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Kolina J. Delgado

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Dual Diagnosis: Impact, Assessment, and Treatment in Co-occurring

Substance Abuse and Severe Mental Illness

Kolina Delgado, Psy.M.

Wright State University

School of Professional Psychology

Chemical Dependency

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Dual Diagnosis: Impact, Assessment, and Treatment in Co-occurring  
Substance Abuse and Severe Mental Illness

Mental illness and substance use disorders individually comprise a challenging area of work for health care professionals. In combination, these issues create an even greater demand; a demand that many health care professionals find themselves ill prepared to address (McKeown, 2010). The prevalence rates of substance disorders and psychiatric disorders co-occurring in one person, a condition referred to as dual diagnosis, are astoundingly high.

The most extensive prevalence research to date is the Epidemiologic Catchment Area (ECA) Study (Regier et al., 1990). The researchers conducted comprehensive diagnostic interviews for both psychiatric disorders and substance abuse disorders in a random sample of 20,000 individuals from across the United States. The data demonstrated that individuals diagnosed with a mental illness were significantly more likely to have a substance disorder as compared to those with no psychiatric disorder. For example, in the general population (those with no psychiatric diagnosis), the lifetime prevalence rate for alcohol-related disorders was 13.5% and drug-related disorders was approximately 6%. However, among those diagnosed with schizophrenia, the lifetime prevalence rate of an alcohol-related disorder was 33.7% and 27.5% for drug-related disorders. Those diagnosed with bipolar disorder show an even higher lifetime prevalence rate for drug-related and alcohol-related disorders, at 33.6% and 43.6% respectively. Other studies have demonstrated similar findings (Kessler et al., 1996; Teeson, Hall, Lynskey, & Degenhardt, 2000). Research suggests that individuals with co-occurring severe mental illness and substance misuse problems have poorer treatment outcomes, including relapse, than do those undiagnosed with a substance disorder (Green, Drake, Brunette, & Noordsy, 2007).

Considering the high rates of dual diagnosis and the evidence suggesting poor treatment outcome among these individuals, there is great demand for health care practitioners to become more knowledgeable in dual diagnosis research in order to better address the complex needs of this population. The current paper will discuss the impact of substance abuse on psychiatric illness, substance assessment, and models of treatment for the dually diagnosed.

### **Impact of Substance Misuse on Psychiatric Illness**

Research suggests that substance misuse can have significant negative effects on individuals diagnosed with severe and mental illness (Drake & Brunette, 1998). As previously noted, substance misuse by individuals diagnosed with a severe mental illness significantly increases the risk of relapse and psychiatric hospitalization (Hunt, Bergen, & Bashir, 2002). There is extensive research which demonstrates that alcohol use worsens the symptom severity of depression; this makes sense considering that alcohol is a depressant (Mueser, Noordsy, Drake, & Fox, 2003). The risk of suicide also increases among individuals with dual diagnoses (Torrey, Drake, & Bartels, 1996). Thus, in populations that are already at increased risk of suicide, such as those with schizophrenia, bipolar, and major depression, the risk of suicide becomes especially high when these persons also have a substance disorder.

Co-occurring severe mental illness and substance disorders carry increased difficulty in daily living. For example, dual disorders have been shown to exert significant problems in relationships, including family and friends (Salyers & Mueser, 2001). In addition, financial difficulties often result from substance misuse problems as individuals often place a higher priority on obtaining substances than on fulfilling basic needs such as clothing, food, and even shelter (Mueser, Noordsy, Drake, & Fox, 2003). This places individuals with dual disorders at increased risk of homelessness (Goldfinger et al., 1999). Furthermore, cravings for substances

can create disinhibitory effects, resulting in impulsive and potentially aggressive behavior in the pursuit of drugs or alcohol (Rasanen et al, 1998). Many individuals with substance abuse problems find themselves involved in the legal system, resulting from aggressive behavior, theft, or disorderly conduct (Mueser, Essock, Drake, Wolfe, & Frisman, 2001).

In addition to the aforementioned implications of substance abuse and severe mental illness, health complications are also a common consequence of substance abuse among the mentally ill. According to Rosenburg et al. (2001) health problems may result from increased risk taking behaviors such as sharing needles or engaging in unprotected sex, thus increasing the risk of contracting Human Immunodeficiency Virus (HIV), Hepatitis, or other communicable diseases. In addition, the use of substances can have direct effects on health. For example, a common health consequence associated with alcohol abuse is liver damage. Overall, substance abuse among individuals with mental illness appears to have additive effects, increasing symptom severity, susceptibility to health problems, and social and functional deficits, all of which contribute to increased risk of mortality.

### **Assessment**

#### **Assessing Substance Dependence in the Dually Diagnosed**

##### **Areas to assess.**

Evans and Sullivan (2001) point out that it is important to remember that in diagnosing chemical dependency, it is not how much, or how often a person uses a particular substance, but what happens when the person is under the influence that matters most. Therefore, in addition to the more traditional questions pertaining to quantity and frequency of use, assessment methods must address issues related to loss of control and negative consequences associated with substance use.

According to Evans and Sullivan (2001) loss of control is a hallmark of substance dependence. Thus, evaluators should directly assess issues related to loss of control. In order to address this issue, evaluators may inquire about whether or not the person used more of a substance than planned or about whether or not the individual has ever attempted to control his or her substance use. It is also important to remember that the loss of control need not occur every time a person uses a substance for there to be a dependency problem. The difficulty is that individuals are unable to predict when a loss of control will occur (Evans & Sullivan, 2001).

When assessing for substance dependency problems, the evaluator is wise to inquire about negative consequences that have occurred as a result of a person's substance use. Negative consequences resulting from substance provide support for the assertion that an individual is addicted. In evaluating negative consequences, the evaluator should assess consequences experienced in various domains such as interpersonally, occupationally, legally, and in relation to physical health (Evans & Sullivan, 2001).

Although, loss of control and negative consequences are the hallmarks of substance dependence, information about the type(s) of substance(s) used, substance use history, and the quantity and frequency of use are also important in conducting a thorough substance dependence assessment. Research suggests that although most substance users have a substance of preference, polysubstance dependence is extremely common. Conducting a thorough assessment of quantity of use can provide information pertaining to the issue of tolerance. Furthermore, inquiring about use during the previous week can aid in determining whether medical detoxification is warranted (Evans & Sullivan, 2001).

Substance withdrawal can be potentially life-threatening, and therefore should always be assessed when conducting a substance dependence assessment. Severinghaus and Kinney (1996)

provide evaluators with a list of signs and symptoms of withdrawal that would suggest a medical evaluation is necessary. For example, delirium, a heart rate of 110 beats per minute or more, tremors, paranoia, hallucinations, seizures, or recent substance use at levels that create a risk of poisoning, overdose, and/or organ damage would constitute situations that call for immediate medical attention. Substance abuse evaluators without medical expertise should refer the client experiencing these or other severe symptoms of substance withdrawal to a qualified health care professional for a medical assessment.

Another area important in the assessment of substance dependence is information regarding treatment. Information gathered should include treatment goals and expectations, previous experiences with substance-related treatment, motivational factors which facilitated engaging in the current treatment, triggers of relapse, and social support. Unfortunately, many clients being evaluated for a substance dependence problem do not seek treatment of their own free will, but instead are mandated to treatment for various reasons and may express denial about the extent of their substance dependence issues (Evans & Sullivan, 2001).

#### **Assessment methods.**

To date, there is no agreed upon standard of assessing for substance dependency, however; experts often suggest using two or more assessment methods to attain greater reliability (Drake, Rosenberg, & Mueser, 1996). The most common forms of assessment are interviews, collateral contacts, medical testing, and self-report instruments. Many of the methods of gathering information rely on the client's self-report, which may be consciously or unconsciously distorted. Research has addressed this issue, and there are now several recommendations available to assist evaluators in obtaining more accurate self-report data.

Professionals have provided interviewing strategies that facilitate the acquisition of richer and more accurate clinical data regarding substance misuse (O'Connor, 1996; Miller & Rollnick, 1991). For example, the use of open-ended questions is recommended in order to obtain more factual and specific information. Another strategy is to avoid discussions about client's rationalizations for use. It is also important to roll with a client's resistance rather than be overly direct or pushy. However, gentle persistence is often necessary in order to gather more detailed and relevant information. Evaluators may find it best to begin with more neutral questions and proceed to more potentially sensitive topics at a later point in the interview process. It is also important that the evaluator not take the client's defensiveness personally, but instead attempt to remain objective and to demonstrate a matter-of-fact interviewing style.

Various questionnaires are available to assess substance abuse and dependence. However, a common issue is that of client's attempting to "fake good." That is, clients will often attempt to portray their substance use as unproblematic. Some instruments are better at detecting these attempts than others. For example, the Michigan Alcoholism Screening Test is well known, but items are face-valid making it easy for someone to minimize or lie about their substance use. Two self-report instruments have attempted to address this problem through the use of validity indices designed to identify faking; these are the Substance Abuse Subtle Screening Scale (SASSI) and the Minnesota Multiphasic Personality Inventory (MMPI). The SASSI has versions available for use with adults or adolescents. Lazowski, Miller, Boye, & Miller (1998) demonstrated a 93% accuracy rate for the SASSI-3 among dually diagnosed individuals in an inpatient setting. The MMPI for adults is in its second edition and there is another version specifically for use with adolescents (MMPI-A). The validity scales available on the MMPI can help detect whether someone was faking responses and provides other useful

information about how the person approached the test (e.g. defensiveness, exaggerated, etc.).

The MMPI can also provide information about psychiatric symptoms which makes it especially useful in assessing dual diagnosis (Evans & Sullivan, 2001).

There are also scales designed specifically for use with dually diagnosed clients. These include the Alcohol Use Scale, the Drug Use Scale, and the Substance Abuse Treatment Scale. These instruments provide a way for clinicians to both assess and monitor substance use in their dually diagnosed clients. Although, these instruments are useful, they also have limitations. For example, these instruments are not recommended to be used as the basis of a comprehensive substance use assessment. They also assume that the information provided by clients is accurate and truthful (Evans & Sullivan, 2001).

Gathering collateral information in substance abuse evaluations is especially important based upon the aforementioned difficulty in gathering accurate information from clients regarding their substance abuse problems. Family members, physicians, friends, and coworkers can all be valuable sources of information. However, appropriate releases must be obtained prior to initiating contact with collateral sources. Evans and Sullivan (2001) warn evaluators using collateral sources to be aware that these sources may also be in denial, and therefore attempts should be made to obtain factual information. That is, information grounded in some form of evidence. The authors suggest that evaluators ask for specific behavioral examples that support the claims made by collateral contacts.

### **Assessment Considerations for the Dually Diagnosed.**

The use of traditional substance disorder assessment methods with dually diagnosed clients warrants special consideration. According to Evans and Sullivan (2001) individuals with co-occurring substance dependence and psychiatric illness will often have clear problems

controlling substance use. Many psychiatric illnesses are characterized by poor impulse control which then becomes exacerbated by substance use. In addition, many people with psychiatric illnesses demonstrate interpersonal dysfunction. However, these individuals are likely to remain in contact with family and friends whereas, dually diagnosed individuals often exhibit increased interpersonal dysfunction and may have more involvement with the legal system.

There are aspects of psychiatric illness that pose specific problems in the assessment of substance abuse problems. For example, assessing for blackouts may be difficult among individuals with a history of psychosis or dissociation (Evans & Sullivan, 2001). In addition, individuals with severe mental illness are often poor historians and may have limited insight, thus creating difficulty in obtaining accurate historical information pertaining to the progression of use and tolerance, making it even more important for evaluators to obtain collateral information. Furthermore, symptoms of withdrawal may not be easily detected as they may be covered up by psychiatric symptoms (Evans & Sullivan, 2001).

### **Treatment**

Professionals utilize several different forms of treatment interventions to address dual diagnosis. However, the majority of interventions fall into the larger categories of individual, group, and family therapy. For example, stage-wise and motivational interviewing are two forms of individual therapy approaches whereas, group therapy interventions may include social skills training or self-help groups. In recent years family therapy interventions in dual diagnosis have become more common consisting of family collaboration or behavioral family therapy (Mueser et al., 2003). A brief description of these therapeutic techniques will be presented herein. However, readers considering implementing any of these approaches in a therapeutic context

will be well served to conduct a more thorough analysis of the process components prior to utilizing these strategies in therapy.

### **Individual Approaches**

#### **Stage-wise individual therapy.**

Stage-wise therapeutic approaches emphasize meeting the client's particular needs given his or her particular stage of treatment. The primary idea is that without careful consideration of the stage of treatment a client is currently in, a therapist may provide services that are inappropriate, even if well intentioned. The stage of treatment is captured in one of four categories: engagement, persuasion, action, and relapse prevention. It is important to note that individuals do not always proceed through the stages in a linear fashion, rather for most, there tends to be an ebb and flow between the stages (Mueser, et al., 2003).

Within the engagement stage, the goal of treatment is to establish a therapeutic relationship that facilitates open and honest discussion regarding the client's psychiatric symptoms and substance use. As such, all interventions should be aimed at building a solid alliance with the client that will serve as the foundation of the work yet to come. Therefore, suggesting that the client change his or her behaviors, or expressing disapproval of current behaviors are not compatible to this stage of treatment (Mueser et al., 2003).

In the persuasion stage, the goal of therapy is to assist the client to develop the motivation to change their substance use and management of mental illness. It is important to remember that without adequate motivation on the client's part, even the best treatment interventions are bound to fail. Therefore, the therapist should avoid any attempt at behavioral change during the persuasion stage, but instead focus solely on helping the client to become motivated to engage in the active stage of treatment (Mueser, et al., 2003).

In the action stage, the primary goal of treatment is to provide the client with needed resources and skills necessary to change problematic substance use and/or improve management of psychiatric symptoms. Interventions during this stage may include helping clients reduce substance use or abstain from them altogether. Other interventions may be aimed at improving medication compliance or other forms of treatment to manage psychiatric symptoms (Mueser, et al., 2003).

The goal of the relapse prevention stage is to foster long term maintenance of success. Treatment may expand to include long term lifestyle change or enhancement of social support systems that will facilitate long term success. A key in this stage of treatment is to empower the client to become more self-reliant. Therefore, frequency of contact with the therapist may be reduced, while an increase in utilization of community resources, such as support groups is likely to occur (Mueser et al., 2003). Many other forms of treatment integrate the fundamental ideas behind stage-wise treatment; one such approach is motivational interviewing.

#### **Motivational interviewing.**

Motivational interviewing incorporates a set of therapeutic techniques aimed at helping clients to view the negative impact their substance abuse has on their lives. Although, it is typically applied in an individual therapy setting, many of the principles of motivational interviewing have been successfully integrated into other therapy modalities as well, such as group or family based interventions. However, for the purposes of the current discussion, motivational interviewing will be addressed from an individual therapy context (Mueser et al., 2003).

One of the most pervasive difficulties therapist face when working with dually diagnosed individuals is a lack of motivation on the client's part to engage in the change process. A strong

working client-therapist relationship is a necessary component of motivational interviewing. As such, this approach is best suited for clients in the persuasion or action stage of treatment (Mueser et al., 2003).

The initial task of the therapist using a motivational interviewing approach is to simply listen to the client, empathically and non-judgmentally, in an effort to better understand his or her experiences. Next, the client and therapist should explore the goals and personal values of the client. This will facilitate the development of therapeutic goals that are consistent with the desires of the client. Once the therapist and client have identified goals, the two will work to identify the steps that will need to be taken in order to achieve the client's stated goals. During this process, it is important for the therapist to present ways in which the client's substance use interferes with or conflicts with the client's stated values and goals. When the client realizes that there is a discrepancy between his or her goals and his or her substance use, cognitive dissonance develops between the client's goals and his or her continued substance use. The client can address the dissonance by taking steps to cut down substance use and or abstain from substances altogether. Success in motivational interviewing occurs when the client begins to take personal responsibility for working on his or her substance abuse problem, resulting from an awareness that these changes are in his or her best interest (Mueser et al., 2003).

### **Group Therapy Approaches**

#### **Social skills training groups.**

Social skills training groups provide an essential component in the treatment of many clients with dual disorders. These groups focus on teaching clients skills necessary to get their needs met and to effectively handle common problem situations involving substances. For example, these groups can provide clients with opportunities to practice how to manage peer

pressure situations or other potentially hazardous triggers. Dually diagnosed individuals often use substances as a way to gain acceptance in peer groups. Therefore, social skills training may provide a useful way for these clients to gain skills necessary to improve their interpersonal relationships and to get their needs met in healthier peer interactions (Mueser et al., 2003).

Social skills training groups typically address a wide array of social skills and other factors that affect social interactions. For example in teaching individuals how to communicate with others more effectively, one must also consider the role of perceptual skills, problem-solving skills, and behavioral skills. Professionals facilitating social skills training groups for severely mentally ill individuals must also consider the role of psychiatric symptoms and medication side-effects in social interactions. For example, akinesia is a common side-effect of antipsychotic medications which causes an inability to express affect through facial expressions. Therefore, akinesia can cause severe problems communicating with others through nonverbal facial expressions (Mueser et al., 2003).

### **Self-help groups.**

Self-help groups such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) have been shown to provide significant benefits to individuals recovering from substance abuse disorders. The primary goal of self-help groups is to provide a supportive environment to individuals already committed to abstaining from substances. Thus, it is best not to recommend self-help groups to individuals in the early stages of treatment (i.e. engagement or persuasion). In addition, participation in self-help group must be based upon the client's personal choice (Mueser et al., 2003).

Attempts at including dually diagnosed individuals into self-help groups have posed problems. One such problem is that many mentally ill individuals often find it difficult to

interact effectively with other group members due to social skills deficits or problems relating to the concerns presented by other group members. For example, group members may discuss marital or occupational problems resulting from substance abuse which many individuals diagnosed with severe mental illnesses may not be able to relate to, as many such individuals do not work or have never been married. In addition, most self-help groups have a large number of members which can contribute to social anxiety, paranoia, or persecutory delusions among individuals who are mentally ill. Furthermore, a fundamental component of many self-help groups is a commitment to abstinence from substances. Many severely mentally ill individuals find it confusing to be told to abstain from drugs, while they are simultaneously reminded by their physicians about the importance of medication compliance (Mueser et al., 2003).

### **Familial Therapy Approaches**

#### **Family collaboration.**

According to Mueser and colleagues (2003) family plays an especially critical role in the lives of the dually diagnosed. Family members can help to alleviate the stress of daily living for these individuals, or may have a negative contribution on a person's symptom severity or substance use problems. Therefore, working with family members of dually diagnosed individuals becomes especially important to the client's well-being.

Family collaboration is focused on building a strong working relationship between treatment providers and the client's family members. Providers using this approach make a concerted effort educate family members on dual disorders and to include the family in treatment planning and implementation. This form of intervention can be implemented on its own or in combination with other forms of therapy. Goals of family collaboration may include reducing familial stress, improving communication, improving treatment compliance, and decreasing

substance use, all of which can have a profound effect on the course of dual disorders and on the client's overall prognosis (Mueser, et al., 2003).

**Behavioral family therapy.**

Behavioral family therapy (BFT) is a form of family therapy aimed at systematically educating family members about dual disorders and their treatment, and teaching families how to improve communication and problem-solving skills. The primary advantage to BFT over other informal family therapy approaches is that it provides a theoretical explanation of the role families play in dual disorders.

BFT is a standardized method of intervention that is broken down into six phases: connecting the family, assessment, psychoeducation, communication skills training, problem-solving training, and termination. In the initial phase, the therapist works to develop a collaborative relationship between all family members, the client, and the clinician. This phase is fundamental to the work to be conducted in the following phases of treatment. In the assessment phase, the therapist works on gathering information from each family member including the client. This usually takes place through individual interviews with each person (Mueser et al., 2003).

During the psychoeducational phase, the therapist provides the family with information about mental illness, substance abuse, the role of family in the treatment of dual disorders, and the impact that substance abuse can have on psychiatric symptoms and prognosis. The next two phases focus on helping the family to develop fundamental skills, such as communication and problem-solving skills, which will increase their ability to effectively interact and address the substance abuse problems and psychiatric symptoms of the client. In the termination phase of treatment, the therapist reviews the progress made by the family unit over the course of therapy.

During this final phase of treatment, the therapist and family (including the client) collaborate to develop a plan to respond to relapse in substance use and/or psychiatric symptoms (Mueser et al. 2003).

### **Conclusion**

Individuals diagnosed with severe mental illness are at significantly greater risk than the general population to have a substance disorders. Substance abuse among this population poses significant problems such as increased risk of suicide, health complications, increased symptom severity, relapse, rehospitalization, functional impairment, and involvement with the legal system. The assessment and treatment of substance use, abuse, and dependency are complicated tasks in their own right, however; the combination of co-occurring psychiatric illness creates further challenges to professionals working with this population. Professionals conducting substance abuse assessments on individuals with a psychiatric illness must be aware of the special needs of this population and the challenges posed in gaining relevant and accurate data. In addition, evaluators should be skilled in strategies that facilitate the acquisition of accurate information.

There are several treatment approaches that can be utilized in addressing dual diagnosis. While some of these techniques have been presented herein, there are many more. Treatment interventions can be categorized into individual, group, and family approaches. Two examples of individual therapy approaches discussed included stage-wise therapy and motivational interviewing. Research supports the efficacy of both of these approaches in working with dually diagnosed clients. Group therapy modalities also have benefits as clients are often at various stages of treatment, creating benefits for those who may be at earlier stages in the change process. Social skills training groups may be especially beneficial to dually diagnosed

individuals considering the fact that social skills deficits are inherent in many psychiatric diagnoses. Self-help groups can provide needed support to individuals struggling with substance disorders, but these groups also pose special challenges to those who are dually diagnosed. Finally, family therapy, whether it is conducted in a structured or informal fashion, can provide many benefits for both the individual struggling with dual diagnosis as well as the family as whole.

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