

# Involvement in 12-Step Programs Among Persons With Dual Diagnoses

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**Although many people with substance use problems are referred to Alcoholics Anonymous (AA) or Narcotics Anonymous (NA), few studies have examined characteristics of persons who comply with such referrals. In particular, little is known about self-help meeting attendance by persons with dual diagnoses. This study examined rates of AA and NA attendance among 351 persons with dual diagnoses who were treated in a hospital setting. It also explored the relationship between diagnosis and meeting attendance. Ten months after hospitalization, the study participants demonstrated rates of AA or NA attendance that were similar to those of persons who were diagnosed as having substance use disorders without severe mental illness. However, patients with schizophrenia or schizoaffective disorders reported significantly fewer days of AA or NA meeting attendance. (*Psychiatric Services* 53:894–896, 2002)**

Many persons with substance use problems are referred to Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) after professional

substance abuse treatment, including some persons with severe mental illness. Patients with severe mental illness experience a number of barriers to involvement in AA or NA, including a tendency to deny substance use problems (1), difficulty obtaining and maintaining social support in a group setting (2,3), and use of psychotropic medications (4). Some members of 12-step programs are opposed to the use of psychotropic medications for any reason.

Few empirical studies have examined AA or NA meeting attendance by patients with severe mental illness. Studies typically have used small, predominantly white samples. In this study we collected data from a sample with a large subgroup of African Americans by using prospective methods to examine the relationship between diagnosis of a mental illness and involvement with AA or NA.

Treatment follow-up studies of persons without severe mental illness who have substance use problems have shown that most patients (up to 80 percent) who are referred to AA after inpatient treatment do attend meetings (5). However, dropout rates are high: only 25 percent of patients referred to AA attend meetings regularly (6). Studies of patients with severe mental illness have shown similar patterns, with about 28 percent of referred patients attending AA meetings (7,8) but less than a third attending regularly. Persons who do attend AA meetings are less likely to have a diagnosis of schizophrenia (5,7,8), more likely to have participated in inpatient AA or NA groups (7), and more likely to be motivated toward achieving sobriety (9).

## Methods

This study was part of an investigation of 485 patients with dual diagnoses who were receiving treatment at an urban public psychiatric hospital in the Midwest between 1991 and 1992. Interviews were conducted at hospital admission, at discharge, and two, six, and ten months after discharge. The analyses included 351 participants who met criteria for substance abuse or dependence at discharge and for whom valid data on AA or NA attendance were available for any two of the follow-up interviews. The patients who were included did not differ from those who were not included in age, ethnicity, marital status, income, or previous attendance at AA or NA meetings. Patients who were included were more likely to be male, to be diagnosed as having psychosis, to be dependent on more than one drug, and to be participating in specialized dual diagnosis treatment. All participants provided written informed consent at the time of enrollment in the study. The American Psychological Association's ethical guidelines for human subjects were followed.

*DSM-III-R* diagnoses were assessed with semistructured interviews by attending psychiatrists. Nearly 50 percent of the sample (164 patients) were diagnosed as having schizophrenia or schizoaffective disorder or organic mental disorders. A total of 223 patients (64 percent) were polydrug abusers (primarily alcohol and cocaine abuse or dependence). The severity of substance use problems was represented in the analyses with a two-level variable: substance abuse (108 patients, or 31

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percent) was represented by 1, and substance dependence (243 patients, or 69 percent) was represented by 2.

"Plans for sobriety" was assessed with a three-item scale administered at discharge from the hospital. Participants were asked to report their plans for engagement in treatment and other efforts to maintain sobriety after treatment—for example, attending AA or NA meetings, staying sober, and staying off street drugs (Cronbach's  $\alpha=.63$ ).

"Addiction ideology" was assessed with a 40-item Addiction Belief Inventory (ABI) (10) administered at baseline. The ABI assesses beliefs about addiction in seven domains: inability to control substance use, belief in addiction as a chronic disease, reliance on experts for cure, accepting responsibility for actions while using drugs or alcohol, accepting responsibility for recovery, belief in a genetic basis of addiction, and use of alcohol or drugs as a means of coping (Cronbach's  $\alpha$  range, .63 to .76).

"Specialized chemical dependency unit treatment" was a two-level variable that indicated whether respondents were assigned to one of the standard psychiatric wards or to the specialized treatment unit, where they participated in AA, NA, or other substance abuse treatment. Of the 351 participants, 252 received specialized treatment.

Attendance at AA or NA meetings was assessed for the 30 days preceding each interview with items from the Addiction Severity Index. Three measures were created to represent AA or NA attendance. "Ever attended AA or NA" was measured as never attended (coded as 0) or attended at one or more time points (coded as 1). Data for the total number of times the patient attended AA or NA during the follow-up period were transformed, because of nonnormality, from a continuous measure to a 7-point scale ranging from 0, none, to 6, at least 51 times. The third measure was the number of time points or follow-up periods during which the patient reported AA or NA attendance, ranging from zero to three.

## Results

Most participants in this study were male (265 patients, or 76 percent)

and African American (237 patients, or 68 percent); the mean $\pm$ SD age of the participants was 33 $\pm$ 7.23 years. Ninety respondents (26 percent) reported attending AA or NA before hospitalization, and 209 (60 percent) reported attending during the ten-month follow-up period. Of those who reported postdischarge attendance at AA or NA meetings, only 36 (17 percent) were attending at all interview points. The study participants attended meetings on 5 $\pm$ 4.05 days per month on average; only three patients (1.9 percent) reported attending on at least 15 days at each interview point.

Hierarchical regression analyses were used to test the main hypothesis that persons who were diagnosed as having schizophrenia or schizoaffective disorder would report less involvement with AA or NA. Logistic regression was used to predict whether the study participants ever attended AA or NA; ordinary least squares regressions were used to predict the number of days of attendance at AA or NA meetings and the number of follow-up periods during which the participants attended. The analyses of the latter variable included only the 209 participants who reported ever attending AA or NA. For each regression model, four variables were entered in step 1—treatment condition, previous AA or NA attendance, severity of substance use problem, and sobriety plans; schizophrenia or schizoaffective diagnosis was entered in step 2.

Of the covariates, a diagnosis of substance dependence was associated with significantly greater odds of ever attending AA or NA meetings. Previous AA attendance was marginally related to whether participants ever attended AA or NA meetings after discharge, although the difference was not significant. Having plans for achieving sobriety was associated with a greater total number of times the patient attended AA or NA meetings. Participants who were diagnosed as having schizophrenia reported significantly fewer days of AA or NA attendance ( $F=2.34$ ,  $df=5$ , 202,  $p<.05$ ). A diagnosis of schizophrenia or schizoaffective disorder was not significantly associated with whether participants ever attended AA or NA

meetings or with the number of interview points during which AA or NA attendance was reported.

Post hoc analyses of ABI scores showed that compared with the rest of the sample, the patients with schizophrenia were less likely to believe that persons with alcohol or drug addictions should be considered responsible for their drug use ( $F=6.76$ ,  $df=1$ , 346,  $p<.01$ ) or for their own recovery ( $F=16.02$ ,  $df=1$ , 346,  $p<.01$ ). These patients were also more likely to believe that addiction is a chronic disease that does not get better ( $F=20.90$ ,  $df=1$ , 346,  $p<.01$ ), that alcohol and drugs are used to cope with stressful life events ( $F=4.59$ ,  $df=1$ , 341,  $p<.05$ ), and that addicted persons can regulate their alcohol and drug use for social purposes ( $F=34.59$ ,  $df=1$ , 346,  $p<.01$ ). In addition, the patients with schizophrenia were less likely to identify themselves as addicts ( $\chi^2=16.11$ ,  $df=2$ ,  $p<.01$ ,  $N=348$ ).

Although we did not examine racial differences in this study, other studies based on these data have shown that African Americans were more likely than whites to attend AA or NA meetings.

## Discussion and conclusions

AA and NA attendance rates in this sample were comparable to rates of attendance among persons with single diagnoses and on the high end of rates reported for samples of persons with dual diagnoses. Corroborating previous reports (5,7,8), we found that patients who were diagnosed as having schizophrenia reported lower levels of involvement with AA or NA. These patients also were less likely to identify themselves as addicts and tended to endorse an addiction-belief ideology that eschewed responsibility for their recovery.

This study was an improvement over previous investigations in that it provided AA and NA attendance data for a large urban sample. However, the quality of participation in AA or NA could not be assessed. The research of Kurtz and colleagues (9) suggests that persons with severe mental illness who attend AA meetings often refrain from taking on active roles or responsibilities in the organization. In addition, our study

used self-report data, which may be less reliable among patients who have thought disorders. Future studies should incorporate observational measures and examine the quality of AA and NA involvement in diverse samples. ♦

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