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Perceived Reasons for Substance Misuse Among Persons With a Psychiatric Disorder

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Abstract

The etiology of substance use among persons with severe mental illness remains unclear. This study investigates stated reasons for substance use among persons in recovery from co-occurring disorders of serious mental illness and substance abuse and dependence. The desire to fit in with peers played a key role in the initiation of substance use; boredom, loneliness, temptations to use, and stress were cited most as relapse triggers. The authors discuss the need for dually diagnosed persons to develop sobriety-supporting peer networks to help them learn adaptive strategies to deal with the stress of recovery; further, treatment programs should instill hope for recovery and provide opportunities for meaningful activities and relationships.

The rate of co-occurring substance misuse and psychiatric disorders is high (e.g., Kessler et al., 1997). Such dual diagnosis has important clinical implications. Persons with co-occurring serious mental illness (SMI) and substance use disorders (SUD) have greater vulnerability to rehospitalization; greater depression, suicidality, and proneness to violence; more noncompliance with medications and other treatments; increased risk of HIV infection; increased family burden and legal troubles; and higher service utilization and costs (Bartels et al., 1993; Clark, 1994; Cournos et al., 1991; Drake, Osher, & Wallach, 1989; Yesavage & Zarcone, 1983). The McKinney demonstration projects for homeless mentally ill adults reported that substance misuse was the single most important factor contributing to housing instability in this population (Center for Mental Health Services, 1994). There is also evidence that the negative outcomes of substance use are reduced when dually diagnosed persons attain abstinence (Bartels et al., 1993; Zisook et al., 1992). Treatment interventions addressing substance use have been shown to be effective in that regard. For example, a recent study among homeless persons with a diagnosis of SMI with and without a co-occurring SUD found that among clients with dual diagnoses, those who reported extensive participation in substance

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abuse treatment showed clinical improvement comparable to or better than that of clients without dual diagnoses (Gonzalez & Rosenheck, 2002). Interventions that are successful at reducing substance misuse among dually diagnosed persons may also reduce psychiatric symptomatology, emergency service utilization, and the costs of treatment and increase community functioning (Mueser, Drake, & Miles, 1997).

The effectiveness of therapeutic interventions is likely to be enhanced if the field can gain a greater understanding of the causes of substance abuse. It is important to investigate this question specifically among dually diagnosed persons rather than to generalize from data obtained among single disorder substance users, because the usual dimensions of substance abuse—pattern, consequences, dependence syndrome, and subjective distress—are qualitatively different among dually diagnosed persons (Drake et al., 1990; Lehman, Myers, Corty, & Thompson, 1994; McHugo, Paskus, & Drake, 1993; for discussion, see Mueser et al., 1997). Thus, the causes of substance misuse in this population may differ as well.

The etiology of co-occurring SUDs is unclear (Mueser, Drake, & Wallach, 1998; Phillips & Johnson, 2001). A number of theories implicating a broad range of factors have been advanced to explain increased co-occurring SUD among persons with mental illness and are reviewed in detail by Mueser and colleagues (1998). Different models may account for comorbidity in different groups of individuals, and more than one model may apply for a given individual. Review of these models is beyond the scope of this article; we limit our discussion to models that have received empirical support. Family history has been shown to be associated with SUD among dually diagnosed persons: A number of studies have found that such persons are more likely to have relatives with SUD than are similar patients with SMI only (e.g., Noordsy, Drake, Biesanz, & McHugo, 1994). Antisocial personality disorder accounts for some increased comorbidity (e.g., Caton, 1995; Kessler et al., 1997). The supersensitivity model, whereby biological vulnerability due to psychiatric disorder results in sensitivity to small amounts of alcohol and drugs, leading to substance misuse, has also received some support (e.g., Lieberman, Kane, & Alvir, 1987). Among the most widely held explanatory views of SUD in persons with psychiatric disorders is the self-medication model, whereby specific substances are used to alleviate particular painful affects (e.g., Khantzian, 1985); the model has received little or no direct empirical support. A more general explanatory model, commonly referred to as “alleviation of dysphoria,” holds that persons with SMI are prone to dysphoric states that also make them prone to the use of psychoactive substances. As discussed by Mueser and colleagues (1998), dually diagnosed persons are considered to be like others with SUD in that they initiate substance use to feel good or to alleviate feeling bad before the process of addiction supervenes; findings from several studies have lent support to this model (Baigent, Holme, & Hafner, 1995; Warner et al., 1994).

Drake and colleagues (Drake, Wallach, Alverson, & Mueser, 2002) have recently noted that the emphasis on biological and pharmacological factors in the literature on dual diagnosis has diverted attention from important psychosocial issues. The authors put forth that psychosocial factors such as social networks, expectancies of drug effects, boredom, dysphoria, unemployment, and poverty “are critically important in the presentation, development and course of substance abuse and in the process of helping people attain sobriety, stable abstinence and recovery” (p. 100). There has been little research in this area. In particular, one area that remains largely unexplored is substance users’ stated reasons for substance use—what they believe leads them to use. As discussed by Dixon, Haas, Weiden, Sweeney, and Frances (1991), “these perceptions, however inaccurate, may themselves drive drug-taking behavior and thus merit further investigation” (p. 229). Fishbein’s (1980) theory of reasoned action postulates that behavior is based on attitudes that, in turn, are based on personal beliefs. Beliefs rest in large part on what is learnt and experienced; in particular, beliefs that are based on personal experience have been found to have a stronger influence in the formation of attitudes

than information gained in other ways and to better predict later behavior (Fazio & Zanna, 1981). Thus, what substance users believe concerning what drives their substance use may be a crucial determinant of substance use behavior, including whether they continue or return to substance use. Among persons with co-occurring SMI and SUD who live with two chronic, relapse-prone disorders, perception of the interplay between the two disorders may also play a role in substance abuse. There has been little empirical work in this area, and the few available studies have used small samples consisting mainly of clients with schizophrenia. Across studies conducted among both current and past substance misusers with a psychiatric disorder, reasons for substance use include to increase happiness, energy, and emotions; to relax and to go along with the group; to decrease anxiety; to increase pleasure; to get high; and to reduce depression (Addington & Duchak, 1997; Baigent et al., 1995; Dixon, Haas, Weiden, Sweeney, & Frances, 1990; Dixon et al., 1991; Phillips & Johnson, 2001; Warner et al., 1994).

In addition to the importance of investigating reasons for substance use, it is also useful to examine reasons for wanting to stop substance use as well as resources used to attain abstinence. There is virtually no research available in this area, and such information may contribute to enhance the effectiveness of interventions designed to reduce substance use among the dually diagnosed. The aims of this article are

1. to examine stated reasons for initiation of and relapse to substance use,
2. to examine reasons and strategies used for quitting, and
3. to explore the perceived association between substance use and mental illness among a large sample of persons with co-occurring SMI and SUD.

Method

Setting and Participants

Prospective study participants were recruited at Double Trouble in Recovery (DTR) meetings throughout New York City as part of a National Institute on Drug Abuse-funded study of the effectiveness of self-help for dually diagnosed persons. DTR is a mutual aid program adapted from the 12-step program of recovery, specifically to address the recovery needs of persons with co-occurring SMI and SUD (Vogel, Knight, Laudet, & Magura, 1998). Group meetings are held in community-based organizations, supported living residences, and day treatment programs throughout New York City. All DTR members who had been attending for 1 month or longer were eligible. Participation was voluntary on the basis of informed consent; the National Development and Research Institutes Institutional Review Board approved the study. Three hundred ten members were interviewed during January–December 1998. The study employed as interviewers several members of the DTR fellowship who received training in interview skills and were closely supervised in their research activities. The interviews required about 2 hr; participants received \$35 for their time.

Study Measures

The interview was a semistructured instrument covering sociodemographics, background, history, and current status of mental health and substance abuse. Open-ended questions were asked to obtain information about reasons individuals initiated substance use, the specific substances used, the reasons for stopping, the strategies used to stop, and the reasons for returning to substance use. Individual items are provided in the corresponding Results section. Codes for the open-ended questions were developed on the first 30 completed interviews; on the basis of a subsample of 25 instruments coded by two independent researchers, interrater reliability was .92. In addition, participants were asked two questions to assess perceived association between mental illness and substance abuse: “When/if you have symptoms, how

much do you feel like using?” and “When/if using, do your symptoms get worse, get better, or stay the same?”

Results

Description of Sample

Study participants were predominantly male (72%) and African American (58%), Hispanic (16%), and non-Hispanic White (25%). Members' ages ranged from 20 to 63 years of age ($Mdn = 39$ years). Over one half (59%) had finished high school or obtained a GED; almost all (95%) reported disability benefits (Supplemental Security Income or Social Security Disability Insurance) as their primary source of income. Over one half (52%) lived in a community residence or apartment program, 21% lived in their own apartment or house, 11% lived with friends or relatives, 10% lived in a single room occupancy residence, and 6% lived in a homeless shelter. The majority of subjects (62%) were single; 30% were separated, divorced, or widowed; and 8% were married or in a common law marriage. Most (91%) had no current involvement with the judicial system; 7% were on probation or parole. Six percent had tested positive for HIV.

Mental Illness and Substance Use Histories

Participants had a long psychiatric history, reporting their first symptoms in adolescence ($Mdn = 18$ years of age). Almost all (96%) had been diagnosed with a mental health disorder; median age when first diagnosed was 30 years. Self-reported primary psychiatric diagnoses were schizophrenia (35%), major depression (26%), bipolar disorder (25%), schizo-affective disorder (7%), and other disorders (7%).

Substance use began in adolescence as well ($Mdn = 17$ years of age). Reasons for initiation of substance use and substances used are reported in a later section. Self-reported lifetime problem substances were crack/cocaine (42%), alcohol (34%), heroin (11%), marijuana (10%), and other substances (3%). Duration of substance use from initiation ranged from 4 months to 54 years ($Mdn = 20$ years). At the time the study was conducted, nearly one half (47%) of subjects reported substance use in the previous year, 9% in the past month. Self-reported clean time ranged from none to 21 years ($M = 2.1$ years, $SD = 2.8$ years). The distribution of clean time was 1 month abstinent (6%), 3 months (8%), 6 months (12%), 1 year (22%), 2 years (20%), and over 2 years (32%).

Patterns of onset for the two disorders were as follows: Thirty-eight percent started experiencing mental illness symptoms before they ever used drugs or alcohol, whereas 50% showed the reverse pattern, and 12% started experiencing symptoms and using drugs or alcohol at the same age.

Initiation of Substance Use: Reasons and Substances Used

Reasons to start use (in answer to the question, “What got you started using?”) are presented in Table 1. (Totals in the tables sum to over 100%, as indicated in the footnote, to reflect multiple answers.) The responses were open ended. The most often cited reason for starting to use was the desire to fit in (e.g., “to belong,” “to be accepted”), mentioned by 58% of the sample. As can be seen in Table 1, persons diagnosed with a bipolar disorder were significantly more likely to cite wanting to fit in with peers as the reason to start using, and a primary diagnosis of schizophrenia was associated with a significantly lower likelihood of citing emotional or mental issues as a reason to start using drugs and alcohol. A greater percentage of persons diagnosed with major depression reported emotional issues as a reason to start using, but the finding did not reach statistical significance ($p = .08$).

Alcohol and marijuana were most often cited as substances used first. Fifty percent reported using these substances daily or almost daily when they first started using, one quarter used several times a week, 16% used once a week, and 9% used once or twice a month.

Abstinent Periods: Reasons to Quit and Strategies

Sixty-one percent of participants reported having had one or more drug-free periods of 1 month or longer outside of being in a closed, controlled environment (e.g., hospital or jail). The number of drug-free periods ranged from none to 90 (*Mdn* = 1).

Participants who reported one or more abstinent periods of 1 month or longer were asked, “Why did you stop?” and, “How did you stop?” Responses are presented in Table 2. The desire to have a better life and the negative consequences of drug use (e.g., severe threat to health, fear of losing custody of children, frequent car wrecks) were the most often cited reasons to stop. As to strategies used to stop, the most frequent responses were 12-step recovery groups (45%), formal treatment (34%), and “cold turkey” (30%).

Triggers to Relapse

Of the 61% of participants who reported having had one or more drug-free periods of 1 month or longer outside of being in a closed controlled environment, 42% returned to substance use. Two open-ended items were used to elicit information about perceived reasons for relapse: “What was going on inside of you (thoughts, feelings) that triggered you to use?” and “What happened in the outside world (social situation, event) that triggered you to use?” Results are presented in Table 3. The two most frequent internal reasons for returning to substance use were loneliness/boredom and the desire to use (cravings). We note that 12% of respondents perceived that substance use helped their psychiatric symptoms (specific answers included “to reduce symptoms” and “to make me feel better when I have symptoms”). As to external circumstances perceived to have been associated with relapse, temptation to use (e.g., exposure to triggers, drugs being offered to participant), stress, and increased responsibilities (e.g., regained custody of children, threat of losing child, relationship problems, job loss and failing in school) were cited by nearly one third of participants. Problems with personal relationships, typically with a partner, were cited by 16% as a relapse trigger, and 12% of participants reported that nothing happened in the outside world to trigger their substance use.

We examined whether perceived triggers to relapse differed across major diagnosis categories. Three significant findings emerged: Persons with a primary diagnosis of depression were more likely to report denial/questioning sobriety as an internal trigger than were participants with other diagnoses, $\chi^2(7, N = 79) = 4.4, p = .03$; a primary diagnosis of schizophrenia was significantly associated with greater reports of boredom as a trigger, $\chi^2(7, N = 79) = 6.9, p = .008$; and stress was cited more frequently by participants with a primary diagnosis of bipolar disorder than by persons with other diagnoses, $\chi^2(7, N = 79) = 4.4, p = .03$.

Perceived Association Between Mental Illness and Substance Use

In addition to examining the association between substance use and mental illness by asking respondents about relapse triggers, we asked two questions specifically to assess participants' perception of the association between the two disorders. With respect to whether substance use influences psychiatric symptoms, over two thirds of participants (69%) reported that their symptoms get worse if or when they are using drugs. Sixteen percent said that symptoms get better when they use drugs and alcohol, which closely replicates the finding obtained from the open-ended question (Table 3) to which 12% of participants said using drugs and alcohol improves how they feel when they experience symptoms and 15% said symptoms stay the same. As to the role of psychiatric symptoms in substance use, 44% of participants said they

felt like using “very much” if/ when they experienced symptoms, 17% said “moderately,” 15% said “a little,” and 24% said “not at all.”

Discussion

This study sought to examine stated reasons for initiation of, cessation of, and relapse to substance use and to explore the perceived association between substance use and mental illness among dually diagnosed persons. Findings indicate that initiation of substance use, typically occurring in adolescence, was most often motivated by the influence of peers and by the desire to “fit in.” The role of peers has long been acknowledged as a prime, if not the strongest, influence on adolescents in the initiation of substance use (Becker, 1953; Johnson, Marcos, & Bahr, 1987), as demonstrated recently by a number of studies among noncomorbid adolescents (e.g., De Micheli & Formigoni, 2002; Titus et al., 2002). Adolescence is a difficult time, when confusion and anxiety may be overwhelming; thus, the need for peer acceptance may be particularly strong during this period. That is likely to be especially true of adolescents who are experiencing prodromal symptoms of mental illness, such as cognitive and social problems related to underlying information processing deficits (Drake et al., 2002). As a result of such symptoms, adolescents may feel different and alienated from other youths. In this context, Lamb (1982) has suggested that difficulties in gaining access to a social group “can lead adolescents toward networks of drug users who may be more accepting than other social networks of people who are unusual in some way” (Phillips & Johnson, 2001). A feeling of belonging to the group may fulfill the need for an identity, and the youth may also discover that drug use alleviates some social anxiety, thus facilitating social interaction.

The most frequent motivations to quit substance use were the desire for a better life and the negative consequences of drug use. Former single disorder substance users frequently cite the negative consequences of substance use (e.g., “being sick and tired of being sick and tired”) as one of the major reasons for seeking to achieve abstinence (Burman, 1997; Laudet, Savage, & Mahmood, 2002; Titus et al., 2002). Substance use is typically motivated by short-term considerations in persons with co-occurring SMI and SUD, as in their single disorder counterparts (Drake et al., 2002). The long-term causal consequences of substance use may not be immediately felt or recognized, particularly among persons who may suffer from cognitive impairments. Over time, however, and as the negative consequences of drug use increase, the long-term consequences of substance use may be recognized, and many substance users will curb or decrease their use (Drake et al., 2002). Consistent with the “maturing out” hypothesis, whereby a number of addicts cease their addictions over time (Winick, 1962), Warner and colleagues (1994) have documented decrease in substance use over time among dually diagnosed persons.

Three strategies to stop substance use were cited by one third or more of participants: attendance at 12-step fellowship meetings, formal treatment, and quitting “cold turkey.” The usefulness of formal treatment in achieving abstinence has been demonstrated in numerous studies, both among single disorder substance users (e.g., Simpson, 1997) and among dually diagnosed persons (e.g., Gonzalez & Rosenheck, 2002—also see later discussion). Participation in 12-step groups both during and after formal treatment has been shown to be useful to the recovery process for single disorder substance users (e.g., Fiorentine, 1999; Humphreys, Huebsch, Finney, & Moos, 1999; Moos, Finney, Ouimette, & Suchinsky, 1999; Timko, Moos, Finney, & Lesar, 2000); little is known of the effectiveness of 12-step participation among substance misusers who are not engaged in formal treatment, as the bulk of empirical findings on 12-step programs has been obtained from treatment evaluation studies. Twelve-step attendance among persons with co-occurring SMI and SUD has received little empirical attention. Available findings suggest that the demonstrated benefits of attendance at traditional 12-step groups extend to this population (Gonzalez & Rosenheck, 2002; Moos et al., 1999; Moos, Schaefer,

Andrassy, & Moos, 2001). Moreover, several studies conducted by our research team lend support to the effectiveness of specialized 12-step-based group attendance, such as DTR, in reducing substance use among dually diagnosed individuals (e.g., Laudet, Magura, Vogel, & Knight, 2000b; Magura et al., 2002), underlining the need for clinicians to foster stable affiliation with such groups among their clients. We note that study participants were recruited among members of a recovery self-help group; this may account for the relatively large percentage of participants reporting that they used 12-step groups to achieve abstinence. Natural recovery (e.g., quitting “cold turkey”), the achievement of abstinence without formal help (treatment) or informal help (e.g., 12-step groups), has been documented among both alcohol and illicit drug users (Burman, 1997; Toneatto, Sobell, Sobell, & Rubel, 1999). It is generally accepted that such recovery is less common among individuals with severe problems (Cunningham, 1999), and there is evidence that many individuals with co-occurring SMI and SUD typically use relatively small amounts of drugs and alcohol (Drake et al., 2002).

Four out of 10 participants who reported a drug-free period returned to substance use; this is consistent with the current view of addiction as a chronic, relapse prone disorder (e.g., Leshner, 1997). Loneliness, boredom, and wanting to use (cravings) were cited most often as perceived reasons for relapse. Social isolation has been previously associated with substance use among persons with SMI (e.g., Mueser et al., 1998; Test, Wallach, Allness, & Ripp, 1989), and Alverson, Alverson, and Drake (2001) have noted the important social functions of substance use in this population. Boredom is frequently cited as a reason for substance use by both single disorder and dually diagnosed substance users (e.g., Boys, Marsden, & Strang, 2001; Titus et al., 2002; Warner et al. 1994). In a study conducted among recent substance users with a psychotic disorder, Warner and colleagues (1994) reported a significant association between lack of structured activity and citing boredom as the most significant reason for substance use. Such findings emphasize the importance of providing dually diagnosed persons with the opportunity for enjoyable and meaningful interactions and activities, both in the context of treatment and in the community in which they reside (see later discussion; also, Alverson et al., 2001). With respect to “wanting to use” and cravings, we did not obtain sufficient information to determine whether participants were referring to physical cravings or to the desire for the effects of substance use, such as the alleviation of boredom (discussed earlier) or negative emotional states (see below). Physical cravings may not play a major role in substance use among persons with co-occurring SMI and SUD, as many use rather small amounts of drugs and are less likely than other substance abusers to develop the physiological syndrome of addiction (Drake et al., 1990; Wolford et al., 1999). Wanting to use may also refer to wanting to “get high,” often cited by substance users as a reason for continuing to use (e.g., Titus et al., 2002).

Negative emotional states such as anger and sadness were cited as a relapse trigger by nearly 20% of participants, replicating earlier findings (Warner et al., 1994). Negative emotions are associated with relapse among single disorder substance users as well (Havassy, Wasserman, & Hall, 1993) and may be even more difficult to handle for dually diagnosed persons, who are also experiencing psychiatric symptoms and/or medication side effects and who may not have adequate skills to cope with negative emotional states. Twelve percent of participants reported returning to substance use to alleviate psychiatric symptoms, replicating a previous report by Dixon and colleagues (1991). The association between substance use and mental illness in this sample is discussed in greater detail below.

Regarding external relapse triggers, temptations to use as well as stress and responsibilities were cited by nearly one third of participants. Temptation to use drugs may be particularly difficult for dually diagnosed persons to resist. Individuals with SMI often have problems in finding satisfying activities, relationships, and social roles and in avoiding boredom (Lamb, 1982). The problems may be compounded by limited access to ordinary social networks and

to structured activities that results from the stigma associated with mental illness (Phillips & Johnson, 2001) as well as from the overall psychosocial context, including treatment settings, in which the opportunity for stimulating activities may be lacking. The desire to be accepted by peers may make it very difficult to remain abstinent among substance-using peers. Further, abstinence may seem pointless in the absence of other available means of spending time, suggesting again the importance of providing opportunities for meaningful and enjoyable activities and social relationships both in the treatment context and in the community.

Stress and responsibilities are frequently cited as reasons for drug use among single disorder substance users (e.g., Titus et al., 2002) and may be particularly challenging for persons with co-occurring SMI and SUD, who often do not have the necessary skills to cope with everyday social situations (Lamb, 1982). As recovery progresses, increased expectations are often placed on the individual, both by the person himself or herself and by the system. For dually diagnosed persons, recovery may not necessarily result in the ability to live independently or to hold a job; when it does, these new situations may seem overwhelming. In the present sample, employment issues (finding or keeping a job), being bored, and “things not happening fast enough” were rated among the most difficult aspects of the recovery process (Laudet, Magura, Vogel, & Knight, 2000a). As discussed in further detail below, these findings emphasize the need for clinicians to work in collaboration with clients to identify expectations and difficulties as they arise and to teach adaptive strategies to cope with the changing demands of recovery. Further, encouraging contact with recovering peers is suggested, as such individuals can function as role models, providing hope that recovery is possible and sharing coping strategies that have proven effective.

In addition to investigating perceived reasons for substance use, we sought to explore the perceived association between substance use and psychiatric illness. Findings suggest that the two disorders are experienced as strongly associated. Over two thirds of participants reported that their symptoms get worse if or when they are using drugs, and nearly two thirds said they felt like using “very much” or “moderately” if/when they experienced symptoms. Previous studies conducted among persons with schizophrenia have reported that most participants believed that drug use had initiated or exacerbated their psychiatric illness (e.g., Baigent et al., 1995). It is interesting to note that, in the present study, in spite of the large proportion of participants who reported an association between substance use and mental illness when asked directly, only a very small percentage explicitly cited mental-illness-related issues as a reasons for substance use in the open-ended questions. However, many of the reasons cited for substance use (e.g., stress, difficulties coping, loneliness, boredom, and lack of meaningful activity) may be consequences of mental illness or of the psychosocial context resulting from the double social stigma of mental illness and chemical dependency (e.g., limited access to structured activity). Further, we note that although only 12% of participants cited emotional or mental health issues as a factor in the initiation of substance use, in this sample, substance use and mental health symptoms began in adolescence, even though the median age when clinical diagnosis was made is 30. This suggests a period of a decade or longer during which both disorders may coexist untreated; in such cases, substance use may be a strategy to cope with negative emotional states such as depression, anxiety, boredom, and loneliness, as put forth by the alleviation of dysphoria explanatory model discussed earlier.

Implications

Risk factors for SUDs include social isolation, poor cognitive and interpersonal skills, school or vocational failure, poverty, lack of adult role responsibilities, lack of structured activities, association with deviant groups, and living in areas with high drug availability (e.g., Anthony & Helzer, 1991; Berman & Noble, 1993). Individuals with co-occurring SMI and SUD experience many of these environmental and psychological risk factors (Mueser et al., 1998).

Recovery from any adversity involves a psychosocial process of developing hope, learning to manage the adversity realistically, and moving on with one's life (Drake et al., 2002). Substance users who recover cite psychosocial factors such as hope, new beliefs, new relationships, and new activities as key to their recovery (Laudet et al., 2002; Watson & Sher, 1998). The instillation of hope for progress toward recovery is particularly important in the case of dually diagnosed persons. Addiction and mental illness vary in course and severity; empirical evidence indicates that progress toward recovery is a realistic expectation for many individuals with mental illness (e.g., DeSisto, Harding, McCormick, Ashikanga, & Brooks, 1995) and with co-occurring SMI and SUD (e.g., Moggi, Brodbeck, Koltzsch, Hirsbrunner, & Bachmann, 2002). However, societal views of both disorders as incurable and the low expectations of patients held by some professionals can impede treatment and contribute to low self-efficacy among dually diagnosed persons (Lamb, 1986; Leete, 1989). Psychosocial factors both in treatment and outside of treatment are critical to the recovery process: Persons with severe mental illness appear to recover from substance abuse just as others do, by developing a satisfying life that includes regular, meaningful activities such as jobs and hobbies, meaningful relationships with others, and a safe living environment away from substance use (Drake et al., 2002).

Up until relatively recently, dually diagnosed patients often fell through the cracks of the treatment system, where mental illness and addiction were typically addressed separately in different programs by clinicians with different training and therapeutic orientations. In particular, interventions for the mentally ill tended to emphasize medicalization and stabilization; psychosocial services were rare, contributing to many of the psychological and environmental factors identified as triggers to substance use (e.g., isolation, inactivity; DeSisto et al., 1995). By the late 1980s, clinicians and researchers began to recognize that the separation of mental health and substance abuse treatment programs was a significant part of the problem encountered in treating clients with co-occurring disorders (Drake et al., 2002; Ridgely, Osher, Goldman, & Talbott, 1987). Since then, combined integrated treatments in which the same clinical team addresses both disorders simultaneously have become the prevalent therapeutic model, and recent studies support the effectiveness of this approach (e.g., Carmichael, Tackett-Gibson, & Dell, 1998; Drake et al., 2001; Hellerstein, Rosenthal, & Miner, 2001; Moggi et al., 2002). Effective interventions for dual diagnosis need to endorse a long-term perspective and involve psychosocial processes that build on natural pathways to recovery, including a combination of substance abuse counseling, social network interventions, and comprehensive attention to other needs, such as employment, housing, or physical health. Further, patient-clinician consensus is essential to rehabilitation: clinicians need to work collaboratively with clients and listen to their point of view to identify expectations, needs, and goals, as staff and patients differ in the perceived importance and helpfulness of various treatment elements (Comtois et al., 1998; Goldstein, Cohen, Lewis, & Struening, 1988). In addition to the importance of providing hope, support, and opportunities for personal growth within the treatment context, clinicians can also contribute to dually diagnosed clients' progress toward recovery by encouraging attendance at self-help groups, such as DTR, where exposure to recovering peers provides hope, role models, and coping strategies for recovery as well as the opportunity to develop a drug-free social network.

Present findings on factors implicated in the initiation of substance use, which often occurs in adolescence, also emphasize the importance of education and prevention strategies targeted both at vulnerable youths and at their families toward reducing the risk of initiating substance use. As discussed by De Micheli and Formigoni (2002), prevention and education strategies must go beyond emphasizing the negative consequences of substance use and reducing availability of drugs. Suggested educational and preventive strategies include creating opportunities for pleasurable activities, encouraging conditions that permit good relationships with peers and families, and finding ways to help teenagers face traumatic situations. Overall,

present findings point to the importance of teaching adaptive strategies to cope with difficulties and of providing opportunities for pleasurable and meaningful activities and relationships both as a means of minimizing the risk of initiation of substance use and as a means of enhancing the likelihood of stable abstinence among persons with SMI.

The present study had several limitations. First, the generalizability of findings is restricted by the nature of the sample: Participants were members of a self-help recovery group who volunteered to be interviewed, and therefore they may differ in clinical or background characteristics from group members who were not interviewed or from the general population of persons with co-occurring SMI and SUD. However, findings were generally consistent with available reports obtained among dually diagnosed persons in the general population (both past and recent substance users; e.g., Warner et al., 1994), suggesting that the restricted sample may not significantly limit the generalizability of findings. A second limitation is the retrospective nature of the data, particularly as relates to initiation of substance use. However, again, findings presented here are consistent with published reports obtained among current, recent, and past substance users, both dually diagnosed and single disorder persons (e.g., Boys et al., 2001; De Micheli & Formigoni, 2002; Titus et al., 2002), suggesting that our findings are not extensively biased by the retrospective nature of the data.

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Table 1
Substances Used and Reasons for Starting to Use by Diagnosis

| At the time when you first started, what did you use? | First mention | Any mention ^a | | |
|---|-----------------|--------------------------|------------------|---------------------|
| Alcohol | 65 | 87 | | |
| Marijuana, hashish, grass | 25 | 61 | | |
| Any cocaine | 4 | 51 | | |
| Heroin | 4 | 21 | | |
| Hallucinogens | >1 | 15 | | |
| Tranquilizers | >1 | > 1 | | |
| Other pills | 1 | > 1 | | |
| Any other drugs | 1 | > 1 | | |
| Why did you start using? ^a | Total (n = 310) | Schizophrenia (n = 124) | Bipolar (n = 69) | Depression (n = 73) |
| Wanted to fit in with peers | 58 | 61 | 68* | 51 |
| Family member/caretaker used | 12 | 9 | 13 | 10 |
| Emotional/mental issues | 12 | 7* | 12 | 18 |
| Fun/experiment/curiosity | 10 | 12 | 7 | 7 |
| Problems at home or school | 9 | 7 | 7 | 11 |
| Traumatic/stressful event | 4 | 3 | 4 | 6 |
| Wanted to drink/use | 2 | 3 | | |

Note. Values are percentages.

^a Adds to over 100% to reflect multiple answers.

* $p = .05$.

Table 2

Reasons to Quit Substance Use and Strategies (Longest Drug-Free Period) Among Those Reporting One or More Drug-Free Periods of 1 Month or Longer (N = 189)

| Question | % |
|---|----|
| Why did you stop using? | |
| Wanted a better life/tired of drugs | 54 |
| Negative consequences of drug use | 14 |
| Was attending treatment | 8 |
| Mental health/psychiatric medication mentions | 6 |
| No access to drugs or to funds | 5 |
| Encouraged/required | 5 |
| Getting support/spiritual help | 2 |
| Miscellaneous other | 6 |
| How did you stop? | |
| 12-step/self-help groups | 45 |
| Treatment | 34 |
| Cold turkey/will power | 30 |
| Competing activity | 11 |
| Dealt with mental health issues | 3 |

Note. Values may add to over 100% to reflect multiple answers.

Table 3

Triggers to Relapse Among Those Who Returned to Substance Use After a Drug-Free Period of 1 Month or Longer (N = 79)

| Question | % |
|---|----|
| What was going on inside of you (thoughts, feelings) that triggered you to use? | |
| Lonely, bored | 31 |
| Craved, wanted to use | 31 |
| Negative emotion (sad, angry) | 17 |
| Using helps with mental health symptoms | 12 |
| Stopped treatment, 12-step, or meds | 7 |
| Denial, questioning sobriety | 7 |
| What happened in the outside world (social situation, event) that triggered you to use? | |
| Temptations | 28 |
| Stress/responsibilities | 28 |
| Relationship problems | 16 |
| Bored, too much time | 7 |
| Negative feelings, confusion | 5 |
| Unresolved recovery issue | 2 |
| Mental health symptoms | 2 |
| Nothing | 12 |

Note. Values may add to over 100% to reflect multiple answers.