APPROPRIATE TREATMENT FOR DULLY DIAGNOSED ADOLESCENTS: AN ANALYSIS OF PROGRAM SUCCESS AND REVIEW OF LOCAL FACILITIES

Lynnzi M. Brent
Faculty Mentor: Dr. Lisa Tavano-Hall

ABSTRACT

The coexistence of substance abuse and psychiatric disorders among adolescents is of growing concern. While treatment programs for these dually diagnosed individuals are available, the primary focus has been on adults, leaving the unique developmental needs of the adolescent unmet. A quantitative analysis of U.S. national data revealed that of the 1,355 statewide facilities offering treatment programs for clients with co-occurring disorders; only 4 of the 18 local facilities qualified to treat adolescents. In addition, meta-analysis of success rates reported in the literature revealed that success rates were significantly higher for cross-type programs than for substance abuse only programs. This finding provides evidence of the need for more facilities providing cross-system programs to serve the increasing prevalence of dually diagnosed adolescents.

A commonly used blanket term, dual diagnosis refers to the coexistence of two or more diagnosable disorders, but the actual diagnosis describes an individual who meets the Diagnostic and Statistical Manual (DSM-IV) criteria for at least one mental health and one substance abuse disorder (American Psychiatric Association 2000). The co-occurrence of abuse and mental disorders is a challenge that has been of primary focus for mental health professionals over the past several decades (Bender 2006). More recently, researchers have been studying this area to further the understanding of the relationship between mental disorders and substance abuse disorders, as well as to develop programs for the successful treatment of individuals with such Dual diagnoses (Hawkins 2009). Mental health professionals have come to recognize co-occurrence as being less of an exception to the diagnostic rule and more of a norm, thereby increasing the accuracy of assessment (Greenbaum 1996). Researchers are also studying and addressing the need for specialized treatment programs that focus on the integration of Dual diagnosis programs into mental health facilities and drug and alcohol rehabilitation centers (Hawkins 2009).

Although developments in assessment techniques and treatment programs for dually diagnosed individuals have helped further the knowledge and understanding in this area, researchers tend to focus their research on adults, leaving out a large and critical population: adolescents (Greenbaum 1996). The treatment of adolescents with co-occurring disorders has become
an increasingly pressing issue due to the significant percentage of dually diagnosed patients in this population. Dually diagnosed adolescents present unique challenges to both mental health care and substance abuse services. For a treatment program to be effective, it must incorporate not only the specialized needs of the dually diagnosed client, but also the developmental needs of the adolescent (Gregorius 1991). Unfortunately, insufficient research, under-diagnosis, and conflicting treatment approaches have left this issue inadequately addressed.

Determining the prevalence of co-occurring mental health and substance abuse disorders can be challenging and the collected data is usually skewed. Clinical data tends to overestimate the prevalence of co-occurring disorders, while national and community data, although more preferred, tends to underestimate it (Hawkins 2009, 199). Due to the flaws in large-scale epidemiological studies, researchers have had to rely heavily on smaller probability household samples.

**Literature Review**

Lahey, Flagg, Bird, and Schwab-Stone (1996) looked at data from the National Institute of Mental Health Methods for the Epidemiology of Child and Adolescent Mental Health Disorders and discovered very high rates of co-occurring disorders among adolescents. They found that in a community sample of 401 adolescents, ages 14- to 18-years-old, 27.8% had at least one diagnosed mental health disorder and 6.2% had a substance abuse disorder, with the higher rates of substance abuse (9.9%) among 17-year-olds. Additionally, 76% of those with a substance abuse disorder reported having at least one diagnosed mental health disorder (Lahey et al. 1996). Lewinsohn, Hops, Seeley, and Andrews (1993) found further evidence of prevalence among adolescents in their research on adolescent psychopathology. In their Oregon Adolescent Depression Project, the researchers surveyed 1,710 Oregon high school students ages 14 to 18 and found that 66.2% of those with a substance abuse disorder also had a co-occurring mental health disorder (Lewinsohn et al. 1993). Finally, Chan, Dennis, and Funk (2008) analyzed data from 77 substance abuse treatment studies and found that 90% of adolescents under the age of 15 with a substance abuse disorder had at least one or more co-occurring mental health disorders (Chan et al. 2008).

The adolescent years are a time of dramatic changes, with each individual coping and conforming to these changes in various ways. The developmental differences between age ranges in adolescents are much greater than in adults. Therefore, the question facing clinicians is: What is the appropriate age range for treatment programs designed for children? Bender (2006)
suggested that although current models of treatment have been successful in the past to treat adults, they are not adequate to serve an adolescent’s unique developmental needs. Gregorius (1991) further elaborated on the many developmental hurdles that face adolescents: consolidation of self-image, development of mastery strengths regarding control of emotions, and the establishing of a personal identity. For a treatment program to be successful, it must encompass all these developmental complexities. Gregorius warns that the disease process associated with substance abuse and mental illness may be intensified and accelerated by the dynamics of psychological growth and external dependence that is associated with adolescence (1991). Failure to acknowledge these dynamics results in a rise in client relapse and overall lower success rates.

In addition, Bender (2006) reviewed current studies in treatment effectiveness with dually diagnosed adolescents and reported that practitioners need to be aware of the difficulties and frustrations that come along with treating adolescents with a dual diagnosis. Bender’s review revealed that dually diagnosed adolescents are likely to have poor attendance in treatment, to be difficult to engage, and to have high rates of noncompliance. This information is vital when developing treatment programs. Mental health care professionals must realize that in order to be successful, it is imperative that treatment programs address the unique needs of the developing adolescent by applying adequate assessment techniques that address these special needs.

Assessment techniques are constantly under investigation and review. Greenbaum (1996) has researched many of the assessment confounds faced by clinicians. The first prevailing issue is the lack of instruments and guidelines with which to assess substance abuse within this age range. Traditional assessment models identify substance abuse disorders by measuring dimensions of drug behavior. While this may be appropriate for assessing adults, adolescents have a shorter history of substance abuse and the contrast in life-stage may produce differing results (Bender 2006). Another major difficulty that presents itself when assessing adolescents is the struggle to know what constitutes substance abuse or an addictive behavior in a population where experimental substance use is a norm (Greenbaum 1996).

As drug and alcohol usage increases among children and adolescents, what accurately defines substance use as opposed to a substance abuse disorder? Another consideration to this question is that, for adolescents the use of substances such as alcohol is illegal and can therefore be considered abuse. This factor often results in adolescents hiding their substance use from adults. Clinicians should address this consideration because it can have a significant impact on the accuracy of assessment and diagnosis of the client.
Historically, treatment approaches in mental health facilities and substance abuse facilities have differed greatly. Typically, mental health care professionals focus on the long-term treatment and maintenance of a mental health disorder; whereas substance abuse professionals focus on the immediate elimination or control of the individual’s chemical dependencies (Gregorius 1991). Ideally, treatment for a dually diagnosed client would integrate both of these approaches into one comprehensive program. Additional evidence presented by Gregorius (1991) and Belfer (1996) support these findings and suggest that in order to eliminate this conflict between treatment approaches, the need for integrated treatment programs and more comprehensive training must be addressed. Pierce’s (1991) study on dual-disordered adolescents suggested that the majority of adolescents with a Dual diagnosis did not begin abusing substances until after the onset of a psychiatric disorder (Pierce 1991). Caton, Gralnick, Bender, and Simon (1989) found that 67% of their 51 patients did not abuse alcohol or other substances until the onset of their diagnosable psychiatric disorder. More specifically, Deykin (1987) concluded that the onset of major depression quite often (79%) preceded alcohol and other drug use, suggesting the possibility of self-medication as a factor in the development of alcohol or substance abuse. Data such as these serve as strong indications that the co-occurrence of disorders is no longer the exception and treatment programs should be designed with this in mind. It is clear that the separation of the mental health and substance abuse treatment fields may result in unsuccessful treatment for many adolescents.

As can be seen when reviewing the literature, understanding of the treatment of dually diagnosed adolescents has improved; however, several researchers offer insight into the possibilities of future direction. Gregorius (1991) emphasizes the role that peer pressure plays in an adolescent’s life and suggests that counselors explore group or peer counseling programs. Multisystematic therapy is an example of such a treatment approach that integrates various individuals who affect and influence the adolescent’s life into the treatment program. It is based on a social ecology theory posed by Bronfenbrenner (1979) that emphasizes the influence of family, peers, school, and community on the anti-social behavior of youth. By using multisystematic therapy, adolescents can benefit from a larger support system that may be vital to their success. Hawkins (2009) has found the multisystematic approach to therapy to reduce substance use, decrease psychiatric symptoms, and improve family and peer relationships.

Belfer (1996) found that researchers who have made the most meaningful and useful contributions to the development of treatment have done so with the use of standardized tests developed specifically for children and
adolescents, such as the Diagnostic Interview for Children and Adolescents and the Kiddie-Schedule for Affective Disorders and Schizophrenia (Belfer 1996). These tests share the characteristics of specificity and precision within their questions. These findings have led Belfer to believe that the more specific a test or questionnaire is to the client-group, the more reliable the results. The researcher therefore encourages the further development of such standardized measures.

PROBLEM STATEMENT

The need for better assessment techniques, integrated treatment programs and cross-trained professionals has been addressed by the literature; however, it seems that little action toward rectifying these problems have been taken. The current research emphasizes the need for the development of age appropriate treatment programs that meet the unique needs of dually diagnosed adolescents. By reviewing national data on program types available in the U.S. and the structure of current local treatment programs, this researcher plans to produce an objective layout of the availability of programs designed for adolescents.

Hypothesis

The researcher predicts that, in consideration of the prevalence of dual diagnosis in adolescents, there will be a limited number of programs available to meet these needs. In addition, this researcher hypothesizes that a meta-analysis of the literature will show that reported success rates are significantly higher in cross-system programs than substance abuse only programs.

METHODS

The following details the methods used in the present study.

Analysis of Local Programs

The researcher performed a quantitative analysis of statistics on substance abuse and mental health care facilities using the 2007 National Survey of Substance Abuse and Mental Health Treatment Services (N-SSATS 2007). The N-SSATS was designed by the Substance Abuse and Mental Health Services Administration to collect data on location, characteristics, services, and use of substance abuse and mental health facilities throughout the United States. Statistics on the facilities included in the survey are regularly updated. Data for 2007 is the most currently available. The N-SSATS provides a comprehensive listing of facilities, including federal agencies, the Department of Veteran Affairs, the Department of Defense, Indian Health
Services, state approved agencies and independent or non-state approved agencies.

The researcher then screened the state of California data provided in the N-SSATS for several characteristics, including: facilities providing services for co-occurring disorders, facilities providing services to adolescents, and facilities providing services to adolescents with co-occurring disorders. Mojtabai previously used this method of data analysis in his 2004 research on dual diagnosis programs. Although Mojtabai’s research included data from all 50 states for his national study, the current study will dissect the data to include only facilities operating within the metropolitan area of Sacramento, California. Facilities that met the criteria underwent further investigation for specific information on services provided, the development and structure of treatment programs, and their success rates. The researcher obtained information for each facility through their administrative website, or staff provided it on request.

Meta-Analysis

An initial meta-analysis of the literature was conducted to determine outcomes and success rates of different program types reported in previous studies. Five studies were chosen for analysis, including four substance abuse (SA) program studies and one cross-system (CS) program study. Studies 1 and 2 (SA1 and SA2) reported success in regards to abstinence from drug and alcohol use. Studies 3, 4 (SA2 and SA3) and 5 (CS) all reported success in terms of lowered mean scores from self-reported substance usage scales. The researcher calculated the numbers of patients who were successful or had relapsed based on reported percentages of a successful score and the number of patients in the study (see Table 1), and then combined the number of successes and relapses for the four SA programs for purposes of analysis. The data from the five studies was analyzed for differences in treatment outcomes between the two types of programs (SA and CS) by using the chi square method.

<table>
<thead>
<tr>
<th>Program</th>
<th>N</th>
<th>Success (%)</th>
<th>Number of Successes</th>
<th>Number of Relapses</th>
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<td>SA1</td>
<td>234</td>
<td>12.5</td>
<td>131</td>
<td>103</td>
</tr>
<tr>
<td>SA2</td>
<td>88</td>
<td>58.0</td>
<td>11</td>
<td>77</td>
</tr>
<tr>
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<td>51.0</td>
<td>126</td>
<td>121</td>
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<td>SA4</td>
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<td>Total SA Program</td>
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<td>39.0</td>
<td>418</td>
<td>657</td>
</tr>
<tr>
<td>CS</td>
<td>107</td>
<td>82.5</td>
<td>88</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 1. Program success and relapse rates.
The following details the results of the present study.

Analysis of Local Programs
Results from the N-SSTAS data analysis showed that 3,597 facilities nationwide offered treatment programs for clients with co-occurring disorders. Within the state of California, 1,355 facilities offered treatment programs for clients with co-occurring disorders, 18 of which were located within Sacramento County. Of these 18 facilities, four were qualified to offer specialized treatment programs for adolescents. These four facilities were comprised of three mental health facilities and one substance abuse facility.

Mental health facility #1 (MHF1) offers inpatient treatment to both children (12-years-old and younger) and adolescents (13- to 18-years-old) with group sessions and one-on-one consults when recommended by a physician. Although this program is advertised as being designed specifically for dual diagnosis patients, further investigation revealed the treatment program to be primarily psychiatric-based, with only acute alcohol detoxification available. Patients with additional substance abuse needs are referred to outside sources, as the facility is unable to accommodate these needs.

Mental health facility #2 (MHF2) offers a six-month intensive treatment program for adolescents ages 12 to 21. This treatment program follows a multisystematic therapy approach, which involves the client’s family, peers and even teachers. This program includes intensive individual therapy sessions with cross-trained clinicians, in addition to group and family sessions. Counselors place emphasis on the treatment of the whole person and therefore provide access to all mental health and substance abuse needs in one program.

Mental health facility #3 (MHF3) offers an inpatient treatment program for adolescents ages 13 to 17. This program includes 24-hour nursing, daily interventions, individual, group and family therapy sessions, and motivational therapy. A program team consists of both physicians and cross-trained clinicians. Counselors place emphasis on the treatment and stabilization of the client’s most serious symptoms to allow for a quick transition to a less intensive level of care.

Substance abuse facility #1 (SAF1) offers outpatient treatment programs for adolescents only. The client’s assigned case manager develops individualized treatment programs and uses a multisystematic therapy approach by involving family members, friends, teachers, and even employers in the treatment program. Length of treatment is one year, during which time the client receives services from both a therapist and substance abuse counselor. While
the length of treatment is typically one year, the therapist may advise clients to stay in treatment until they conclude that the client has achieved successful participation in the treatment.

Meta-Analysis
In order to run comparisons between the program types, the researcher combined the success rates and relapse rates of participants from the four substance abuse programs. The total success rate for participants in substance abuse programs was 39.5% (N = 1075) and the success rates in the cross-systems program was 83.5% (N = 107). A chi square test of independence revealed that success rates were significantly different between the two types of programs ($\chi^2 (1, N = 1182) = 74.73, p < .005$). The effect size was small ($r = .25$).

DISCUSSION
The present study looked at treatment programs for dually diagnosed adolescents, specifically in Sacramento County, while taking the prevalence rates of this population into consideration. As hypothesized, there appears to be a lack of programs available for dually diagnosed adolescents, considering the prevalence of this diagnosis according to past studies (Gregorius 1991). While many facilities advertised having adolescent dual diagnosis programs available, further investigation found this claim to be inaccurate. Ultimately, only four out of the six facilities that appeared to have these programs met this study’s criteria for specialized programs designed to meet the needs of dually diagnosed adolescents.

Results from the meta-analysis revealed a significant difference in success rates between program types. Dually diagnosed adolescent in cross-system programs had higher treatment success rates when compared to dually diagnosed adolescents in substance abuse only programs. These findings support those of previous researchers who emphasize the need for integrated treatment programs in order to have more successful outcomes. In addition, the results from the meta-analysis support the need for more facilities that provide cross-system programs in order to meet the demands of an increasing prevalence of dually diagnosed adolescents.

LIMITATIONS
One of the greatest limitations in this study was the lack of a universal measurement and definition for “successful outcomes.” These inconsistencies made data analysis difficult, and required the researcher to omit many studies due to the broad range of outcome measures. One suggestion to aid in
the development of treatment programs is the redefinition of “successful outcomes” for dually diagnosed clients. As individuals with both substance abuse disorders and psychiatric disorders are susceptible to relapsing (Hawking 2009), the combination of the two disorders only increases the chances of relapse. Clinicians should consider treatment as ongoing maintenance of the disorder rather than a means to ultimate recovery. By revising the definition of successful outcomes, researchers may more accurately assess the outcomes of treatment programs for future studies.

CONCLUSION

Despite these limitations, the present study provides supportive evidence of the effectiveness of cross-system treatment programs and the need for such programs. Due to the small number of studies analyzed, research should continue as the results from more studies on success rates for cross-system programs become available. In addition, researchers may consider the analysis of factors contributing to client relapse in both substance abuse and cross-system programs for the further development of treatment approaches. Although researchers have made great strides in this area of study, there is still much to examine to ensure clinicians can more fully understand the issues associated with this complex adolescent population, dual diagnosis, and appropriate treatment programs.
REFERENCES


