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Natural Recovery or Recovery without Treatment from Alcohol and Drug Problems as Seen from Survey Data

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Much of what is known about self-change or recovery without treatment from alcohol and drug problems comes from general population studies or special samples from sources other than treatment centers. In this chapter, reports from large-scale population surveys and community studies as well as those from smaller samples obtained by advertising or other means will be reviewed. Such studies provide good estimates of how many people in the larger society have alcohol and drug problems that resolved without formal treatment. These studies also help in understanding the characteristics of those who recover without treatment. The advantages and disadvantages of using various interview methods and what questions are still unanswered about natural recovery in large populations will be examined. Finally, practical suggestions based on this research will be discussed.

Early Drinking Survey Results

Some of the earliest interest in natural recovery occurred because of drinking surveys that showed declines in drinking with age. Cahalan and Room (1974) found in their American Drinking Practices Survey that 25% of males aged 21–29 had high scores on a drinking problem scale. However, only 13% of those aged 50–59 and 19% over 70 years old had high problem scores. These results were obtained for both males and females and were stronger among the higher social classes than the lower ones. Because the Cahalan and Room study was a cross-sectional survey and not a longitudinal one, no estimate was made regarding how many individuals stopped drinking on their own as opposed to with active treatment. Later studies using longitudinal data have generally shown that drinking practices remain stable rather than decrease (Glynn, Bouchard, LoCastro, & Laird, 1985; Temple & Leino, 1989). Some have argued that the difference between the cross-sectional and

longitudinal studies is accounted for largely by the higher mortality of heavy drinkers, allowing only light and moderate drinkers to reach the older years (Stall, 1987; Temple & Leino, 1989). However, others have noted that mortality rates are an insufficient cause, and natural recovery is an important factor (Drew, 1968; Harford & Samorajski, 1987).

Specialized Survey Studies of Natural Recovery

Several efforts have been made to determine rates of natural recovery or recovery without treatment in surveys of general populations. There is considerable variability in the survey methods used, the definitions of natural recovery, and how alcohol problems are defined.

The earliest survey of natural recovery used a health questionnaire at three time points in the early 1960s. Bailey and Stewart (1967) found that at their first survey, 91 people had a current or previous drinking problem. By the second and third follow-ups, only 13 and 6 participants, respectively, were drinking within normal limits. None had psychotherapy but half had medical care related to drinking and could therefore be considered naturally recovered. This study showed a very low rate of natural recovery compared with that found in later investigations. As this report has a very small sample size, less confidence can be placed in the results of these findings.

In the early 1990s, surveys of natural recovery became larger and more numerous and sophisticated. For example, Hasin and Grant (1995) carried out the first large-scale survey of natural recovery. They used data from the National Health Interview Study conducted in 1988 which had used a well-designed sample of 43,809 people aged 18 and over in the 50 U.S. states and the District of Columbia. They identified former drinkers, who comprised about 19% of the total sample; of this group, 21% were alcohol dependent and 42% were alcohol abusers according to DSM-IV criteria. However, only 33% of those who were alcohol dependent and 17% of those who were alcohol abusers had attended Alcoholics Anonymous (AA) or sought any other kind of treatment, thus indicating that the majority had solved their alcohol problems without help. Moreover, many reported social pressure to cut down their drinking, which may have been sufficient to make them stop drinking.

Several important surveys of recovery without treatment have also been conducted in Canada. Sobell, Cunningham, and Sobell (1996) used data from a national survey ($n = 11,634$) and an Ontario survey ($n = 1,034$). They defined problem drinkers as those who usually drank seven or more drinks per occasion. Most of those who resolved their alcohol problems ($n = 322$ and $n = 70$, respectively) did so without using any formal treatment. The proportion of recovery without treatment was remarkably similar in the two surveys (77.5% and 77.7%, respectively). However, there was a large difference in how many problem drinkers returned to moderate drinking rather than abstinence (38% versus 63%, respectively). One reason suggested for the likelihood of

returning to social drinking was that socioeconomic and income levels are higher in Ontario than in the country as a whole.

Cunningham, Lin, Ross, and Walsh (2000) found several groups of heavy drinkers in a natural recovery study. One group had significant alcohol problems over a long time and resolved them through abstinence or treatment while another group experienced fewer problems but “matured out” of them as they aged. Another group recovered from problems and were able to drink moderately and have fewer problems than the abstinent groups. It was found that nontreatment recoveries among those with alcohol problems varied between 53.7% and 87.5%, depending on how many alcohol-related problems the drinker had experienced. The greater the number of problems, the lower was the percentage of participants who were self-remitters. Recoveries without treatment were less frequent among those with more serious alcohol problems. However, even among those who had six or more problems, 53.7% recovered without formal treatment.

Similar to the Canadian studies cited above, Weisner, Matzger, and Kaskutas (2003) found that alcohol dependent people who received treatment were more likely to become abstinent than those who were untreated in a California survey with a 1-year follow-up. Having more heavy drinkers in one’s social network, higher psychiatric morbidity, and more social consequences of alcoholism were inversely related to recovery in both treated and untreated groups.

Bischof, Rumpf, Hapke, Meyer, and John (2001) studied natural recovery among those in a German general population survey. They recruited 32 individuals with alcohol dependence who were “fully remitted” without treatment for alcohol problems and compared them with 26 participants who were currently alcohol dependent. Unlike results from other studies, those who recovered without treatment had higher levels of dependency, less social pressure to quit drinking, and more driving while intoxicated. However, they had more work satisfaction, better finances, and more stable relationships. Compared with male alcohol dependents, females who remitted had less social pressure to change, less satisfaction with life, more health problems, and drove less when impaired (Bischof, Rumpf, Hapke, Meyer, & John, 2000a). This is the only known study which explores sex differences in self-change in detail. Further studies with larger samples are needed to explore such differences in greater depth. The above surveys demonstrate that the majority of individuals who report having solved alcohol problems did so without treatment or AA involvement. It should also be noted that there is little variation across studies, and natural survey rates are usually 75% or greater.

While less work has focused on natural recovery from drug use, several studies have been conducted by Cunningham and colleagues. The first study used the Canadian Alcohol and Drugs Survey conducted on a national sample ($n = 12,155$) in 1994 (Cunningham, Koski-Jännes, & Tonneato, 1996). Former drug users who had not used in the past year were identified. Very few had ever had any drug related treatment, especially among regular marijuana

users (16.0%), LSD users (14.1%), and cocaine/crack users (16.0%). However, treatment rates were higher for speed (20.4%) and heroin users (34.5%). Overall, this study did not relate treatment to drug use or serious drug problems and some of the sample sizes were small, especially for individuals treated for speed and heroin use.

A later study done with an Ontario sample examined the reasons why drug users quit (Cunningham, 1999). This study identified 109 former cannabis users who had used 50 times or more and 26 former cocaine users who had used 10 times or more. Only 1.8% of the cannabis users and none of the cocaine users reported that they quit because of treatment or doctors' advice. Most mentioned factors such as growing up, personal changes, changes in responsibilities, health concerns, or disappointments with drug effects as the main reasons for stopping their drug use.

Community Studies of Self-Change

Several community-based studies of self-change from drinking problems have been conducted using a variety of approaches. In the first, Newman (1965) used the records of police, treatment, social agencies, and clergy to identify alcoholics in 1951. A total of 688 were found in an Ontario county and in 1961, a follow-up was conducted to examine how many participants had recovered. In this study, individuals were defined as "recovered" if they did not reappear in any records at follow-up. Overall, only 29.4% of the problem drinkers, 14.2% of the alcohol addicts, and 10% of the chronic alcoholics recovered without treatment. These findings are far lower than would be expected from survey results. However, the criteria used were quite different; that is, people with drinking problems were not self-identified as in other surveys, but were classified through records. Thus, these cases may have been more serious than those typically seen in surveys.

A community-based study of people in the Clydeside area of Scotland by Saunders and Kershaw (1979) also found a lower rate of self-change than did most surveys. This investigation covered 228 people who said that they "drank too much in the past." Some were still drinking too much, while others were episodic drinkers or misclassified based on surveys that are more intensive. However, there were 41 past problem drinkers, none of whom had been treated for alcoholism. Most reduced their drinking because of marriage, job changes, physical illness, or family advice. Moreover, three stated that advice from their general practitioner was important in reducing their drinking. Of the 19 respondents classified as alcoholics, 7 had received alcoholism treatment or had attended AA. The remaining 63% (12 cases) had recovered without treatment, but some of those appeared to have had medical advice or treatment for other ailments. As with the problem drinkers, marriage, job changes, and physical illness were the most important factors in recovery for the people who are "definitely alcoholics."

Leung, Kinzie, Boehnlein, and Shore (1993) conducted a 19-year follow-up of 100 people in a small Indian community. Only 46 could be reinterviewed but others ($n = 25$) were followed through medical charts or death certificates. Alcohol abuse and dependence diagnoses were made using DSM-III criteria. In total, 46 had stopped drinking and of those only 8 (17%) had specific alcohol treatment. Most mentioned family pressures and social and financial problems as the most important factors in recovery, although many could give no reasons.

Cameron, Manik, Bird, and Sinorwalia (2002) compared two small groups of whites and people from the Indian subcontinent who had “grown out of alcohol problems” without treatment. For both groups, physical health, self-esteem, and ability to cope and work were factors in promoting self-change. Social networks and family status and honor were more important factors for the Indians compared with the group of whites.

In another small study, male Navajos who “aged out” of alcohol problems without treatment were interviewed (Quintero, 2000). It was found that important factors in success included health and religious concerns, having a traditional Navajo way of life, and increased child-rearing responsibilities.

Russell et al. (2002) investigated samples of alcoholics identified in previous community studies and found 83 “naturally recovered” individuals. Those who recovered were more often married and had better coping mechanisms, higher self-esteem, social networks with fewer heavy drinkers, and less drug use and intoxication histories.

Overall, it is striking that so few studies involve high-risk groups such as individuals from alcoholic families, American Indians, or other aboriginal peoples. Current knowledge of natural recovery in these groups is, therefore, sparse and needs to be investigated further.

The community studies reviewed above give a wide range of recovery rates without treatment. It is notable, however, that the sample sizes and characteristics vary greatly as do the criteria for alcohol problems and dependency. In addition, only a few communities have been studied and they may not be representative of large populations.

Drug Users and Natural Recovery

Several studies of natural recovery among abusers of drugs such as opiates, cocaine, and cannabis are now available, many with large samples. The largest of these involved recoveries among 841 American Vietnam veterans who had positive urines for drugs on leaving Vietnam in 1971 (Price, Risk, & Spitznagel, 2001). A follow-up 25 years later showed that most drug abusers achieved recovery without treatment. Only about 20% were treated for their drug problems, however, most achieved recovery with a “cold turkey” approach. There was a lower rate of natural recovery for opiates. Not only does this study have interesting results, but it is also one of the very few with a long-term follow-up.

However, it supplies no psychosocial reasons for the natural recoveries or any assessment of why some drug abusers did not recover without treatment.

Several smaller studies have explored the psychosocial reasons for natural recoveries among drug abusers. For example, Toneatto, Sobell, Sobell, and Rubel (1999) studied 50 abstinent, untreated former cocaine users and 21 active, untreated cocaine users. The two groups did not differ in demographics, drug history, or psychiatric problems. However, recovery was related to a cognitive appraisal of the pros and cons of further cocaine use, with recovered individuals assessing the problem of cocaine abuse as not being worth the consequences.

Similar findings were reported by Blomqvist (2002) who studied 25 treated former drug users and 25 self-remitters gathered from advertisements and other sources in Sweden. Among the most often perceived reasons for natural recoveries were intrapsychic factors (i.e., wanting to quit), frightening or humiliating experiences, situational changes in life, legal problems, and positive influences from others. This report showed that both alcohol and drug abusers remitted because of rational decisions and some negative consequences.

Latkin, Knowlton, Hoover, and Mandell (1999) studied 335 former drug addicts and abusers in an HIV prevention program who ceased drug use. The main factor in natural recoveries was that remitters had fewer members of their social network who used drugs; other variables did not seem to be as important. Although this report demonstrates the possible influence of social factors in natural recovery, it does not allow for easy comparisons to other studies of the same type.

Only one known paper makes any cross-national comparisons of natural recovery among alcohol and drug abusers. Sobell et al. (2001) compared alcohol and cocaine abusers in Canada with heroin abusers in Switzerland. Cognitive factors were the most important reasons for cessation followed by emotional and behavioral monitoring. Many drug abusers go through a cognitive appraisal in trying to remit without treatment. This process seems to be similar across cultural setting and type of substance involved.

Advantages of Survey and Other Methods for Studying Natural Recovery

Although survey sampling methods have some disadvantages, they also have many advantages over other designs for studying natural recovery. Surveys usually involve large samples of the general population and hence can give overall estimates for rates of natural recovery. Due to their size, they normally identify large numbers of problem drinkers or alcohol abusers and can break them down into several subgroups. However, most surveys contain very few questions about recovery without treatment. Studies not using surveys but snowball methods or special samples of recovered problem drinkers are typically focused on recovery issues and how recovery proceeds. They usually

contain many more questions on how recovery was achieved and go in depth about the motivation for recovery. This study design is more likely to answer questions about how and why recovery occurs, but not about the number of alcoholics or problem drinkers who recover without treatment.

Snowball, Media-Derived, and Convenience Samples in Self-Change Studies

Numerous efforts have been made to study self-change with snowball, samples derived from media advertisements, and other nonrepresentative methods. Various follow-up studies such as those by Vaillant (1983), Fillmore (1987), and others established that the natural history of alcohol problems involves fluctuations over time and that some people recover with increasing age while others do not. Regarding wait-list control groups, several studies have found that some participants in these groups got better without treatment (Kendall and Staton, 1966; Kissin, Rosenblatt, & Machover, 1968).

Reasons for recovery and details of how it happens are best understood from the various studies of recovered alcohol abusers. Numerous investigations have used individuals who responded to media contacts. These are not true population studies, but rather surveys of people who have come forward because of advertisements in newspapers, radio, or television. The early studies of Tuchfeld (1981) and Ludwig (1985) used newspaper advertisements to attract people who had recovered from alcohol problems without treatment. Tuchfeld's 51 alcohol abusers reported that they recovered mainly because of personal illness or accidents, better education about alcohol problems, religious experiences, direct interventions by friends or relatives, and financial or other problems created by alcohol. In addition, most responders gave more than one reason. Ludwig's questions were different and he found that his 29 participants had recovered because they had hit a personal bottom, had a physical illness, a change in lifestyle, or a religious experience; a few simply lost interest in alcohol. These reasons have been repeated in later studies as well.

Klingemann (1991) used newspapers and radio to assemble samples of recovered alcohol abusers and heroin users in Switzerland. About half of the naturally recovered alcohol cases returned to social drinking, although all but a few of the heroin users stopped altogether. In general, the problems of both groups were the same before and after recovery. Both groups were self-conscious remitters who decided that, after hitting bottom or having health, financial, and other problems, their addiction career should end. Klingemann showed that there are several major stages in recovery, such as the motivation for change, implementing this decision, and developing and maintaining a new identity.

One of the largest and most comprehensive studies of alcohol problems derived from media interviews was conducted by Sobell, Sobell, Toneatto, and Leo (1993). They recruited and interviewed 182 respondents and classified

them into the following groups: (a) resolved abstinent without treatment, (b) resolved nonabstinent, (c) resolved abstinent with treatment, and (d) non-resolved (i.e., control group). To corroborate respondents' self-report, they also interviewed relatives or friends. The largest group was resolved abstinent without treatment ($n = 71$), followed by nonresolved ($n = 62$). In the overall sample, only 28 participants were abstinent and had ever sought treatment. There were no differences within the various resolved groups or in comparisons with the nonresolved group. Most recoveries involved cognitive appraisals of drinking (i.e., pros and cons of continuing to drink) and the support of spouses. Similar results were also found by Tucker, Vuchinich, and Gladsjo (1994) in their study that examined participants 2 years before and 1 year after their abstinence.

Granfield and Cloud (1996) also studied both alcohol and drug users but employed a snowball sample of 46 middle-class individuals with stable lives, jobs, and families. Although these people had much to lose by continuing their addictive careers, they were reluctant to enter treatment. Most participants in this study never adopted addictive lifestyles or identities, which probably helped in their recovery. Many of these findings were repeated in Burman's (1997) study of 38 alcohol abusers in New Jersey obtained through the media. Individuals who recovered eventually felt that they had too much to lose by continuing their addictive careers.

Only one study (Copeland, 1998) focused on women in recovery. Copeland assembled 32 cases of women who recovered on their own by advertisement in Sydney, Australia. Most changed because of concerns for current and future psychological and physical health and existential crises. A conflict developed between their impoverished lives and their self-concept as intelligent, middle-class women. Compared with men, these women seemed to change residences, social activities, and sexual partners more frequently. However, this study had no direct comparisons with male self-changers.

Among the largest and most comprehensive recent studies using convenience or media samples are those by Bischof and colleagues. In one study, Bischof, Rumpf, Hapke, Meyer, and John (2003) entered 178 media-recruited natural remitters into a cluster analysis. They found one group with high levels of dependence, low alcohol-related problems and low social support and dependence, high social support, and late onset of alcohol problems. They concluded that natural remitters are a heterogeneous group and that understanding natural recovery must take this into account. Further investigation is needed into the various subgroups among natural remitters looking at age, sex, extent of drinking problems, and other factors.

Bischof, Rumpf, Hapke, Meyer, and John (2000b) have also explored the triggering mechanisms in natural recovery. They studied 93 remitters and 42 self-help group participants. There were more similarities than differences in the successful recoveries of the two groups. However, self-help attendees talked to more people about their recovery and sought more social support in dealing with craving than did natural remitters.

Rumpf, Bischof, Hapke, and John (1999) and Rumpf, Bischof, Hapke, Meyer, and John (2000) have also shown that individuals solicited through the media, compared with those in a representative survey, are more likely to be abstinent in the last months, more dependent, less satisfied with life prior to natural recovery, and possess better coping skills. This is an interesting and important finding because it reinforces the idea that there are likely to be different results when different sampling methods are used. Therefore, comparisons of other sampling methods (e.g., word of mouth, convenience, snowball-derived) could be of value.

Several studies have focused on age as an important sample selection variable. For example, a study using a very small sample size of 5 younger males and 7 females was reported by Finfgeld and Lewis (2002), but the results are difficult to interpret. However, Vik, Cellucci, and Ivers (2003) studied 91 college students and found that 22% reduced their heavy drinking without treatment. In these analyses, marital status and church attendance were both important predictors.

Only one known study of older problem drinkers has been published (Walton, Mudd, Blow, Chermack, & Gomberg, 2000). Through advertising, 78 older adults with drinking problems were recruited. At a 3-year follow-up, 48 participants were reinterviewed and only 11.4% were resolved. Health problems were the main reason for decreased drinking. Overall, this study seems to show a low rate of natural recovery for older adults. It would be worth repeating this study with a larger sample and a broader list of maintenance factors. It would also be useful to conduct studies comparing natural recovery rates among different age groups, especially if the design controlled for the extent of alcohol problems.

Do Those Who Recover Naturally Have Fewer Problems Than Those Who Seek Treatment?

Questions have been raised about whether people who recover from alcohol problems are able to do so because they have fewer problems or alcoholic symptoms than those who need treatment to recover. Saunders and Kershaw (1979) were among the first to note that natural recovery appeared to occur most readily in less severe cases. However, they did not show detailed analyses that supported this claim, although a few others have been able to supply such data.

Several survey studies have shown that those who recover with treatment may have fewer problems than those who seek treatment. For example, a national study by Hasin and Grant (1995) found that only 27% of those who were former drinkers experienced a compulsion to drink, 21% had a DSM-IV diagnosis of alcohol dependence, and 42% had a diagnosis of alcohol abuse. These rates would be substantially less than those found in individuals being treated in alcoholism treatment centers. The two surveys reported by Sobell et al. (1996) showed that persons who were resolved abstinent with treatment were much more likely to have more alcohol problems than those abstinent or nonabstinent without treatment. Also, those who were abstinent with treatment in media-derived studies had higher scores on the MAST, drank more drinks per day, and had more

alcohol-related consequences than those who were abstinent without treatment (Sobell et al., 1993). It appears from surveys that natural recovery is most likely with problem drinkers at an early stage in their career, before alcohol-related problems become too overwhelming. However, Klingemann's (1991) study showed that samples from the media were similar to those in surveys and clinic populations. This finding is not surprising considering that Rumpf, Bischof, Hapke, and John (1999) have demonstrated that media-derived natural remitters were more dependent and less often abstinent than were the same groups from population surveys. We should not forget, however, that those who recover on their own do typically have substantial alcohol problems.

What Can We Conclude about Self-Change?

When all the survey and special studies are considered together, the following conclusions emerge:

- Most population surveys show that the large majority of people with alcohol problems can and do resolve them without formal treatment or self-help groups.
- While there are fewer relevant studies, it appears that most former illicit drug abusers stop using drugs without formal treatment. Information about whether prescription drug users can do the same, however, is not yet available.
- Community studies of self-change are few in number. Using different methods than survey designs, some community studies find the same results as surveys while others find lower levels of self-change.
- Survey studies of self-change are larger and more useful in estimating the frequency of problems and recovery rates. However, special studies of self-selected groups are more often used to investigate the paths to recovery and the motivation for change.
- Reasons for self-change are many and varied. Health and cognitive appraisals of the pros and cons of continuing to use versus stopping are two of the more salient reasons for changing.
- There is some evidence from surveys that people who recover without treatment may have fewer alcohol problems (i.e., less dependent) than those who recover through treatment.

Clearly, studies of self-changers show that there are multiple pathways to recovery. However, self-change is the predominant pathway to recovery for many alcohol and drug abusers.

Important areas of research which deserve future investigation are the following:

- Ethnic subgroups and how their natural recovery rates may vary from the general population.
- Individual differences between groups of those who recover on their own, depending on their characteristics before their recovery.

- Gender differences in natural recoveries and factors explaining them.
- High-risk groups for alcohol and drug problems such as aboriginal groups and those from families of alcohol and drug abusers. They may have additional problems with natural recovery compared with groups at lower risk.
- Effects of different recruiting methods on the selection of natural recoveries among different respondent groups.

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