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BRIEF REPORT

FACTORS ASSOCIATED WITH UNTREATED REMISSIONS FROM ALCOHOL ABUSE OR DEPENDENCE

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Abstract — This paper describes an epidemiologic-based sample of individuals who remitted from alcohol abuse or alcohol dependence, both with and without treatment, to abstinence or moderate drinking. Inspection of the severity, onset, and duration of alcohol problems experienced by these individuals suggests that there may be two primary categories of drinkers with distinct pathways to remission. The first is a population of individuals who experience significant problems for an extended period of time who then resolve to abstinence through the use of treatment services. The second is a population of individuals who drink heavily at some point in their lives, experience some problems, and then "mature out" of this stage in their life as they age and take on other life roles. © 2000 Elsevier Science Ltd.

Although there is disagreement as to the exact prevalence of untreated remissions from alcohol problems (Cunningham, 1999; Roizen, Cahalan, & Shanks, 1978), there is considerable evidence that significant numbers of individuals do recover without treatment (Dawson, 1996; Fillmore, 1988; Sobell, Cunningham, & Sobell, 1996). This paper investigates some of the factors associated with treated and untreated remissions from alcohol problems using data from the 1990–1991 Mental Health Supplement to the Ontario Health Survey. Because of the psychiatric orientation of the Supplement, the survey includes questions regarding the onset and duration of the person's alcohol concerns. Such a level of detail allows us to assess similarities and differences in the course of alcohol problems between treated and untreated resolved respondents.

МЕТНОД

Sample

The Mental Health Supplement to the Ontario Health Survey (Supplement) is a stratified, multi-stage, area probability sample of the general population aged 15 and older in Ontario, excluding individuals in institutions, those living on native reserves, and the homeless (9,953; Ontario Ministry of Health, 1995). The Supplement questionnaire used a modified version of the World Health Organization's *Composite In*-

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ternational Diagnostic Interview (World Health Organization, 1990) to generate DSM-III-R diagnoses (American Psychiatric Association, 1987). Of interest in this paper are those individuals 19 years or older (legal drinking age in Canada; n = 9,128) who have a lifetime diagnosis of alcohol abuse or alcohol dependence (n = 1,035).

Selecting respondent groups

Respondents who were classified as having a lifetime diagnosis of alcohol abuse or dependence, but who had experienced no symptoms related to their alcohol use in the last year (n = 589), were further classified as abstinent and nonabstinent remitters using the following criteria. *Remitted Abstinent* (n = 119): Respondents who stated they had stopped drinking and that abstinence had been maintained for at least the last year. *Remitted Nonabstinent (Moderate Drinkers;* n = 108): Moderate drinking was defined as never consuming more than four drinks in a single day in the past year and further, drinking one to four drinks no more than twice per week. As drinking at heavier levels than those identified here may be associated with long-term health consequences (Ashley, Ferrence, Room, Bondy, & Rehm, 1997), respondents who reported no symptoms in the past year, but who reported drinking one to four drinks more than twice per week, were excluded from our analyses (n = 362).

All remitted respondents were further categorized as to whether they had ever used any treatment services in relation to their drinking. The Supplement questions only asked about treatment for alcohol or drug concerns in general. Thus, treatment was defined as ever: telling a medical doctor about substance use; taking medication for substance use; seeing a psychiatrist, psychologist, social worker, rabbi, priest, minister, counsellor and others, like chiropractor for substance use concerns; attending AA, NA, or other self-help group; or using inpatient or outpatient services for substance abuse concerns. Talking to a medical doctor (79.4%) and accessing self-help groups (47.1%) were the most common type of treatment experience.

Statistical analyses

Standard errors and statistical significance values were generated using *SUDAAN User's Manual* (Shah, Barnwell, & Bieler, 1995). Sample sizes are reported as unweighted data while percentages and statistical calculations are based on weighted data. Categorical variables were analyzed using chi-square tests to investigate differences across the four groups: (1) Moderate Untreated (current moderate drinkers who never accessed treatment); (2) Abstinent Untreated (abstinent in last year, never accessed treatment); (3) Moderate Treated (current moderate drinkers who have ever accessed treatment); and (4) Abstinent Treated (abstinent in last year who have ever accessed treatment). As SUDAAN does not allow for the conduct of ANOVAs, analyses for parametric variables were conducted using the regression method with treatment and current drinking status entered as dichotomous independent variables and the parametric variable of interest entered as the dependent variable. Significance values were reported using Wald's F.

RESULTS

Of all respondents who remitted, 50% (n = 115) had ever accessed treatment and 58% (n = 108) were currently drinking moderately. In a 2 × 2 Chi-square analysis, treatment use by drinking recovery type were significantly associated [$\chi^2(1) = 7.0$, p < .01] with moderate drinking remissions more common amongst respondents who had

	Group				
Variable	Untreated moderate $(n = 71)$	Untreated abstinent $(n = 41)$	Treated moderate $(n = 37)$	Treated abstinent $(n = 78)$	p Level
Mean (SE) age	41.1 (1.8)	47.8 (5.5)	40.9 (4.0)	44.3 (1.9)	n.s.
% Male	69.6	86.6	58.2	87.8	n.s.
% Married	83.5	80.3	84.7	76.8	n.s.
% Alcohol Dependence Diagnosis	22.9	43.9	41.8	95.7	<.001
% Drank 12+ drinks $\geq 1/\text{week}^a$	20.0	10.9	35.4	79.0	<.001

Table 1. Demographic characteristics and severity of prior problems amongst the four groups of remitted drinkers

n.s. = not significant, p > .05.

^aQuantity of heavy drinking prior to remission at the time when respondent's drinking was at its heaviest.

never accessed treatment than amongst those who had [Moderate Untreated (36%, n = 71); Abstinent Untreated (14%, n = 41); Moderate Treated (22%, n = 37); and Abstinent Treated (28%, n = 78)].

Table 1 presents comparisons of demographic characteristics and of severity of alcohol problems prior to remission between the four groups of respondents. There were no significant differences (p > .05) between groups on respondents' age, gender, or current marital status. There were several significant differences among the four groups on measures of severity prior to remission. First, there were some clear indications that remitted respondents (and particularly those who are currently abstinent) who had ever accessed addictions services had more severe alcohol problems prior to their remission. Compared to the Untreated Moderate drinking group, a greater proportion of those respondents in the Treated Abstinent group had a lifetime diagnosis of alcohol dependence as opposed to a diagnosis of alcohol abuse [$\chi^2(3) = 48.5$, p < .001]. Further, at the time of their heaviest drinking, the Treated Abstinent group drank 12 or more drinks on one occasion significantly more often than the untreated groups [$\chi^2(3) = 45.6$, p < .001].

Table 2 presents measures of the duration of the respondents' drinking concerns. While there was no significant difference (p > .05) in the age of onset of the respondents' drinking problems, the two abstinent groups continued their drinking problems

Table 2. Duration of alcohol problems amongst remitted drinkers

Variable	Untreated moderate (n = 71)	Untreated abstinent $(n = 41)$	Treated moderate $(n = 37)$	Treated abstinent $(n = 78)$	<i>p</i> Level
Age of onset	19.4 (0.4)	20.2 (0.9)	23.0 (3.0)	21.3 (1.2)	n.s.
Age last symptom	28.9 (1.7)	36.9 (2.8)	30.0 (3.3)	37.1 (1.5)	M < .01
Years since last symptom	12.2(1.5)	10.9 (2.1)	10.9 (1.3)	7.2 (1.1)	n.s.
Age began heavy drinking	21.3 (0.8)	25.6 (2.8)	22.5 (2.4)	25.8 (1.6)	n.s.
Age finished heavy drinking	26.2 (1.3)	37.4 (3.0)	28.7 (3.2)	36.4 (1.5)	M < .01
Years since heavy drinking	15.2 (1.4)	10.4 (1.2)	10.6 (1.3)	7.8 (1.2)	M, T < .01

M = Main effect of current drinking status, Moderation vs. Abstinent; T = Main effect of ever accessing treatment, Never accessed treatment vs. Ever accessed addictions treatment; n.s. = not significant, p > .05.

for a significantly longer period of time than the two moderate drinking groups. Age of last symptom was 36.9 and 37.1 years for the two abstinent groups, compared to 28.9 and 30.0 years for the moderate drinkers [Wald F = 10.7, 1 df, p < .01]. Similarly, the period between the first and last occurrence of heaviest drinking was longer with the abstinent groups reporting their last episodes at 37.4 and 36.4 years of age, compared to 26.2 and 28.7 years for the moderate drinkers [Wald F = 15.5, 1 df, p < .01]. Finally, there was also some variation in the duration of remission between the four groups. Compared to the other three groups, it had been a significantly longer time [Mean (SE) = 15.2 (1.4)] since respondents in the Untreated Moderate group had consumed alcohol at their heaviest amount [Main effect of current drinking status, Wald F = 9.0, 1 df, p < .01; Main effect of treatment, Wald F = 8.7, 1 df, p < .01]. Respondents in the Treated Abstinent group appeared to have been drinking heavily most recently [Mean (SE) = 7.8 (1.2)], and respondents in the Untreated Abstinent [Mean (SE) = 10.4 (1.2)] and Treated Moderate [Mean (SE) = 10.6 (1.3)] groups both had stopped their period of heaviest drinking about a decade ago. While a similar pattern of results was observed for the number of years since the respondents experienced their last symptoms, the difference between the four groups did not reach statistical significance (p < .08).

DISCUSSION

As with previous research in this area (Cunningham, 1999; Dawson, 1996; Sobell et al., 1996), a large proportion of respondents in this sample (50%) who had recovered from an alcohol problem appeared to have done so without accessing formal help or treatment. Further, many of these individuals (58%) appear to be currently drinking in a moderate, nonproblem fashion. Finding such results in a sample of respondents who met diagnostic criteria (DSM-III-R) for alcohol abuse or dependence prior to their remission lends strength to the growing body of evidence that there are multiple pathways to recovery from alcohol problems, and further, that many people resolve their problems without seeking treatment.

Despite the limitations associated with a cross-sectional population sample (Cunningham, 1999) for this type of analysis, inspection of the patterns of treated and untreated resolutions leads to speculation that we may be observing two main categories or populations of alcohol resolutions. The first is the group of respondents that we commonly see in treatment. This treated, currently abstinent group appeared to experience fairly significant problems associated with their alcohol use prior to their remission. Further, they appeared to have experienced alcohol problems for a fairly extended period and to have remitted from their alcohol problems in their late 30s or early 40s and now drink no alcohol. In contrast, the other large group of respondents appeared to have resolved their alcohol problems without treatment and to currently be drinking moderately. Prior to their remission, this group appeared to have alcohol concerns that were less severe, of a shorter duration, and resolved their alcohol concerns at a significantly younger age. Such descriptions of two pathways towards alcohol resolutions have been noted elsewhere (e.g., Fillmore, 1988; Humphreys, Moos, & Finney, 1995; Weisner, 1993).

Given the barriers to traditional treatment services (Cunningham, Sobell, Sobell, Agrawal, & Toneatto, 1993) and the differences in pattern and severity of alcohol problems seen in individuals who resolve with and without treatment, what can be concluded about the treatment services that are needed in order to provide an ade-

quate continuum of care for individuals with alcohol concerns? Data from this study and others have emphasized a large sample of untreated individuals who, while on average experience less severe problems, nevertheless have clinically significant alcohol concerns that may benefit from the provision of help (e.g., self-help or other minimal intervention). While it could be argued that such individuals do not require services as they eventually resolve by themselves, there are several factors that point towards the provision of services for these individuals. First, these individuals experience problems associated with their alcohol use (as is demonstrated by a diagnosis of alcohol abuse or dependence). It is the responsibility of health services providers, whose mandate it is to reduce the harm associated with substance use, to consider ways to provide services to all those who could benefit, rather than just to those who show up to traditional treatment services. Second, the same argument could be made for the need for an expansion of services based on an analysis of individuals with current substance abuse concerns. It is those individuals with more severe concerns that show up for treatment (Ross, Lin, & Cunningham, in press). The larger population of individuals with less severe concerns are unlikely to access traditional services. Finally, as this large population of problem drinkers results in significant costs to society (Kreitman, 1986), there are pragmatic as well as humanitarian reasons for recommending an increase in service delivery for this population.

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