Specialized 12-Step Programs and 12-Step Facilitation for the Dually Diagnosed

Michael P. Bogenschutz, M.D.

ABSTRACT: The role of 12-step programs and 12-step-oriented treatments for dually diagnosed individuals (DDI) remains unclear. Here are presented the results of a pilot study in which 10 seriously mentally ill patients received a modified 12-step facilitation (TSF) therapy emphasizing engagement of DDI in a specialized 12-step program for DDI. Participants significantly increased their 12-step attendance and decreased their substance use during the 12 weeks of treatment. Larger and longer-term studies are needed to assess the efficacy of modified TSF for DDI relative to other treatments, and to determine what forms of TSF are most effective in this population.

INTRODUCTION

The 12-step approach is now established as one of the leading empirically validated forms of psychosocial treatment for drug and alcohol dependence (1997; 1998; Crits-Christoph, Siqueland, et al. 1999). The efficacy of 12-step programs and 12-step-oriented treatments in the treatment of dually diagnosed individuals (DDI) is less clear, in spite of the fact that they have been included in many programs and models.

Dually diagnosed individuals face a number of issues, peculiar to the dually diagnosed, that complicate their participation in 12-step programs. In an early review, Noordsy et al. reported low rates of long-term 12-step involvement among severely mentally ill substance abusers, and enumerated issues which may interfere with their ability to participate in and benefit from 12-step programs (Noordsy, Schwab, et al., 1996). For example, paranoia and social anxiety may make it very difficult for patients to participate in groups, especially when a confrontational style of interaction is employed as it is in many 12-step meetings. Patients may feel they have little in common with the non-mentally ill members of the groups. They may be told that they are not clean and sober if they are taking psychiatric medication.

Bogenschutz and Akin (2000) reported significant correlation between dual diagnosis patients' attitudes toward 12-step meetings and their recent attendance of meetings. Among patients with a psychotic diagnosis, the relevant issues were those most closely related to their status as mentally ill individuals, e.g., negative attitudes of other group members toward medication, feeling that other group members do not understand about mental illness, paranoia in meetings, etc.

In spite of these potential barriers, most studies that have looked at 12-step meeting attendance of DDI have found rates similar to those of singly diagnosed substance dependents. Westermeyer and Schneekloth (1999) found that schizophrenic patients attended 12-step meetings as much as non-schizophrenic patients with substance use disorders. A study of psychiatric inpatients with alcohol dependence found that these patients reported comfort with AA, and 37% had a history of regular AA attendance, with no difference by psychiatric diagnosis (Pristach & Smith, 1999). A survey conducted in an outpatient dual diagnosis program with a mixed diagnosis sample of seriously mentally ill patients with substance use disorders found rates of AA attendance very similar to those reported for the project MATCH sample, but with lower rates for patients with psychosis (Bogenschutz & Akin, 2000). These findings were confirmed in a larger sample by Jordan Davidson, et al. (2002), who also found that dually diagnosed patients overall attended about the same number of 12-step meetings as substance use disorder (SUD) patients, but that patients with schizophrenia or schizoaffective disorder attended fewer meetings. A survey of AA
contact persons found that most had positive attitudes toward the dually diagnosed, and believed that they should take their medications as prescribed (Meissen, Powell, et al., 1999). However, a majority also believed that specialized groups for the dually diagnosed would be more helpful than mainstream AA.

A few recent studies in male VA populations have investigated the relationships between 12-step attendance and relevant clinical outcomes in DDI. In a sample of 981 DD patients who were followed for a year after discharge from inpatient treatment, 12-step attendance was associated with slightly greater improvement in coping skills (Moggi, Ouimette, et al., 1999). Another study found that although DD patients had lower rates of abstinence at 5 years, 12-step involvement was associated with abstinence in DD and non-DD patients with SUDs (Ritsher, McKellar, et al., 2002). However, a prospective study of 2161 male inpatients, 110 with SUD and comorbid depression and 2051 with SUD only, found that the depressed patients appeared to benefit less from traditional 12-step groups, although substance use outcomes were similar for both groups (Kelly, McKellar, et al., 2003).

In response to the difficulties experienced by some DDI in participating in traditional 12-step programs, specialized 12-step programs have emerged which aim to create a more welcoming mutual help community for the dually diagnosed. These programs include Double Trouble in Recovery (DTR) and Dual Recovery Anonymous among others. (Vogel, 1993) These programs have been designed by and for the dually diagnosed to create, as stated in the DTR manual, “a safe environment where clients can discuss the issues of mental disorders, medication, medication side effects, psychiatric hospitalizations and experiences with the mental health system openly, without shame or stigma.” (1998) Since these programs are relatively new, there are only a few published studies concerning them. A survey of DTR participants showed that they found the program to be welcoming and helpful in maintaining abstinence and facilitating recovery (Vogel, E., et al., 1998). Dually diagnosed individuals with experience in both traditional 12-step programs and DTR (n = 27) were found to have significantly more positive attitudes toward DTR (Bogenschutz, Vigil, et al., 2002). Specifically, these individuals reported fewer difficulties related to their mental illness with DTR than with the traditional programs. A cross-sectional study of 310 dually diagnosed individuals found an association between program participation and recovery (less substance use, psychiatric distress, higher well being) for dual recovery but not traditional 12-step groups (Laudet, Magura, et al., 2000). A 1 year prospective
study of 240 DTR participants demonstrated that regular attendance of DTR was associated with better compliance with psychiatric medications during the follow-up period (Magura, Laudet, et al., 2002).

Two recent publications have investigated the mechanisms by which DTR facilitates recovery. Among 276 DTR attendees followed for a year, greater DTR affiliation was associated with greater improvement in substance use and health promoting behavior (Magura, Knight, et al., 2003). The authors investigated the role of 12-step-specific (spirituality and hope) and non-specific (internal locus of control and sociability) mechanisms on substance use and health behavior outcomes. Internal locus of control (comprising internal motivation, perceived coping, and self-efficacy) and sociability were found to mediate the effects of DTR involvement on both abstinence and health promoting behavior. Spirituality and hope appeared to mediate health promoting behavior but not abstinence. Another analysis of the same sample attempted to dissect what aspects of the 12-step process mediated recovery among DTR attendees. (Magura, Laudet, et al., 2003) The authors’ model included three mutual aid processes: “helper therapy process,” in which the group member assumes a helping role vis a vis other group members; “reciprocal learning process,” in which the group member shares with and learns from other group members; and “emotional support,” in which the group member feels accepted and cared for by other group members. The authors found that the helper-therapy and reciprocal-learning processes, but not emotional support, were associated with better outcomes in DTR attendees.

Several outcome studies have investigated the effect of 12-step-oriented treatment for DDI. A large VA study of a mixed population of male dually diagnosed patients found that they improved as much in 12-step as in cognitive behavioral therapy, and that substance use outcomes were similar to SUD only patients at 1 year follow-up (Ouimette, Gima, et al., 1999). Another large VA study found that availability of 12-step programs during inpatient treatment was one factor associated with lower readmission rates (Swindle, Phibbs, et al., 1995). Good outcomes were found in a day program for homeless substance abusers (some of them mentally ill) in a program that emphasized peer leadership and 12-step meetings (Galanter, Dermatis, et al., 1998). Sixty-nine percent of patients had three consecutive negative urine drug screens immediately prior to discharge. Substance use outcomes for patients with schizophrenia were better than those of patients without major mental illness. An outcome study of a halfway house using a modified therapeutic community model for DD patients,
including 12-step participation, found that only 12% of patients had positive urine drug screens during residential treatment (Taylor, Galanter, et al., 1997).

Quasiexperimental studies have been used to compare residential treatment approaches. Blankertz and Cnaan (1994) reported results of a quasiexperimental study comparing two residential program models. The experimental program included integrated treatment of SUDs and psychiatric disorders using a psychosocial rehabilitation model. The control program was a traditional therapeutic community using a 12-step model, with mental health services provided elsewhere. The experimental group had higher rates of retention and successful completion, but the lack of integrated treatment in the control condition must be considered a significant handicap. In a large VA study comparing a total of 88 residential treatment programs, outcomes in programs employing a 12-step approach were comparable to those of psychosocial rehabilitation and therapeutic community approaches (all of which were better than “undifferentiated” programs) (Moos, Moos, et al., 1999).

The first controlled study which compared a treatment based on the 12-step model to other substance abuse treatments for dually diagnosed outpatients involved 132 DD1 who were treated at 5 sites with one of three modalities: cognitive behavioral coping skills, intensive case management, or a 12-step control condition (Jerrell & Ridgely, 1995). There were no significant differences between the three groups on summary scores of measures of social functioning, life satisfaction, or role functioning. The group receiving skills training showed more improvement than the 12-step control intervention in patient-reported drug and alcohol symptoms. Data on drug and alcohol use were not reported. Both skills training and intensive case management groups reported more improvement in psychiatric symptoms than the 12-step group. Skills training was found to be the most cost-effective approach (Jerrell & Ridgely, 1997). This study had a number of methodological limitations in addition to the lack of drug and alcohol use measures, which limit the generalizability of the study. Over half of the sample was assigned by clinician choice, while the rest was assigned randomly (Jerrell & Ridgely, 1995). There were significant baseline differences among the groups (Jerrell & Ridgely, 1999). None of the interventions was manualized, and there was considerable variability across sites in how the treatments were implemented (Ridgely & Jerrell, 1996). Outcomes across all groups depended strongly on how robustly the model was implemented (Jerrell & Ridgely, 1999).
A more recent study compared 12-step and cognitive behavioral approaches in a sample of 70 dually diagnosed patients completing three to six months of intensive outpatient/partial hospital treatment (Brooks & Penn, 2003). Participants were alternately assigned to the two treatments, which were conducted at separate sites. The cognitive behavioral intervention (self-management and recovery training, SMART) is based on rational emotive behavioral therapy. The 12-step approach was based on the usual 12-step facilitation model, with an emphasis on minimizing confrontation for the DD population. Patients receiving the 12-step intervention had better substance use outcomes, but health and employment status improved more in the cognitive behavioral condition. 12-step treatment was more effective for reducing drinking and increasing social interaction, but SMART more effective for medical, psychiatric, and vocational outcomes. Strengths of this study included manualized 12-step and cognitive behavioral treatments (though fidelity and process measures were lacking), and outcome measures including both the ASI and urine toxicology.

In summary, there is strong evidence that 12-step-based treatment is effective for non-DDI patients with SUDs including alcohol and cocaine dependence. DDI attend 12-step programs at rates comparable to non-DDI, although rates may be lower for those with psychotic disorders. The extant studies consistently show a positive relationship between 12-step attendance and recovery (including decreased substance use) among DDI, and suggest that specialized 12-step programs may be more acceptable and more helpful to DDI. Very little work has been done to elucidate the mechanisms by which 12-step involvement may facilitate change in DDI. Many treatment models for DDI include 12-step involvement, yet to date there are only 2 controlled studies investigating the effectiveness of TSF for DDI. These yielded equivocal results, although the more recent study using manualized treatment found greater improvement in substance use in the 12-step condition (Brooks & Penn, 2003). Neither of these studies utilized specialized 12-step programs such as DTR or dual recovery anonymous.

Clearly there are not enough data to reach a definite conclusion about the effectiveness of the 12-step approach for seriously mentally ill patients with SUDs. To our knowledge there are no published reports of attempts to use 12-step facilitation specifically to link dually diagnosed patients with specialized programs such as DTR. Here are reported the results of a pilot study of a 12 session individual TSF, based on the Project MATCH manual (Nowinski & Baker, 1992), designed to help DDI engage with a specialized 12-step program (DTR).
STUDY DESIGN AND METHODS

Participant Recruitment

Patients were recruited from the outpatient dual diagnosis treatment program of an academic psychiatric center. Inclusion criteria were (1) clinical diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder, or major depression; (2) diagnosis of a substance use disorder which is active within the past 1 month (i.e., not in early or sustained full remission), (3) willingness to participate in the DTR program, and (4) ability to provide informed consent. Patients were excluded if they were actively engaged in DTR (two or more DTR meetings in the past month). The study was approved by the University IRB and all patients completed the informed consent process and signed the consent form prior to completing any study procedures.

TSF Protocol

12-step facilitation is a form of therapy which focuses on helping patients become actively involved in a 12-step self-help program. The Project MATCH 12-step facilitation protocol (Nowinski & Baker, 1992) is a 12 week manual-based individual therapy which focuses on "core topics" of helping the patient to (a) learn the 12-step philosophy, (b) "work" the first 3 steps (acceptance of powerlessness over addiction and surrender to a higher power), and (c) become active in AA, including attending meetings, using the telephone to get support from other AA members, and getting a sponsor. The protocol also includes "elective topics," some of which may be covered once the "core topics" have been thoroughly covered. Patients are given copies of AA publications including Alcoholics Anonymous (1976) (the "Big Book"), and readings are suggested from these books each week. Although the therapy is often delivered by counselors who are themselves in recovery, it can be done by individuals without history of addiction, provided they have sufficient familiarity with 12-step programs and philosophy.

The 12-step facilitation protocol used in the present study was based on the 12-step facilitation manual used for project MATCH, but modified for use in dual diagnosis populations. Patients were seen individually for 12 weeks by the 12-step facilitation therapist, as in the project MATCH therapy. Modifications included the following: (1) The therapy is intended primarily to facilitate engagement in DTR rather than AA. (2) Elective topics were added to address psychiatric issues which interfere with 12-step involvement. These topics included (a) patient's adherence to psychiatric treatment as part of the recovery process, and (b) targeted social skills training to help patients tolerate meetings and interactions with individual DTR members such as the patient's sponsor. (3) The topic dealing with work on the fourth step (inventory) was eliminated. (4) All patients were assigned a case manager. Patients were given rides to and from DTR meetings by the case manager or a transportation technician if they were having difficulty getting to meetings on their own. (5) The therapist introduced the patient to at least 1 contact in DTR who is active in the program and clean and sober for at least a year. This DTR contact attended 30 minutes of the second session of the TSF therapy. (6) Readings were primarily from the Double Trouble in Recovery Basic Guide, (2000) a book published by DTR which covers the 12 steps from the perspective of the dually diagnosed. The therapy occurred in the context of the patients' treatment in the integrated outpatient dual diagnosis treatment program. Patients continued their usual treatment, except that they were not involved in other forms of substance abuse treatment while in the study. Patients were referred for more intensive treatment (i.e., psychiatric hospitalization or inpatient or residential substance abuse treatment) if
necessary due to clinical deterioration during the course of the study. The therapy was terminated after 12 weeks, regardless of the number of sessions that had been attended.

Three therapists including the author provided the TSF. Two of the three had extensive personal experience with 12-step recovery, and one of them was dually diagnosed. Training was limited to study of the manual and DTR literature, and ongoing supervision. The first author supervised the other two therapists.

Measures

At baseline patients provided demographic information, and clinical diagnoses were obtained from the medical record. Identical assessments were performed at baseline and at 12 weeks. Substance use and severity was measured with the Drug/Alcohol Use portion of the Addiction Severity Index (ASI) (McLellan, Luborsky, et al., 1980). 12-step participation and engagement was measured with the Twelve-Step Participation Questionnaire (TSPQ-21; Tonigan, Miller, and Connors, unpublished instrument available at http://casaa-0031.unm.edu/). The TSPQ is adapted from the Alcoholics Anonymous Involvement Questionnaire, which has good reliability for both drug and alcohol dependent patients (Tonigan, Connors, et al., 1996). The severity of psychiatric symptoms was measured with the Positive and Negative Syndrome Scale (PANSS) (Kay, Fiszbein, et al., 1987) and the Clinical Global impression (CGI) (Guy, 1976), rated separately for psychiatric disorders and substance use disorders. The Stages of Change Readiness and Treatment Eagerness Scale for Alcohol and Drugs (SOCRATES A and D (Miller & Tonigan, 1996)) was used as a measure of motivation for change.

Statistics

Data were entered into SPSS® version 10.1 for windows. The Wilcoxon signed ranks test was used to compare 12-step attendance due to the highly non-normal distributions of these variables. Paired t-tests were used to compare substance use before and during treatment. For 12-step participation the primary measure was total meetings in the past 90 days from the TSPQ. Secondly DTR and non-DTR meetings were quantified separately. For substance use, the primary measure was the sum of the alcohol and drug composite scores from the ASI. Secondly, alcohol and drug composite scores were examined separately. Correlations between therapy attendance, 12-step attendance, and substance use outcomes were computed.

RESULTS

Participants

Three women and 7 men were enrolled in the study. Four were Hispanic and 6 were non-Hispanic white. Mean age was 40.5 ± 6.4 years. Seven had the diagnosis of paranoid schizophrenia, one had a diagnosis of undifferentiated schizophrenia, and two had a diagnosis of major depression. The primary substance use disorders were alcohol depen-
dence \( n = 7 \) cocaine dependence \( n = 2 \), and amphetamine dependence \( n = 1 \). Four patients had a secondary substance use disorder, and a total of eight had alcohol dependence as a primary or secondary substance use disorder. They had attended a mean 41.9 ± 46.4 lifetime 12-step meetings (range 3–150), 3.5 ± 8.1 meetings in the past year (range 0–26), and 0.5 ± 1.3 meetings in the past 12 weeks (range 0–4). Patients who completed the SOCRATES at baseline \( n = 9 \) demonstrated high levels of motivation to achieve and maintain change, with scores high for the determination (29.9 ± 7.1), action (30.6 ± 6.0) and maintenance (29.1 ± 6.1) scales, and lower scores for the precontemplation (16.4 ± 4.7) and contemplation scales (22.2 ± 5.4).

**Therapy Participation**

Participants completed a mean 7 ± 3.5 sessions during the 12 weeks of therapy (range 0–12). One patient dropped out before receiving any TSF sessions. All the rest received at least three sessions. 8/10 participants remained actively engaged at the end of treatment and had their final session at week 12. There were no significant differences in therapy session attendance by therapist, by gender of participant, or by gender matched vs. unmatched status of the participant/therapist dyad.

**FIGURE 1**

![Graph showing meetings baseline and week 12 for DTR, AA, and other categories.](image-url)
12-step Participation

12-step meeting attendance increased significantly over baseline during the 12 weeks of treatment. Figure 1 summarizes 12-step attendance (DTR, other 12-step, and total 12-step for the 12 weeks before and during treatment). Total attendance increased from $0.5 \pm 1.3$ to $12.1 \pm 8.4$ meetings ($Z = -2.527$, $p = 0.012$, Wilcoxon signed ranks test). DTR attendance increased significantly (from 0 to $8.6 \pm 9.7$, $Z = -2.36$, $p = 0.018$), as did non-DTR meeting attendance (from $0.5 \pm 1.3$ to $3.6 \pm 5.0$, $Z = -2.22$, $p = 0.026$).

Substance Use Severity

Total substance use severity decreased significantly during the study. Figure 2 shows ASI composite scores pre-and post-treatment. The sum of the alcohol and drug composite scores decreased from $0.60 \pm 0.30$ to $0.31 \pm 0.19$ ($t = 3.012$, df = 8, $p = 0.017$). The alcohol composite also decreased significantly (from $0.48 \pm 0.28$ to $0.25 \pm 0.21$, $t = 2.964$, df = 8, $p = 0.018$), but the change in drug severity showed only a trend for improvement (from $0.12 \pm 0.11$ to $0.052 \pm 0.090$, $t = 1.970$, df = 8, $p = 0.084$). The clinician-rated CGI for substance use disorder also

FIGURE 2
decreased significantly (from $4.44 \pm 0.73$ to $2.78 \pm 1.09$, $t = 3.780$, df = 8, $p = 0.005$).

**Psychiatric Severity**

There was a small but statistically significant decrease in the PANSS General Symptom subscale ($34.8 \pm 8.4$ pre-treatment vs. $30.2 \pm 9.3$ post-treatment, $t = 3.264$, df = 8, $p = 0.01$). There were no significant changes in the PANSS positive or negative subscales. There was a trend for improvement in the CGI for psychiatric disorder ($4.22 \pm 0.67$ pre-treatment vs. $3.89 \pm 0.9279$ post-treatment, $t = 2.000$, df = 8, $p = 0.08$). One patient was hospitalized briefly during the study due to exacerbation of psychosis unrelated to substance use or the experimental therapy.

**CONCLUSIONS**

This study demonstrates the feasibility of specialized TSF for the dually diagnosed. The therapy was associated with increases in 12-step attendance and decreases in substance use. Although attendance was far from perfect, these rates of attendance are quite good in this difficult-to engage population, particularly since no special steps (such as reminder calls) were taken to enhance compliance with therapy. Cases managers played a role in getting patients to appointments, although the study design did not allow this to be quantified.

This pilot study has many limitations, including a small number of participants, the lack of a control condition, and the lack of standardized diagnostic procedures. Although the therapy was manualized, there were no formal quality control procedures to ensure adherence to the protocol. Since no follow-up assessments were done after the end of treatment, it is unknown whether 12-step participation continued and decreases in substance use were maintained after treatment. Larger controlled studies will be necessary to answer these and many other questions about the efficacy of specialized 12-step programs and specialized TSF for the dually diagnosed.
REFERENCES


