entered and analyzed data using custom programs written in Microsoft Access (Microsoft, Redmond, Washington), a relational database which enabled us to classify the content of open-ended responses and to determine the frequency of common themes across questions. Microsoft Excel was used to calculate chi-square values according to Siegel's formula.[18]

## RESULTS

The subjects were well distributed among the third through sixth decades of life (Table 1). Women outnumbered men 3 to 2. Most subjects had private insurance, were well educated, and were married or remarried. The demographic attributes of the study subjects and the nonresponders were similar (chi-square tests, $P > .05$).

The subjects' AUDs had been active for an average of 11.3 years (standard deviation [SD]=9.0 years, range=1-40 years). The disorders were in remission for an average of 11.1 years (SD=7.8 years, range=0-32 years). Subjects experienced their first alcohol-related symptoms at an average age of 19.3 (SD=5.4, range=10-50 years). The average age for their first attempt at quitting or cutting down was 27.5 years (SD=8.5 years, range=16-53

**TABLE 1**

**Demographic and Clinical Characteristics of the Respondents and Nonrespondents**

| CHARACTERISTICS | RESPONDENTS (N=119) | NONRESPONDENTS (N=36) |
|---|---|---|
| **Diagnosis** | | |
| Abuse | 50.4 | 50.0 |
| Dependence | 49.5 | 50.0 |
| **Age, years** | | |
| 18-29 | 18.5 | 22.2 |
| 30-39 | 31.0 | 30.6 |
| 40-49 | 28.6 | 30.6 |
| 50-59 | 21.8 | 16.6 |
| **Sex** | | |
| Men | 40.3 | 41.7 |
| Women | 59.6 | 58.3 |
| **Insurance status** | | |
| Public | 11.7 | 8.3 |
| Private | 85.7 | 91.7 |
| None | 2.5 | 0.0 |
| **Level of schooling** | | |
| Less than high school | 6.7 | 5.6 |
| High school or equivalent | 39.4 | 33.3 |
| Associate/vocational technical degree | 21.0 | 25.0 |
| Bachelor's degree | 24.3 | 11.1 |
| Advanced degree | 8.4 | 25.0 |
| **Marital status** | | |
| Married/remarried | 59.6 | 50.0 |
| Never married | 17.6 | 27.8 |
| Divorced or separated | 18.4 | 19.4 |
| Widowed | 1.7 | 0.0 |
| Significant other | 2.5 | 2.8 |
| **Ethnicity** | | |
| African American | 3.4 | 8.3 |
| Caucasian | 92.4 | 86.1 |
| Asian/Pacific Islander | 0.8 | 0.0 |
| Native American | 1.7 | 2.8 |
| Hispanic/Latino | 0 | 2.8 |
| Not indicated | 0.8 | 0 |

**TABLE 2**

**Subjects' Responses to Questions on Why and How They Modified Their Drinking**

| QUESTION | % RESPONDING YES: ALL SUBJECTS (N=119) | % RESPONDING YES: PREVIOUS ABUSE* (N=60) | % RESPONDING YES: PREVIOUS DEPENDENCE† (N=59) | *P* ABUSE VS DEPENDENCE |
|---|---|---|---|---|
| Did you make a conscious decision to quit or cut down? | 66.3 | 53.3 | 79.6 | <.01 |
| Did you quit completely or cut down? | | | | |
| Quit completely | 37.8 | 30.0 | 45.7 | NS |
| Cut down | 62.1 | 70.0 | 54.2 | |
| Did you make rules to help modify your drinking? | 32.7 | 26.6 | 38.9 | NS |
| Have you returned to your previous level of drinking? | 6.7 | 10.0 | 3.4 | NS |
| Did *a specific event* help prompt a change? | 57.1 | 43.3 | 71.1 | <.01 |
| *Medical issues?* | 27.7 | 21.6 | 33.8 | NS |
| *Emotional issues?* | 31.9 | 18.3 | 45.7 | <.01 |
| *Legal issues?* | 8.4 | 6.6 | 10.1 | NS |
| *Financial issues?* | 23.5 | 16.6 | 30.5 | NS |
| *Family issues?* | 42.0 | 36.6 | 47.4 | NS |
| *Work or school issues?* | 13.4 | 10.0 | 16.9 | NS |
| *Problems with friends or relationships?* | 8.4 | 5.0 | 11.8 | NS |
| Did you want your life to go in a different direction? | 57.1 | 43.3 | 71.1 | <.01 |
| Did you try any strategies that worked? | 30.2 | 20.0 | 40.6 | <.05 |
| Did you try any strategies that didn't work? | 12.6 | 6.7 | 18.6 | NS |
| Were there any circumstances beyond your control that helped? | 16.8 | 8.3 | 25.4 | <.05 |
| Were there any circumstances beyond your control that made it more difficult? | 8.4 | 6.7 | 10.1 | NS |
| Were there any people who helped? | 32.7 | 18.3 | 47.4 | <.01 |
| Were there any professionals who helped? | 13.4 | 5.0 | 22 | <.05 |
| Did you ever have any alcohol treatment? | 10.9 | 1.7 | 20.3 | <.01 |
| Have you ever used any self-help groups? | 15.1 | 3.3 | 27.1 | <.001 |

NS denotes nonsignificant, $P > .05$.

**Diagnostic and Statistical Manual of Mental Disorders, third edition, revised (DSM-III-R)* diagnosis of alcohol abuse in remission.

†*DSM-III-R* diagnosis of alcohol dependence in remission.

years). The average age for their most recent attempt at quitting or cutting down was 31.8 years (SD=10 years, range=16-56 years). The majority of subjects (57.9%; N=69) made only one attempt to quit or cut down; 32.7% (39) made 2 to 5 attempts; and 4.2% (11) made 6 or more attempts. One subject reported 20 attempts at quitting or cutting down; another reported 100 attempts. More than two thirds (N=81) of the subjects drank in the past month, and 79.8% (95) drank in the past year. Subjects who continued to drink did so on an average of 3.0 days in the past month (SD=4.4 days, range=0-30 days). Nearly half of the subjects (N=54) drank on 1 to 4 occasions in the last 30 days, and 31.9% (38) did not drink at all. Approximately half of the subjects (N=60) had alcohol dependence in remission, and half (59) had alcohol abuse in remission.

Table 2 shows subjects' responses to many of the closed-ended questions of the study. Approximately two thirds (N=79) made a conscious decision to quit or cut down; for the remainder, the reduction in

**TABLE 3**

**Sample Responses from Each Category of Reasons to Reduce Drinking**

| CATEGORY | SPECIFIC EXAMPLES |
|---|---|
| **Family and relationship issues** | Starting a family, pregnancy, increased responsibility, problems within the family, wanting to be a role model, family intervention, social acceptability, isolation, disapproval/fights, death or injury, friends looked "dumb," peer pressure |
| **Physical health** | Ulcer, liver disease, hypertension, fibromyalgia, memory problems, epilepsy, sinuses, kidney problems, pancreatic cyst, physical health concerns/medical condition (undifferentiated), fears about alcoholism, family history of alcoholism, desiring better overall physical health, illness or injury (motor vehicle or other) from drinking |
| **Mental health** | Dealing with other addictions, self-esteem, embarrassment/shame, depression, desiring a more positive outlook on life, mental health concerns (undifferentiated) personality change, depression |
| **Financial** | Drinking is expensive, family financial stress, general lack of funds |
| **Work or school** | Interference with work/school, began working/increased responsibility at work, missed days at work, hoping to prevent work or school problems, tardiness |
| **Untoward events** | Unspecified traumatic alcohol-related event, self or others acting badly while intoxicated, fights/arguments |
| **Legal** | Legal reasons (unspecified), underage drinking, driving while intoxicated (warning or actual ticket), disorderly conduct, custody/divorce |
| **Religious/spiritual** | Epiphany, religious influences or experiences |

drinking occurred without intent.

Table 3 shows the subjects' specific answers grouped by the major themes that emerged from our analysis of their responses. Within each theme, there were responses reflecting both positive and negative reasons to modify drinking. For example, one subject mentioned that he changed his drinking pattern to be a better role model to children; another stated that she changed because of family disapproval.

Thirty-six subjects initially planned to cut down on their drinking; the others attempted abstinence. A total of 10.9% (13) of the subjects underwent formal alcohol treatment, and an additional 1.7% (2) received help from other professionals. A total of 15.1% (18) attended self-help groups, such as Alcoholics Anonymous.

Thirty-six subjects identified at least one specific strategy that helped them modify their drinking. Thirteen mentioned that it was helpful to avoid bars and people who drink. Others mentioned that it was helpful to change their social activities (N=9), follow the rules of Alcoholics Anonymous (7), keep busy (6), and keep no alcohol at home (5). A total of 12.6% (N=15) tried strategies that did not prove helpful, such as limiting the occasions they went out (5), quitting "cold turkey" (3), avoiding peer pressure (2), and going to Alcoholics Anonymous meetings (2).

Nearly one third (N=39) of the subjects made rules for themselves about their drinking. The most frequently mentioned rules involved limitation. Examples were limits on the amount of alcohol permissible to consume on a particular occasion and limits on the number of days per week or times of the day in which drinking was allowed. Three of those who made rules failed at attempts to quit "cold turkey" by using will power or by "taking control." Two subjects felt that the 12 steps and other rules of Alcoholics Anonymous were not helpful, and 2 felt that avoiding drinkers was not helpful.

A total of 16.8% (N=20) of the subjects stated that certain circumstances in their lives prompted them

to modify their drinking. The most frequently mentioned circumstances were medical conditions and medications that were not compatible with alcohol (N=4). Others mentioned a religious experience (N=3) or the death or injury of a friend or family member (3). Ten of the subjects cited circumstances that hindered their efforts to modify their drinking. Such unfavorable circumstances included obligated exposures to others who drink and peer pressure (N=7), divorce and other family stress (4), and depression (1).

There were several significant ($P$ <.05) differences in responses between the subjects with alcohol abuse in remission and those with dependence in remission. Those with dependence in remission more frequently made conscious decisions to modify their drinking. The previously dependent subjects more frequently reported discrete events that precipitated attempts to modify their drinking, cited emotional concerns as an impetus to modify their drinking, wanted to change their lives, found helpful strategies for modifying their drinking, and experienced circumstances that helped them to quit or cut down. They more frequently had help from nonprofessionals, professionals, formal alcohol treatment programs, and self-help groups, such as Alcoholics Anonymous. Although the dependent subjects were more likely than the abusing subjects to make rules about their drinking (23 of 59, 38.9% vs 16 of 60, 26.6%) and aim for abstinence (27 of 59, 45.7% vs 18 of 60, 30.0%), the differences between the dependent and abusing subjects were not statistically significant. More than half (32 of 59, 54.2%) of the subjects with alcohol dependence in remission did not attempt abstinence.

There were some statistically significant differences between the 16 previously dependent subjects who had received formal treatment and the 43 who had not. Those who had received treatment more frequently attempted abstinence, attempted strategies that were not helpful, found others helpful in modifying their drinking, and attended self-help groups. Those who had received treatment more frequently cited family and emotional issues, but not medical, legal, financial, work, or social issues as contributing to their desire to modify their drinking. There were no statistically significant differences in the frequency with which the subjects in these 2 groups made conscious decisions to modify their drinking, made rules about their drinking, experienced discrete events that precipitated efforts to modify drinking, wanted their lives to go differently, found helpful strategies to modify their drinking, found circumstances that helped or hindered modification of drinking, or returned to previous levels of drinking. Similar comparisons could not be made for the subjects with alcohol abuse in remission, because only 3 of those 60 subjects had received formal treatment.

## DISCUSSION

We found a high prevalence (30.9%) of alcohol problems in remission. Other studies have shown that the prevalence of current alcohol dependence, alcohol abuse, and risky but not problematic drinking is also substantial.[3,15] Although patients with alcohol issues may not seek or may avoid specialized treatment, they frequently return to primary care settings for a variety of medical issues. Thus, as others have concluded,[1,19-22] primary care settings offer clinicians opportunities to intervene for patients with AUDs or risky drinking behaviors.

### Strengths and Limitations

There are some potential limitations to our study. The 76.8% response rate raises concern about whether the subjects were representative of the entire target population. Although the participants and the nonresponders were similar in demographic attributes and in alcohol-related diagnoses, they might have provided different responses to the more substantive questions of the interview. There is also the possibility that the self-reports were not always accurate. Although the interviewers were trained to project neutrality and general support, a socially desirable response set might have been operative. For some subjects, the long period of time between the onset of their remission and the interview might have reduced the accuracy of their responses. Also, we only sampled individuals who were currently in remission, elucidating factors that may have facilitated remission. We did not explore the impact of such factors on individuals who were not in remission.

The generalizability of the prevalence of AUDs in remission may be limited, because our study was conducted in Wisconsin, a state with particularly high levels of alcohol consumption. The generalizability of other findings may be limited, because the study sample was fairly affluent and well educated and because there were 2 eligibility screenings—one for the original screening study and another for our study.

The strengths of our study include subjects sampled from a general primary care population; other studies used mass media recruiting or convenience sampling.[5-12] Also, we used a standard validated instrument to assess alcohol problems, while others used less accurate screening tools.[5,6,11,12]

Nevertheless, our results agreed with previous studies that many patients with alcohol abuse or dependence can remit without formal alcohol treatment. The potential for spontaneous remission appears to be particularly strong for young adults who experience growth in their families and career demands. However, other research suggests that many middle-aged alcohol-dependent men may

experience remission without treatment.[33] A substantial number of dependent patients in the sample attained remission despite continued moderate drinking, with remission defined as cessation of the negative consequences of drinking. This result stands in stark contrast to the opinion, espoused by Alcoholics Anonymous and held by many substance abuse treatment professionals, that the vast majority of alcohol-dependent patients can never drink safely again. One possible explanation for this discrepancy may be a difference in case-mix of alcohol-dependent patients in specialized alcohol treatment settings and primary care settings. If predisposition for alcohol dependence is truly polygenic as is suspected,[3] one would expect alcohol dependence to occur with varying severity. In primary care settings, alcohol dependence may be less severe and more amenable to self-treatment than in specialized alcohol treatment settings. Thus, in primary care settings, attempts to reduce drinking to safer levels, rather than insistence on abstinence, may be an appropriate initial therapeutic approach for alcohol-dependent patients who do not have serious alcohol-related medical problems. At follow-up, those dependent patients who cannot moderate their drinking or remain free of alcohol-related problems would then be advised to abstain.

Another possibility is that the current definitions of AUDs are flawed and that individuals who can actually control their drinking are misclassified as dependent. Under the current definitions of AUDs, if the same initial therapeutic approach is appropriate for patients with alcohol abuse or dependence, it may not be important for primary care clinicians to ascertain precise alcohol-related diagnoses for problem drinkers. A practical point, however, is that patients should be assessed for potential alcohol withdrawal before they are advised to cut down or stop their drinking.

There were some notable differences between those dependent subjects who did receive treatment for their drinking and those who did not. The higher frequency of attempts at strategies that proved unhelpful by those who received treatment may indicate that some dependent patients seek treatment only after attempts at self-treatment fail. The higher frequency of family and emotional problems among those who received treatment is compatible with the notion that more severely affected individuals receive treatment more often than those with milder disorders. These findings support the notion that dependent patients need not be referred immediately for treatment.

### Suggested Strategies

For some of the subjects, medical disorders and medical contraindications to drinking were influential in their remissions. Therefore, clinicians are advised to educate patients about any special medical risks of continued excessive drinking. We also found that family and emotional issues were often more important than biomedical factors in eliciting reduced drinking. Thus, a narrow counseling focus on the biomedical consequences and risks of drinking may miss opportunities with many patients. Primary care clinicians may enhance the effectiveness of their alcohol counseling by reflecting back the more personal psychosocial consequences or risks of drinking.

When helping patients devise strategies to modify their drinking, primary care clinicians should consider helping patients to set rules of limitation and avoidance for themselves, since such rules were helpful for many of the subjects in this study. Clinicians should also assess patients' barriers to reducing their drinking. Exposure to others who drink and family dysfunction may be key barriers. Simple brainstorming and problem-solving techniques may help patients realize how they can minimize their contact with others who drink. Family dysfunction that interferes with a patient's attempts to reduce drinking could be addressed with similar brief techniques, and referrals for individual psychotherapy or family therapy might be useful.

These suggestions adhere to an approach for counseling problem drinkers called "motivational interviewing" or "motivational enhancement therapy." This approach stems partly from Carl Rogers's theory that behavioral change is fostered by unconditional positive regard, nonpossessive warmth, and genuine concern.[34] Applying diagnostic labels, such as "alcohol abuse" and "alcoholism" and issuing directives, such as mandating abstinence, are avoided. Instead, for patients who have not committed themselves to modifying their drinking, clinicians help them recognize and weigh the advantages and disadvantages of drinking in the context of their goals and values. For those who have committed themselves to modifying their drinking, clinicians can help them construct, implement, evaluate, and refine their plans for change. The results of Project MATCH (Matching Alcoholism Treatments to Client Heterogeneity) suggest that motivational interviewing is as effective, and perhaps more efficient, than cognitive-behavioral coping skills therapy and 12-step facilitation therapy.[35]

Brief interventions that adhere to the principles of motivational interviewing are effective in reducing drinking by alcohol abusers.[36] Since it is apparent that many alcohol-dependent primary care patients can remit without specialized treatment, a brief intervention may be sufficient to prompt remission in others who do not remit independently. Randomized controlled trials are needed to assess the effectiveness of brief interventions for alcohol-dependent primary care patients.

## CONCLUSIONS

Our study suggests that AUDs in remission are common in primary care, that many patients with AUDs

will remit without formal treatment, that some patients improve spontaneously without intention, and that many dependent patients can remain free of alcohol-related problems with moderate drinking. Many primary care clinicians may be unduly pessimistic about AUDs. Primary care clinicians who understand the factors that promote remission and can apply appropriate counseling techniques may be able to help primary care patients remit from AUDs without formal treatment.

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