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STABILITY OF REMISSION FROM ALCOHOL DEPENDENCE WITHOUT FORMAL HELP

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Abstract — Aims: To determine the stability of remission from alcohol dependence without formal help. **Methods:** In a cohort of untreated remitters, a follow-up after 24 months was conducted. Participants were recruited through media solicitation and via a general population study. At baseline, all participants (n = 144) fulfilled criteria of remission from alcohol dependence for the previous 12 months without prior use of formal help (sustained full remission according to DSM-IV, neither inpatient nor outpatient treatment, no more than two self help group meetings). Personal interviews were conducted using standardized instruments. **Results:** In the follow-up period, four individuals died; 92.9% of the remaining participants were re-interviewed (n = 130). Of those interviewed 92.3% showed stable remission without formal help, 1.5% were currently alcohol dependent according to DSM-IV, 1.5% were classified alcohol dependent on grounds of collateral information, 1.5% fulfilled one or two criteria of dependence, and 4.6% utilized formal help. **Conclusions:** Untreated remission is not a transient phenomenon. Therefore, studying remitters from alcohol dependence without formal help can yield valid information on pathways to recovery.

INTRODUCTION

Most knowledge on the course of and the remission from alcohol dependence is based on research with individuals undergoing treatment. The groundbreaking long-term study by Vaillant (1982) revealed that a substantial proportion of alcohol dependent individuals recover without treatment. This has been confirmed by other longitudinal studies (Hasin *et al*., 1997; Booth *et al*., 2001) with one study showing that within a period of 4 years 39.4% remitted from alcohol dependence, 14.7% had alcohol abuse and the remaining 46% were still alcohol dependent (Hasin *et al*., 1990). Cross-sectional epidemiological studies based on representative general population samples confirmed that only a minority seeks professional help (Grant, 1997), and among those who remit the majority do so without formal help (Dawson, 1996; Sobell *et al*., 1996). A recent study showed that among those who recovered only 25.5% ever received treatment (Dawson *et al*., 2005). Studying this predominant group could enlarge our knowledge on the process of remission and give valuable suggestions for treatment. However, research in this field is, firstly, rather rare and, secondly, often based on cross-sectional analyses, (e.g. Tuchfeld, 1981; Klingemann, 1991; Sobell *et al*., 1993; Tucker *et al*., 1994; Cunningham, 1999). Most longitudinal studies on untreated alcohol dependent individuals (Vaillant, 1982; Leung *et al*., 1993; Vaillant, 1996; Öjesjö *et al*., 2000) are of limited number and show restrictions in at least one of three aspects: (i) in all available studies, samples were not confined to alcohol dependence alone. The criterion 'alcoholism' was used which covers both dependence and abuse. (ii) Samples consisted of subgroups such as men (Vaillant, 1996; Öjesjö *et al*., 2000) or native Americans (Leung *et al*., 1993). (iii) Subjects seeking some kind of formal help (e.g. addiction treatment or Alcoholics Anonymous) were not excluded. In addition, most of these studies have investigated a rather small number of variables related to the course or the process of remission from alcohol dependence. The more in-depth studies on 'natural recovery' have been cross-sectional. One study gives some evidence on stability in untreated alcohol dependent individuals: Hasin, Liu and Paykin (Hasin *et al*., 2001) found that in a 12-month-follow-up, the probability of sustained reduction in drinking among the group with baseline alcohol dependence was as high as in subjects without dependence.

To assess the value of the in-depth cross-sectional studies on 'natural recovery' that have been conducted so far, it is worthwhile to know how stable untreated remissions are; however, such data are missing. It might be argued that remitters without formal help have frequent relapses or utilize treatment in the long run. The first argument is underlined by the finding that periods of abstinence are quite common among alcohol-dependent individuals: periods of abstinence lasting at least 3 months were reported by 62.3% (Schuckit *et al*., 1997).

The present study adds knowledge to the field by providing longitudinal data from a sample of untreated remitters from alcohol dependence. The aim is to analyse the stability of remission without formal help.

METHODS

The data are part of the project Transitions in Alcohol Consumption and Smoking (TACOS) (Rumpf *et al*., 1998). More details on the cross-sectional part of this study can be found elsewhere (Bischof *et al*., 2000a, b; Bischof *et al*., 2001; Bischof *et al*., 2002; Rumpf *et al*., 2002; Bischof *et al*., 2003). Remission without formal help was defined as meeting DSM-IV (American Psychiatric Association, 1995) or ICD-10 (WHO, 1991) criteria of alcohol dependence during lifetime but not within the last 12 months; participants fulfilled DSM-IV remission specifiers of sustained full remission (meeting none of the dependence criteria for at least 12 months). This criterion was applied in order to be in line with other studies on natural recovery from alcohol dependence. In a review, the median of the minimum required recovery length was 12 months (Sobell *et al*., 2000). In addition, subjects did not fulfill criteria for alcohol

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abuse. To meet our criteria of remission without formal help, participants were not included if they utilized some kind of addiction treatment lifetime; following the criteria of Sobell *et al*. (1993), attending up to two self-help group (AA or other) meetings (6.9% of our sample) was not considered as formal help. In addition, participants receiving psychotherapy of comorbid psychiatric disorders within 2 years prior and 1 year after remission, were excluded. In 87%, collateral interviews could be conducted to confirm data according to the alcohol dependence syndrome, utilization of formal help, date of remission and alcohol consumption since remission. In cases of obvious inconsistencies between respondent and collateral report, respondents were excluded from the study (n = 5). Subjects participated in a comprehensive interview and were paid the equivalent of about 20 Euro. Interviews were conducted by psychologists.

Subjects

Participants were recruited in two different ways: (i) through media solicitation and (ii) from a general population study. All participants gave written informed consent for the follow-up investigation. (i) The media solicitation included 17 newspaper articles, 13 newspaper advertisements, 2 radio reports and 1 television report. The recruitment strategy used was comparable to other studies (Sobell *et al*., 1992) and is described in more detail elsewhere (Rumpf *et al*., 2000). Anyone responding to the advertisement was screened by telephone or letter, subjects fulfilling inclusion criteria were personally interviewed. Of 451 respondents, 115 fulfilled the inclusion criteria described above [initial criteria for remission without formal help were somewhat less restrictive as described here and included individuals who had received minor formal help (c.f. Rumpf *et al*., 2000)].

(ii) In addition, participants were drawn from a representative general population study of 4075 respondents (Meyer *et al*., 2000). Eligible subjects from this sample fulfilling the inclusion criteria for remission without formal help were interviewed a second time. In the general population study, individuals with German nationality, born between 1932 and 1978 and not living in institutions, were randomly recruited from the resident registration office files in Lübeck and 46 adjoining communities representing the catchment area of the city. Residents in Germany are bound by law to be registered in these files within 4 weeks of changing first residence. Restricting the sample to residents of German nationality was to avoid language problems. In total, 4075 individuals were included in the study, the response rate was 70.2%.

Of the sample, 2.6% (n = 104) fulfilled DSM-IV criteria for lifetime alcohol dependence but not within the last 12 months. Of these subjects, 70.2% (n = 73) were selected for the natural recovery study via a computerized algorithm since they met criteria for almost no or minor utilization of formal help. At the end of the baseline assessment, 86.3% (n = 63) of this sample had given written, informed consent to participate in a follow-up study and were contacted for a second interview. In order not to lose any natural remitters, the computer algorithm was rather over-inclusive. Therefore, 18 participants had to be excluded on grounds of interview data or collateral interview because remission or lifetime alcohol dependence was questionable. The response rate of the remaining subjects was 73.3%. To meet the more restrictive criteria of the present analysis, four subjects were excluded because of having had received minor formal help. In total, 115 subjects were recruited through media solicitation and 29 were taken from the general population sample.

Follow-up

The follow-up interview was scheduled after 24 months, with a mean interval between first and second interview of 735.68 days (SD = 48.01). A personal interview was conducted, mainly at participants' homes. Of the baseline sample described above (n = 144), 4 (2.8%) had died. Of the remaining 140 participants, 4 (2.9%) could not be reached, 6 (4.3%) refused to take part, and 130 (92.9%) were re-interviewed. In 81.3% of the sample, collateral interviews were conducted to corroborate participants' data. In two cases (1.5%), major inconsistencies between collateral and participant interview occurred. On grounds of collateral information, these participants were classified as probably dependent.

Assessment

Alcohol dependence according to DSM-IV was assessed by the M-CIDI (Wittchen *et al*., 1995), the German version of the CIDI (Robins *et al*., 1988). Interviewers were instructed by WHO-CIDI-trainers during a one-week course and were supervised closely during the data gathering period.

The drinking history was assessed by standardized interview: quantity and frequency of *alcohol consumption* were measured within three time frames (value of the highest consumption period over the life span, the year before remission, and the year prior to the interview). The average daily alcohol consumption was computed by multiplying the quantity and frequency of consumption for each time frame.

Definition of stable remission

Remission from alcohol dependence was considered unstable when, in the previous 12 months, participants met criteria for alcohol dependence or abuse according to DSM-IV, if one or two dependence criteria according to DSM-IV were fulfilled (partial remission), if subjects utilized formal help, or if alcohol dependence was highly probable on grounds of collateral information.

RESULTS

The sample consisted of 93 men (71.5%) and 37 women, mean age was 48.8 years (SD 10.9), 58.5% were married, 50% were employed and 50% had >9 years of schooling. The average daily alcohol consumption in the year prior to remission was 257.5 g (SD 173.5) and in the year of most severe drinking 296.6 g (SD 178.7). The average length of alcohol dependence was 9.8 years (SD 9.0), length of remission at the time of the first interview was 6.9 years (SD 5.6). On average, participants fulfilled 5.6 DSM-IV criteria for alcohol dependence (SD 1.3), 98.5% fulfilled criteria for physical dependence (either tolerance or withdrawal present), and 72.3% reported withdrawal symptoms.

As shown in Table 1, the majority of unassisted remissions (90.8%) were stable within the follow-up period of 2 years.

Table 1. Status of untreated remission from alcohol dependence after 24 months

Status after 24 months	*N* (%) Male (*n* = 93)	Female (*n* = 37)	Total (*n* = 130)
Current alcohol dependence[a]	2 (2.2)	0 (0.0)	2 (1.5)
Probable dependence (collateral information)[b]	2 (2.2)	0 (0.0)	2 (1.5)
Partial remission[c]	1 (1.2)	1 (2.7)	2 (1.5)
Utilization of formal help[d]	3 (3.2)	3 (8.2)	6 (4.6)
Stable remission[e]	85 (91.4)	33 (89.2)	118 (90.8)

[a]Fulfilling three or more DSM-IV criteria within the last 12 months.
[b]Fulfilling three or more DSM-IV criteria within the last 12 months is likely on grounds of collateral information.
[c]Fulfilling one or two DSM-IV criteria within the last 12 months.
[d]At least one contact to any professional help or more than two self-help group meetings.
[e]Meeting none of the above annotations one to four.

Only two patients fulfilled current (12 month) criteria for alcohol dependence according to DSM-IV. Two additional subjects were classified dependent on grounds of collateral information. The other participants were classified as not stable, because of subthreshold diagnoses (fulfilling one or two dependence criteria) or utilization of formal help. Those who had stable remissions were significantly older (49.4, SD 10.8 vs 42.8, SD 10.1; $t = -2$, df 128, $P = 0.04$); no other sociodemographic differences were found. Due to a small group of unstable remitters no further comparative analyses were done.

DISCUSSION

This is the first study focusing on untreated remissions from alcohol dependence on grounds of longitudinal data. Findings clearly show, that remission from alcohol dependence without utilization of formal help is very stable. In terms of currently fulfilling DSM-IV criteria for alcohol dependence, only 1.5% were unstable and an additional 1.5% were considered dependent on grounds of collateral information. Since periods of abstinence are quite common among alcohol dependent individuals (Schuckit *et al*., 1997) and, therefore, untreated remission could be considered as a transient phenomenon, this provides valuable information. It has to be considered that 4.3% of the sample refused to participate, 2.9% were not reached, and 2.8% died. Part of this group that could not be interviewed at the follow-up might have relapsed, which would alter the number of stable remissions. Taking the worst case that all these individuals relapsed, the rate of stable remissions would decrease to 82%. It has to be stressed that the participants of our study were severe cases prior to remission, they drank heavily, fulfilled a high number of dependence criteria and the majority were physically dependent. Data show that even these individuals with predominantly severe dependence can attain stable remissions without formal help.

Some shortcomings are worth mentioning. One is the small sample size recruited from the general population study. The majority was recruited by media solicitation which is subject to a selection bias. As previous research has shown, media-solicited samples of 'natural recovery' are biased with an over representation of severely dependent subjects and abstinent (vs moderately drinking) individuals (Rumpf *et al*., 2000). In addition, participants might have been more aware of their alcohol problems or showed greater motivation to stay in remission. Furthermore, the group of subjects with unstable remissions was also fairly small. The power was insufficient for comparisons between stable and unstable remitters as well as between participants recruited via media or from the general population. Therefore, we focused on a rather descriptive analysis. Finally, a remission that lasted for at least 12 months can be considered as rather stable. Shorter remission periods are likely to result in higher relapse rates.

The present findings of stability of remissions without formal help support this field of research and should stimulate further work. Data suggest that findings derived from cross-sectional analyses of untreated remitters are not biased by large rates of subjects who relapse or seek help in the long run. Future research should be based on follow-ups of large general population studies, in order to further improve the methodology of research on the natural course of alcohol dependence and untreated remissions.

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REFERENCES

American Psychiatric Association ed. (1995) Diagnostic and statistical manual of mental disorders, 4th edn, international version. Washington, D.C: American Psychiatric Association.

ANEPSA Research Group. (1998) German Research Network 'Analytical Epidemiology of Substance Abuse' (ANEPSA). *European Addiction Research* **4**, 203–204.

Bischof, G., Rumpf, H.-J., Hapke, U. *et al*. (2000a) Gender differences in natural recovery from alcohol dependence. *Journal of Studies on Alcohol* **61**, 783–786.

Bischof, G., Rumpf, H.-J., Hapke, U. *et al*. (2000b) Maintenance factors of recovery from alcohol dependence in treated and untreated individuals. *Alcoholism, Clinical and Experimental Research* **61**, 783–786.

Bischof, G., Rumpf, H.-J., Hapke, U. *et al*. (2001) Factors influencing remission without formal help from alcohol dependence in a representative population sample. *Addiction* **96**, 1327–1336.

Bischof, G., Rumpf, H.-J., Hapke, U. *et al*. (2002) Recovery from alcohol dependence without formal help: how restrictive should our definition of treatment be? *Journal of Studies on Alcohol* **63**, 229–236.

Bischof, G., Rumpf, H.-J., Hapke, U. *et al*. (2003) Types of natural recovery from alcohol dependence: a cluster analytic approach. *Addiction* **98**, 1737–1746.

Booth, B. M., Fortney, S. M., Fortney, J. C. *et al*. (2001) Short-term course of drinking in an untreated sample of at-risk drinkers. *Journal of Studies on Alcohol* **62**, 580–588.

Cunningham, J. A. (1999) Resolving alcohol-related problems with and without treatment: the effects of different problem criteria. *Journal of Studies on Alcohol* **60**, 463–466.

Dawson, D. A. (1996) Correlates of past-year status among treated and untreated persons with former alcohol dependence: United States, 1992. *Alcoholism, Clinical and Experimental Research* **20**, 771–779.

Dawson, D. A., Grant, B. F., Stinson, F. S. *et al*. (2005) Recovery from DSM-IV alcohol dependence: United States, 2001-2002. *Addiction* **100**, 281–292.

Grant, B. F. (1997) Barriers to alcoholism treatment: reasons for not seeking treatment in a general population sample. *Journal of Studies on Alcohol* **58**, 365–371.

Hasin, D. S., Grant, B. and Endicott, J. (1990) The natural history of alcohol abuse: implications for definitions of alcohol use disorders. *The American Journal of Psychiatry* **147**, 1537–1541.

Hasin, D., Liu, X. and Paykin, A. (2001) DSM-IV alcohol dependence and sustained reduction in drinking: investigation in a community sample. *Journal of Studies on Alcohol* **62**, 509–517.

Hasin, D. S., Van Rossem, R., McCloud, S. *et al*. (1997) Differentiating DSM-IV alcohol dependence and abuse by course: community heavy drinkers. *Journal of Substance Abuse* **9**, 127–135.

Klingemann, H. K. (1991) Research report: the motivation for change from problem alcohol and heroin use. *British Journal of Addiction* **86**, 727–744.

Leung, P. K., Kinzie, J. D., Boehnlein, J. K. *et al*. (1993) A prospective study of the natural course of alcoholism in a Native American village. *Journal of Studies on Alcohol* **54**, 733–738.

Meyer, C., Rumpf, H.-J., Hapke, U. *et al*. (2000) Prevalence of alcohol consumption, abuse and dependence in a country with high per capita consumption: findings from the German TACOS study. *Social Psychiatry and Psychiatric Epidemiology* **35**, 539–547.

Öjesjö, L., Hagnell, O. and Otterbeck, L. (2000) The course of alcoholism among men in the Lundby Longitudinal Study, Sweden. *Journal of Studies on Alcohol* **61**, 320–322.

Robins, L. N., Wing, J. and Wittchen, H. U. (1988) The Composite International Diagnostic Interview. An epidemiological instrument suitable for use in conjunction with different diagnostic systems and in different cultures. *Archives of General Psychiatry* **45**, 1069–1077.

Rumpf, H.-J., Bischof, G., Hapke, U. *et al*. (2000) Studies on natural recovery from alcohol dependence: sample slection bias by media solicitation? *Addiction* **95**, 765–775.

Rumpf, H.-J., Bischof, G., Hapke, U. *et al*. (2002) The role of family and partnership in recovery from alcohol dependence: comparison of individuals remitting without formal help and with and without formal help. *European Addiction Research* **8**, 122–127.

Rumpf, H.-J., Hapke, U., Dawedeit, A. *et al*. (1998) Triggering and maintenance factors of remitting from alcohol dependence without formal help. *European Addiction Research* **4**, 209–210.

Schuckit, M. A., Tipp, J. E. and Bucholz, K. K. (1997) Periods of abstinence following the onset of alcohol dependence in 1,853 men and women. *Journal of Studies on Alcohol* **58**, 581–589.

Sobell, L., Ellingstad, T. P. and Sobell, M. B. (2000) Natural recovery from alcohol and drug problems: methodological review of the research with suggestions for future directions. *Addiction* **95**, 749–764.

Sobell, L. C., Cunningham, J. A. and Sobell, M. B. (1996) Recovery from alcohol problems with and without treatment: prevalence in two population surveys. *American Journal of Public Health* **7**, 966–972.

Sobell, L. C., Sobell, M. B. and Toneatto, T. (1992) Recovery from alcohol problems without treatment. In *Self control and the addictive behaviours*, Heather, N., Miller, W. R. and Greeley, J. eds, pp. 198–242. Macmillan Publishing, New York.

Sobell, L. C., Sobell, M. B., Toneatto, T. *et al*. (1993) What triggers the resolution of alcohol problems without treatment? *Alcoholism, Clinical and Experimental Research* **17**, 217–224.

Tuchfeld, B. S. (1981) Spontaneous remission in alcoholics: Empirical observations and theoretical implications. *Journal of Studies on Alcohol* **42**, 626–641.

Tucker, J. A., Vuchinich, R. E. and Gladsjo, J. A. (1994) Environmental events surrounding natural recovery from alcohol-related problems. *Journal of Studies on Alcohol* **55**, 401–411.

Vaillant, G. E. (1982) Natural history of male alcoholism IV: paths to recovery. *Archives of General Psychiatry* **39**, 127–133.

Vaillant, G. E. (1996) A long-term follow-up of male alcohol abuse. *Archives of General Psychiatry* **53**, 243–249.

World Health Organization (1991) *Tenth revision of the International Classification of Diseases, Chapter V (F), mental and behavioural disorders*. WHO, Geneva.

Wittchen, H.-U., Beloch, E., Garczynski, E., Holly, A., Lachner, G., Perkonigg, A., Vodermaier, A., Vossen, A., Wunderlich, U. and Zieglgänsberger, S. (1995) *Münchener Composite International Diagnostic Interview (M-CIDI), Version 2.2*. Max-Planck-Institut für Psychiatrie, München.