"Yes, I've received treatment": what does this mean in the context of epidemiological surveys for alcohol problems?

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Aim: To assess what it means when respondents say they have received treatment on population surveys. Method: Former heavy drinkers recruited through a random digit dialing telephone survey were asked about the type, time, and amount of treatment they had received. Results: When respondents indicated that they had received treatment, it appeared that they had a specific treatment in mind, that they completed the treatment program, and that, for the majority, treatment occurred at roughly the same time as their successful change from heavy drinking. The congruence between age of change and age of treatment use appeared greater among respondents with abstinent versus reduced-drinking recoveries.

KEY WORDS: Natural history, alcohol, representative survey, treatment use.

Determining treatment status is an important issue in naturalhistory research about alcohol problems. When examining pathways to change, it is essential to be able to identify those who recovered with or without substance abuse treatment. In studies that employ face-to-face interviews (reviewed in Blomqvist, 1996, 1999), respondents are asked detailed questions regarding use of treatment services. However, in research that involves the secondary analysis of epidemiological surveys, detailed assessments of treatment use are usually not possible. Such secondary analyses are important, providing the opportunity to estimate the prevalence of treated and of untreated recoveries in the general population (Cunningham, 1999). However, this research is limited because treatment status is often determined by the respondent answering yes or no to a single question about the use of treatment services for alcohol problems. Although most respondents report recovering from an alcohol problem without help or treatment (e.g., 77% in Sobell, Cunningham & Sobell, 1996), a "yes" to such a single question provides very little information. Within such analyses, it is impossible to know: 1) the type of treatment the respondent received; 2) when the treatment occurred (i.e., did the treatment occur at roughly the same time as the respondent's recovery?); 3) how much treatment the respondent actually received (i.e., did the respondent go through the entire program or just attend an initial assessment before dropping out?); and 4) whether the respondent received more than one treatment and/or the same treatment more than once. The present study takes advantage of an epidemiological telephone survey (the natural-history telephone survey; Cunningham, Blomqvist, Koski-Jännes, Cordingley & Callaghan, 2004) to address some of these issues, using a sample of former heavy drinkers who either reduced or stopped their drinking.

Method

The natural-history telephone survey (Cunningham et al., 2004) interviewed a representative sample of 3,006 adults living in Ontario, Canada. Former heavy drinkers were defined as respondents who at some point in their lives drank five or more drinks on one occasion at least once a week for a month or more (Room, Bondy & Ferris, 1995). These respondents were asked a series of questions about quitting or reducing their use if they: 1) had been abstinent in the last year (n = 99) or 2) drank five or more drinks on one occasion less than once per month in the last year (n = 371). A detailed description of these groups is provided elsewhere (Cunningham et al., 2004). This report concentrates on those respondents who said they had ever used treatment. "This next question will ask about any help you might have received in relation to your drinking. Have you ever gone to Alcoholics Anonymous or any other community agency, or seen a physician, counselor, or any other professional for a reason that was related in any way to your drinking?" Respondents who said yes to this question were asked about each of a series of different treatment services (see Table 1 for a list of these services). For each treatment service endorsed, respondents were asked their age of first and last use, the number of times or periods they had used the service, and if they had ever stayed for the whole program. For treatments that usually have prescribed lengths (e.g., inpatient or outpatient treatment), respondents were asked if they had stayed for the entire program. For treatments with no prescribed treatment length (e.g., Alcoholics Anonymous), having attended treatment was defined as going to three or more sessions during one time period. For services such as emergency departments, the question was not asked because it was irrelevant. Finally, respondents were asked if the program had been helpful or unhelpful in helping them deal with their alcohol use. Because of the nature of the analyses presented and the small sample size, results in this report are based on unweighted data. However, as weighting values were within a fairly narrow range, weighted and unweighted estimates can be assumed to be fairly similar in this survey.

Results

Of 470 former heavy drinkers, 64 indicated that they had received treatment, 59 of whom endorsed one or more of the treatments listed on Table 1. By far the most commonly endorsed treatment was Alcoholics Anonymous, followed by talking to a professional in a private office (e.g., medical doctor) and inpatient treatment. While in development (Ogborne, Braun & Rush, 1998), there are no published reports of the numbers of problem drinkers who use the various treatment services in Ontario. Therefore it is hard to ascertain how well the reported proportions of treatment used correspond to the types and numbers of treatment services actually offered. However, an earlier population survey (Cunningham, Lin, Ross & Walsh, 2000) also found private office visits and Alcoholics Anonymous to be the most common types of help mentioned by problem drinkers. Of the 59 respondents who endorsed at least one treatment service, 56 had attended an entire treatment program at least once or had attended Alcoholics Anonymous for three or more sessions in a row.

The next analyses examined whether respondents who went to treatment actually attended the service at roughly the same time that they successfully changed their drinking. Figure 1 shows the age at which each of the 56 respondents first and last attended any alcohol treatment and the age at which they had successfully changed their drinking to its present level. This figure is divided into two groups, reduced recoveries and abstinent recoveries. Visual inspection of the figure indicated that those in the abstinent group were more likely to have the "age during which they attended treatment" be congruent with when they successfully changed their drinking. Age during which they attended treatment was defined as the period between age of first treatment and age of last

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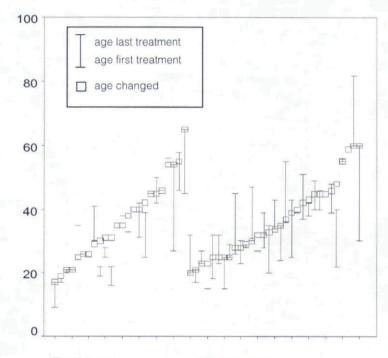
1 | Treatment services used by former heavy drinkers

Treatment	Percent Ever Accessed $(n = 64)$
Alcoholics Anonymous	70
Overnight detoxification	28
3-day to 3-month inpatient	33
Long-term residential or therapeutic commun	ity 0
Assessment or outpatient	14
Outpatient mental health care facility	9
Employee assistance program	6
Family or marital counseling	11
Emergency room	19
Private office with professional	36
Family or marital counseling	11
Jail or prison	3
Minister, rabbi, clergy or spiritual leader	16
Drinking-driving program	2
Other	4
None specified	8

treatment. Chi-square tests were conducted to test whether respondents in the two recovery groups were more likely or less likely to have attended treatment at an age similar to when they changed their drinking to its present level (within one year of calendar-year age versus more than one year of calendar-year age). As can be seen in Table 2, respondents in the abstinent group were more likely to have attended treatment within one year of when they had successfully dealt with their drinking ($\chi^2 = 5.7, 1$ df, p < .02). Table 2 also displays similar analyses comparing age of treatment with: 1) the age at which respondents experienced their last International Classification of Diseases 10 (ICD-10) alcohol dependence symptom; 2) the age of experiencing their last psychosocial consequence; and 3) the age at which they stopped drinking at their heaviest. As can be seen, a similar and significant pattern of results occurred for the variable age of last dependence symptom ($\chi^2 = 5.6$, 1 df, p < .02). While in the same direction, the variables age of last psychosocial consequence and age the respondent stopped drinking at his/her heaviest did not reach significance (p > .05).

FIGURE 1

Age respondent first and last attended treatment and age reported successfully changing drinking among two groups—reduced-drinking and abstinent recoveries



Reduced

Abstinent

TABLE 2

Attended treatment at time of change?

	Type of Recovery						
Percent within one year of treatment	Drinking (n = 24)	Abstinent $(n = 32)$	р				
Successfully changed drinking	58	90	.02				
Last ICD-10 dependence symptom	38	73	.02				
Last psychosocial symptom	61	83	>.05				
Stopped period of heaviest drinking	64	87	> .05				

Also apparent from inspection of Figure 1 was the variability in the age range from first to last treatment among different respondents. Of particular interest were those respondents who reported treatment many years after their age of change. Two analyses were run to explore this issue—the first to see whether use of Alcoholics Anonymous was associated with a greater age range of treatment use, and the second to see whether use of multiple treatments was associated with a greater age range of treatment use. Respondents who attended Alcoholics Anonymous displayed a greater age range between first and last treatment compared with respondents who did not use Alcoholics Anonymous (Mean [SD] = 9.2[7.8] and 2.8 [5.5] years, respectively; t = 2.8, 53 df, p < .01). In addition, the correlation between the number of treatment modalities used and the age range between first and last treatment was r = .56 (p < .001).

Finally, respondents were asked if they found the treatment helpful or not. Of the respondents who endorsed at least one specific treatment service, 78% found at least one treatment very helpful, and only two respondents did not find any treatment at least somewhat helpful.

Discussion

This paper explored a number of questions about what it means when people say they have attended treatment on epidemiological surveys. It appears that most people have a specific treatment in mind, that they attended the whole program, and that they found it helpful. Finally, the majority of individuals sought treatment at roughly the same time they changed their drinking. For this latter point, it also appeared that respondents with abstinent recoveries were more likely than those with reduced-drinking recoveries to have had some treatment experience congruent with their age of successful change. It is possible that this finding reflects the fact that persons with abstinent recoveries tend to have had more severe problems prior to resolution compared with those with moderate-drinking recoveries (Cunningham et al., 2000). However, the present data set is not of sufficient size to adequately test this hypothesis. It is also possible that recovery to abstinence is inherently a more memorable experience than a moderate-drinking recovery, making estimates of age of recovery to abstinence more accurate.

The primary limitation of this study was that the survey assessed only age of first and of last treatment. Respondents were said to have changed their drinking within one year of accessing treatment if they reported an age of change within the one year after the age of last treatment, at one year younger than the first treatment, or at some age between these two time points. It is possible that respondents could have changed their drinking between the ages of first and last treatment but still have these events be several years apart (e.g., Respondent 1641: first treatment at age 37; selfreported change at age 42; last treatment at age 51). If this is the case, should the respondent be classified as having had a treated recovery? Did the respondent continue with treatment during the time between the ages first and last treatment? Two possible explanations for this pattern of results were that respondents with long treatment histories went to treatments that encouraged lifetime attendance (e.g., Alcoholics Anonymous) or went to multiple different treatment modalities. As there are limitations to the amount of detail that can be collected on a telephone survey, this issue might best be explored with a face-to-face interview employing an instrument such as the help-seeking timeline followback (Breslin, Borsoi, Cunningham & Koski-Jännes, 2001). Also apparent from these analyses is the fact that many problem drinkers attended multiple treatments over an extended period of time. Such protracted treatment careers have been noted in previous research (e.g., Dennis, Scott, Funk & Foss, 2005).

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