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Assessing the Need for Dual Diagnosis Training for Mental Health Workers Serving Youth in Michigan

Abstract

Dual diagnosis is the co-occurrence of substance use and another psychiatric disorder. Research has shown that people with dual diagnosis have worse outcomes than those with only substance use or another psychiatric disorder. A considerable amount of research has been conducted on training programs which help better serve adults with dual diagnosis, but there have been minimal efforts for training mental health workers who serve youths. This project examines the need for training in community mental health workers in Michigan who work with youths. Results indicate that a quarter of youths being seen for treatment need substance use services, however most programs do not offer these services.

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Assessing the Need for Dual Diagnosis Training for Mental Health Workers Serving Youths in Michigan

An Honor's Thesis presented in partial fulfillment of the requirements for Departmental Honors in

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College of Arts & Sciences Eastern Michigan University

April, 2006

Kathleen "Lucy" McGoron

Abstract

Dual diagnosis is the co-occurrence of substance use and another psychiatric disorder. Research has shown that people with dual diagnosis have worse outcomes than those with only substance use or another psychiatric disorder. A considerable amount of research has been conducted on training programs which help better serve adults with dual diagnosis, but there have been minimal efforts for training mental health workers who serve youths. This project examines the need for training in community mental health workers in Michigan who work with youths. Results indicate that a quarter of youths being seen for treatment need substance use services, however most programs do not offer these services.

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Assessing the Need for Dual Diagnosis Training for Mental Health Workers Serving Youths in Michigan

Background

Comorbidity is the occurrence of two or more psychiatric disorders. The co-occurrence of substance use disorder and another psychiatric disorder is typically referred to as dual diagnosis (Geppert & Minkoff, 2004). For the purpose of identifying substance use when it cooccurs with another psychiatric disorder, it is defined as any use of a substance that interferes with treatment (Geppert & Minkoff, 2004). Substances can include alcohol, illegal drugs, misuse of prescription drugs, misuse of over the counter drugs, and inhalants. Although the term dual diagnosis has become common in the literature, individuals with this diagnosis typically have more than two disorders (Drake, et al., 2001).

Research has shown that individuals with dual diagnosis have worse outcomes than individuals with only a diagnosis of substance use or another psychiatric disorder. Individuals with both schizophrenia and substance use disorder were found to be hospitalized twice as often as individuals with only schizophrenia; relapse was four times as likely (Swofford, 1996). One explanation of these results could be that individuals with dual diagnosis do not fit into a system of care that is designed to treat one disorder at a time (Minkoff & Cline, 2004). Individuals with dual diagnosis pay substantially higher for psychiatric treatment because many need multiple services (Dickey& Azeni, 1996). Diagnosis of a dual disorder can be difficult. According to Geppert and Minkoff (2002) the key to diagnosis is to disentangle symptoms caused by the substance use disorder and other psychiatric disorders.

Substance Use and Youths

Substance use is often ignored in youths although research shows that it causes problems for them just as it does for adults. Substance use increases with age primarily between the fifth

and tenth grades (Nagel, McDougall, & Granby, 1996). This is especially true for males with alcohol use. Youths with comorbid alcohol and other psychiatric disorders also have worse treatment outcomes. Roberts and Corcoran (2005) studied 64 males in a court ordered partial hospital treatment program for evidence of substance abuse. The mean age of the participants was 16. All the participants met criteria for substance abuse or dependence from the *Diagnostic and Statistical Manual fourth edition (DSM-IV*; American Psychological Association, 2000) and were screened for psychopathic characteristics. The authors found that psychopathic characteristics were positively related to alcohol and drug use. Also, the participants in this study who had high scores of psychopathic characteristics did not respond well to the treatment program, causing many to withdraw. Participants with low scores fared much better and made steps towards sobriety and reform. Teenagers with a dual diagnosis also have higher levels of symptoms severity and lower levels of self-esteem (William, 1996).

Diagnosis and treatment of a dual diagnosis can be even more difficult for youths because there are fewer systems available for youths with a substance use disorder. Garland, Aarons, Brown, Wood, and Hough (2003) examined 974 youth aged 13-18 assigned to professional outpatient, 24-hour care, informal services or having suspected unreported substance use (not receiving any professional services). The youths were assessed for substance use disorder and psychiatric disorder and, based on this information, assigned to one of five groups: comorbid psychiatric and substance use disorder, psychiatric disorder only, substance use disorder only, no diagnosis with functional impairment, and no diagnosis without any functional impairment. The results of the study found that youths with substance use disorder with and without comorbid psychiatric disorder were most likely to receive informal services. It was also found that 30% of youths with comorbid substance use disorder did not receive any professional services and

suspected unreported substance use was greatest in youths with substance use disorder alone. From this it could be inferred that mental health workers are not adequately trained to recognize substance use disorder or that mental health workers fail to recognize the importance of treating substance abuse disorders in youth.

Since systems are often not in place for youths with dual diagnosis, this is a major barrier for service providers to overcome. Ponce and Jon (1991) reported at their residential treatment center the number of youths with dual diagnosis has drastically increased over the years. New systems had to be created for this increasing population. These new systems included learning about drug testing and referring to drug and alcohol help groups. This new wave of clients was reported to "pull down" the functioning of residents. The existing staff was also not adequately trained to handle this new type of client, which brought about the dilemma of retraining the current staff or hiring more qualified clinicians.

Types of Dual diagnosis

Geppert and Minkoff have separated the different types of dual diagnosis into four quadrants illustrated in Figure 1 (2004). They conjecture that the quadrant into which an individual falls often determines which system of care regards them as their responsibility. Individuals in quadrants three and four are typically viewed as the responsibility of the mental health care system while individuals in quadrant two are thought to be the responsibility of addiction specialists and individuals in quadrant one may go through many treatment settings. Characteristics of the individual can also play a role in which treatment options are sought. One study found that Caucasians were less likely to get drug treatment and African Americans were less likely to receive mental health services even though these two groups had the same level of impairment (Alvidrez & Havassy, 2005).

An Approach to Integrated Treatment for Adults

The finding that dual diagnosis patients had worse outcomes led to investigation of an effective treatment option for these individuals. In 1999 Minkoff and Regner studied an early dual diagnosis case rate program known as Choate to evaluate the potential of treatment in a managed care environment. The facility had components of crisis intervention, partial hospitalization, crisis residential, and outpatient services. All of the staff was cross-trained in mental health and substance use disorder. During the study there were 246 admissions to the program. Upon admission, 68% of the patients had little insight, motivation, or compliance regarding addiction and psychiatric treatment. Despite this, 56% of the patients maintained sobriety for 65 days and 49% of them were still sober after the 95-day follow-up. This study shed light on treatment possibilities for individuals with a dual diagnosis.

The Choate study led to the goal of creating specific evidence-based standards at the national level for patients with a dual diagnosis. A review of the literature revealed that there were no previous standards of care in any mental health system. An examination of 16 managed care organizations found that only one had any guidelines for individuals with dual diagnosis (Minkoff, 2001). A report was issued by the committee that included principles for the mental health providers and substance use treatment providers. This was the first step in creating a plan for an integrated system of care for individuals with co-occurring disorder.

Specific evidence-based practices were implemented into the Comprehensive Continuous Integrated Systems of Care developed by Minkoff and Cline (2004). This system of care includes nine principles of assessment and treatment, presented in Figure 2 (Geppert & Minkoff, 2004). This research led to the identification of four phases in recovery from a co-occurring disorder. They are acute stabilization, motivational enhancement, prolonged stabilization: active treatment or relapse prevention, rehabilitation and recovery (Geppert & Minkoff, 2004).

The Comprehensive Continuous Integrated Systems of Care is an approach to treatment of individuals with co-occurring psychiatric and substance use disorders. The CCISC has four basic characteristics. The first is that it is designed to change entire systems at all levels. The second is that it is designed to be used with existing resources inside the system and provides a template for getting outside services when necessary. The third characteristic is incorporation of the basic principles for assessment and treatment, which were obtained through evidence-based, clinical consensus and can be applied to a wide range of disorders. The final characteristic is that it is integrated treatment, which is based on the existing research and can be integrated into the philosophy of service providers. Integrated treatment means that mental health needs and substance use needs are addressed at the same time by the same service provider. Each CCISC addresses a plan for identifying an evidence based practice in a system of care, identifying a dual recovery peer support self help program, planning for programs that address residential needs, and making available services in a variety of levels of care. The CCISC has been implemented into the systems of care in several states.

Integrated Treatments for Youths

Cleminshaw, Shepler, and Newman (in press) have piloted a treatment termed Integrated Co-occurring Treatment (ICT) with a focus on youths. This model of treatment has been developed to be accessible to youths, families, and service providers. The ICT uses treatments and services which have shown to be effective in similar populations and have been adaptive for youths with dual diagnosis. The ICT is a home-based program. Just as the Comprehensive Continuous Integrated Systems of Care, developed by Minkoff and Cline, the ICT integrates the treatment of mental health and substance use needs.

Youths are assessed for mood disorders, psychotic disorder, trauma and anxiety related disorders. They are assessed for substance abuse based on the *DSM-IV* diagnostic criteria. Treatment focuses on 1) basic needs and safety, 2) individual functioning, 3) the family system, and 4) community connections and supports. After treatment care is provided to respond to relapses and teach long term recovery skills. Groups are used less often for youth treatment than with adults due to the possible negative peer influences.

The ICT model was piloted on 56 dual-diagnosed youths who were served by a team of community mental health workers in Ohio. Youths ranged from 13 years old to 18 years old. Of the 56 youths treated and discharged under this model of care, only 14 were recommitted back to the Department of Youth Services. The results of this implementation were found to be preliminary but promising.

Rationale for Current Study

In summary, co-occurring psychiatric and substance use disorders are difficult to treat and are predictive of poor outcomes. This creates a need for further training so mental health workers can better serve youths with a dual diagnosis. In the proposed study, Michigan clinicians will be surveyed to assess the need for further training in substance use problems. Some agencies participating in this study anticipate participating in CCISC training. This study has been designed with the hope of determining the need for that participation.

Research Hypothesis

Hypothesis One: There will be a significant difference between the percent of youths that report a substance use problem upon intake and the percent of youths that report a substance use problem after intake.

Hypothesis Two: Interest in substance use training will be related to the suspected extent of substance use services already in place, percent of suspected substance use in caseload, groupings of years in practice, and the extent of substance use training a clinician has received.

Methods

Procedure

Clinical supervisors were initially contacted via e-mail. Supervisors were given a summary of the project and two ways that their agency could participate. The two ways of administration were by mail directly to individual clinicians or via their supervisors. Supervisors who agreed to participate were mailed all study materials. Surveys, informed consents, and a self addressed and stamped envelope were providers for each clinician who was identified as working 50% of the time or with youths. No identifying information was recorded.

Clinical supervisors were asked to provide the sex and highest degree of all clinicians at their agency who meet study criteria. This was done to generate an understanding of the bias of the study. An example of the grid clinical supervisors were asked to fill out is provided in Appendix B.

Participants

In this study, participants were clinicians recruited from community mental health service provider agencies throughout Michigan. This study was designed to assess the need for training of mental health workers serving youths. Thus, clinicians eligible to participate in this survey

were those who work 50% of the time or more with youths. Because this survey was interested in substance use in an individual's caseload, participants who only worked with very young children (ages 0-5) and participants who did not have a caseload were excluded.

For this study, seventy-three participants completed the survey. Five participants were excluded because they only worked with very young children (ages 0-5), four were excluded because they did not have a caseload, and eight were excluded because they had not completed necessary elements in the survey. Results are based on a sample size of 52, ages 22 to 61 years old (M=42.5, SD= 10.97). The majority of participants were females (80.4%). The degrees participants had were: 46.4% had Masters of Social Work (MSW), 28.6% had Masters in the Arts or Sciences (MA/MS), 8.9% had a bachelor's degree, and 16.1% identified themselves as having another type of degree. The majority of participants (66.1%) identified their field of study as social work, 12.5% in counseling psychology, 8.9% in clinical psychology, and 12.5% identified working in another field. Approximately 82% of the participants worked as clinicians or clinical supervisors. Twelve participants (22.2%) had been working in their field for 4-6 years, 18.5% had been working for 7-10 years, 13% had been working for 11-15 years, and 11.1% had been working for 16-20 years. The participants reported working with youths age 6-12 (78.6%), worked with youths 13-18 (76.8%), youths 19-21 (21.4%), and children and parents (78.6%). Measures

A 21-question survey was developed for use in the study (see Appendix A). Questions in this survey were designed to assess level of clinician training, level of clinician experience, protocol for youth clients with substance use problems, and current caseload of youths with substance use problems. A major goal of this questionnaire was to assess the level of need, and

well as interest in further training in youth substance use problems, including training in a dualdiagnosis model.

The variables generated from the survey are listed in Appendix C. The variable substance use at intake was assessed with the question, "What is your estimate of the percent of your caseload seen for evaluation or treatment that report a substance use problem at the time of intake" The variable substance use after intake was assessed with the question, "What is your estimate of the percent of your caseload seen for evaluation or treatment that report a substance use problem at any time after intake?" Participants answered these questions on an 11-point scale (ranging from 0% to 100%). The variable substance use total caseload was derived at by adding together the variables substance use at intake and substance use after intake.

Interest in substance use training was assessed with the question, "Would you be interested in receiving training in the following areas of substance use?" Participants were asked to rate their interest level in the areas of diagnosis, treatment, on-going supervision, and the Minkoff model. The response options range from 1(Not Interested) to 7 (Very Interested). Scores for these four categories were averaged together to get a total interest score for each participant.

The extent of substance use services was assessed with the question, "What is your agency's current protocol when a youth presents with a substance use problem?" The response options were divided into three categories: trained staff in agency (answers 1, 2, 3), experienced staff (answer 4), & no special services (answers 5, 6, 7).

Groupings of number of years in practice was assessed with the question, "How long have you worked as a therapist?" The response options consist of 9 groupings of years of experience, ranging from "less to 6 months" to "30 years". Extent of substance use training

was assessed by asking participants to identify substance use training they received for both children and adults. The response options for adults and youths were divided into four categories for the purpose of analysis: didactic (answers 1, 2, 4), supervision (3, 5), self study (6, 7, 8), and none (9). Didactic response options included having substance use covered in a course, taking a course devoted to substance use, and attending a workshop. The supervision response option included receiving on-going supervision in graduate school or on the job. Self study included reading about substance use, reading a manual about treating substance use problems, and using a treatment manual for substance use problems in therapy with clients. *Data Analyses*

The first hypothesis was tested in order to get an understanding of the therapist's perception of youths in need of substance use services. The second hypothesis examines which variables are related to a therapist's desire to receive training in substance use problems.

The first hypothesis was tested with a one sample t-test. The variables being compared were substance use at intake and substance use after intake.

The second hypothesis was tested with several bivariate correlations. Correlations were constructed between the following variables: substance use at intake, substance use after intake, total substance use in caseload, interest in training on diagnosis, interest in training on treatment, interest in training on-going supervision, interest in training on the dual diagnosis model, and average interest in training for the four areas (i.e. diagnosis, treatment, on-going supervision, and dual diagnosis model). A one-way ANOVA was conducted to examine the relationship between interest in substance use training and extent of substance use services. An ANOVA was conducted to examine the relationship between interest in substance use training and extent of substance use training and groupings of years in practice. Several independent sample t-tests were conducted between the following

variables: dual diagnosis training, substance use training as applied to youths, substance use training as applied to adults, interest in training on diagnosis, interest in training on treatment, interest in training ongoing supervision, interest in training on a dual diagnosis model, and average interest in training. Several independent sample t-tests were conducted to examine the impact of training and training category (didactic, supervision, self-study, or other) on interest in training.

Results

Substance Use

Results of substance use in caseload are presented in graph 1. The mean of estimated percentage of youth substance use at intake was 13.21 (SD = 16.19). The mean of estimated youth substance use at anytime after intake was 14.11 (SD = 13.45). A one sample t-test revealed no significant difference between the percentage of substance use at intake and after intake (intake percent = 13.21, after intake percent = 14.11, t (55) = -.109, n.s.). The mean of the estimated substance use in families of youths with substance use was 43.48 (SD = 33.45). Thirty-three participants reported on what percentage of youths with a substance use problem improve in functioning. The mean reported was 24.09 (SD = 22.47).

Screening for Substance Use

Results of screening for substance use are reported in graph 2. Participants were asked to select all types of screening they conduct. The most frequent type of screening, 63.6%, was screening all preadolescents and adolescents receiving services. The next reported type of screening, at 27.3%, was screening youths for substance use problems if the family suspects a problem, followed by screening if the participant suspect at 21.8%. Twenty percent of the participants reported not screening youths for substance use at all. A smaller amount, 14.5%

screen all adolescents and 10.9% of participants report screening family members of youths if they suspect substance use.

Services for Youths

Results of services for youths are presented in graph 3. Participants reported their services for youths with substance use problems by indicating their agencies protocol for youths who present a substance use problem. The most frequent response, 62.5%, was to refer the youth to a specialty substance program. The responses "the integrated dual diagnosis disorders treatment model has been implemented at your agency," and "don't know" were both indicated by 8.9% of the participants. It was indicated by 7.1% of the participants that there are staff members who are experienced in substance use problems that treat youths. Treating youths at the participant's agency with a specialty substance use program for youths, a substance use specialist at the agency, and despite there not being a specialty substance program were each indicated by 3.6% of the participants. Finally, 1.8% of the participants reported having a protocol for youths with substance use problems other than what was listed. The responses that indicate no substance use services for youths including referring youth to a specialty substance use program, "don't know," treating youth at participants' agency despite there not being a substance use program were selected by 75% of participants. Only approximately 25% of the participants selected an answer which indicates that their agency has services for youths.

Past Dual diagnosis and Substance Use Training

The results of participants training are reported in graphs 4 and 5. Less than half (46.4%) of the participants had participated in any dual diagnosis training activities. Of those that had participated in training, over half (58.6%) participated in a training a year ago or more. Less than half (44.6%) of the participants had any substance use training as applied to adults and less than

half (41.1%) had any substance use training as applied to youths. Types of Substance use training as applied to youths were: 32.1% had didactic training, 17.9% had supervision, 39.3% had done self-study, and 10.7% had training that fell into the "other" category.

Interest in Training

Results of interest in training are presented in graph 6. Participants reported being the most interested in diagnosis and treatment of substance use problems in youths and dual diagnosis training (M = 5.27, SD = 1.83, 1.98, 1.98). Participants were least interested in receiving on-going supervision for substance use services (M = 4.22, SD = 2.32). The participants' averages for all the training categories was a mean of 5.01 (SD = 1.75).

Substance use total in caseload was positively correlated with interest in diagnosis substance use (r = .29, p < .01). Estimated substance use at intake was positively correlated with interest in diagnosis substance use, interest in training on treatment of youths with substance use disorder, and average for all training categories. A one-way ANOVA indicated that there were no significant differences between participants who had worked in their field for less than 6 months (M = 4.42), 6 months to one year (M = 5.00), 1-3 years (M = 5.34), 4-6 years (M = 5.00), 7-10 years (M = 4.90), 11-15 years (M = 4.04), 16-20 years (M = 5.30), 21-25 years (M = 6.5), or 26-30 years (M = 5.00) on average for all the training categories (F (8,44) = 501, n.s.). A one-way ANOVA indicated that there were no significant differences between participants who have a speciality substance use program for youths (M = 5.00), those who have a substance use for all the training categories model integrated into their agency (M = 6.30), those with experienced staff (M = 6.44), those with no specialty substance use program for youths (M = 5.00) and those who refer youths to a specialty substance use program (M = 4.66) on average for all training categories (F(6,48) = 1.53, n.s.).

An independent sample t-test revealed there were no significant differences in average interest for all training categories for participants who had dual diagnosis training (M = 5.12) and those who had not (M = 4.93; t(53) = .40, n.s.). An independent sample t-test revealed there were no significant differences in average interest for all training categories for participants who had substance use training as applied to youths (M = 5.22) and those who had not (M = 4.88; t(53) = .69, n.s.) An independent sample t-test revealed there were no significant differences in average interest for all training categories for participants who had didactic substance use training as applied to youths (M = 5.09) and those who had not (M = 4.98; t(53) = .21, n.s.). An independent sample t-test revealed there were no significant differences in average interest for all training categories for participants who had not (M = 4.98; t(53) = .21, n.s.). An independent sample t-test revealed there were no significant differences in average interest for all training categories for participants who had not (M = 4.98; t(53) = .21, n.s.). An independent sample t-test revealed there were no significant differences in average interest for all training categories for participants who had supervision in substance use training as applied to youths (M = 5.64) and those who had not (M = 4.89; t(53) = 1.18, n.s.)

An independent sample t-test revealed no differences in average interest for all the training categories for males (M = 5.15) and females (M = 4.96; t (52) = .305, n.s.). A one-way ANOVA indicated there were no significant differences between participants who have an MSW (M = 5.21) participants who had their MS/MA (M = 4.02), participants who have their Bachelors (M = 5.8), and participants who have another degree (M = 5.81) in their average for all the training categories (F(6,47) = 1.83). An independent sample t-test revealed no significant difference between participants who were licensed in their field (M = 5.47) and participants who are not licensed in their field (M = 4.92; t (.38) = .54, n.s.).

A one-way ANOVA revealed a significant difference in interest in training in treatment based on participants' field of study, F(3, 51) = .669, p < .01. A post-hoc Sheffe test indicated that participants who work in the field of clinical psychology (M = 2.4) were significantly less interested in receiving training in treatment than were participants who work in the field of social

work (M = 5.66), counseling psychology (M = 4.57) or "Other"(M = 6.00); these findings were significant at the .05 level. A one-way ANOVA indicated that participants from different fields of study differed in interest in training on dual diagnosis, F(3, 51) = 8.31, p < .001. A post-hoc Sheffe test indicated that participants who work in the field of clinical psychology (M = 1.8) were significantly less interested in receiving training in treatment than were participants who work in the field of social work (M = 5.58), counseling psychology (M = 5.14) or "Other"(M =6.13); these findings were significant at the .05 level. A one-way ANOVA indicated that participants from different fields of study differed in interest in training for the average of all training categories than did the entire sample, F(3, 51) = .669, p < .01. A post-hoc Sheffé test indicated that participants who work in the field of clinical psychology (M = 2.5) were significantly less interested on average for all the training categories than were participants who work in the field of social work (M = 5.28), counseling psychology (M = 4.75) or "Other"(M =5.66); these findings were significant at the .05 level.

Discussion

The present study was designed to determine the need for dual diagnosis training for mental health workers in Michigan who work with youths. It was hypothesized that there would be a significant difference in youths reporting a substance use problem at intake and those reporting a substance use problem after intake. Although the difference was not found to be significant, approximately half of substance use reported by participants was discovered after intake. This may indicate that effective screening methods are not being utilized and this could be due to lack of training

This study also hypothesized that interest in training would be related to the extent of substance use services already in place, percent of estimated substance use in caseload, years in

practice, and the extent of substance use training a clinician had received. Although interest was not found to be related to extent of substance use services in place, groupings of years in practice, or extent of substance use training, was found to be related to substance use in caseload and field of participant's degree. Most participants were interest in further training even if they had participated in past training. This could be due to a willingness to better serve their clientele.

Results indicated that over a quarter of the youths seen for treatment at the surveyed community mental health agencies in Michigan likely need substance use services. Models of dual diagnosis care created by Minkoff and Cline (2004) and Clemencies, Shepler, and Newman (in press) stress integrated care for those with a dual diagnosis. Integrated care would mean cross training for service providers and treatment of both the substance use problem and the mental health problems in the same setting. The high frequency of referring youths out to specialty substance use programs, and the low amount of training in substance use and a dual diagnosis model indicates that these youths are not receiving integrated care. Youths seen at these agencies that have dual diagnosis may be falling between the cracks in a system of care that is designed to treat one disorder at a time.

Mental health workers who have participated in this study have indicated an above moderate interest in receiving training in the four training categories: diagnosis, treatment, ongoing supervision, and the dual diagnosis model of care. They have indicated equally high interest in diagnosis, treatment, and a dual diagnosis model of care. Interest in further training was found to be related to substance use in caseload. Participants who had training other than in clinical psychology presented more interest.

This study indicates that dual diagnosis training is needed for mental health workers serving youths in Michigan. Efforts are underway to reshape the system of care for adults to treat those with dual diagnosis, but this training has been overlooked for most of the agencies providing services for youths.

This study is limited because it examined mental health workers' estimate of substance use in caseload not actual amount. More in-depth research needs to be done to examine actual substance rates. Research also needs to be done on services provided to youths and the impact of these services on youths' outcomes. If there is implementation of a dual diagnosis model in youth services, then, a follow-up study needs to be done to determine if this impacts staff training and protocol for youths with a substance use problem.

References

- American Psychiatric Association. (2000) Diagnostic and statistical manual of mental disorder (4th ed. text revision). Washington, DC: Author.
- Alvidrez, J. &, Havassy, B.E. (2005). Racial distribution of dual diagnosis clients in public sector mental health and drug treatment settings. *Journal of Health Care for the Poor and Underserved, 16*(1), 53-62.
- Cleminshaw, Shepler, and Newman (in press). The Integrated Co-Occurring Treatment (Ict) Model. *Journal of Dual Diagnosis*.
- Dickey, B. (1996). Persons with dual diagnoses of substance abuse and major mental illness: their excess costs of psychiatric care. *American Journal of Public Health*, 86(7), 973-977.
- Drake, R.E., Essock, S.M., Shaner, A., Carey, K.B., Minkoff, K., Kola, L et al. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services*, 52(4), 469-476.
- Garland, A.F., Aarons, G. A., Brown, S. A., Wood, P. A., & Hough, R. L. (2003). Diagnostic profiles associated with use of mental health and substance abuse services among highrisk youths. *Psychiatric Services*, 54(4), 562-564.
- Geppert, C.M.A. &, Minkoff, K. (2004). Issues in dual diagnosis: diagnosis, treatment, and research. *Psychiatric Times*, *21*(4), 103-107.
- Minkoff, K. (2001a). Developing standards of care for individuals with co-occurring psychiatric and substance use disorders. *Psychiatric Services*, *52*(5), 597-599.
- Minkoff, K. (2001b). Level of determination for individuals with co-occurring psychiatric and substance disorders. *Psychiatric Rehabilitation Skills*, *5*(1), 163-196.

- Minkoff, K. &, Cline, C.A.(2004). Changing the world: the design and implementation of comprehensive continuous integrated systems of care for individuals with co-occurring disorders. *Psychiatric Clinics of North America*, 27, 727-743
- Minkoff, K. &, Regner, J. (1999). Innovations in integrated dual diagnosis treatment in public managed care: the Choate dual diagnosis case rate program. *Journal of Psychoactive Drugs*, 31(1), 3-12.
- Nagel, L., McDougall, D. &, Granby, C. (1996). Students' self-reported substance use by grade level and gender. *Journal of Drug Education*, *26*(1), 49-56.
- Ponce, D.E. & Jo, H.S. (1991). Substance abuse and psychiatric disorders: The dilemma of increasing incidence of dual diagnosis in residential treatment centers. *Residential Treatment for Children & Youth*, 8(2), 5-15.
- Roberts, A.R. &, Corcoran, K. (2005). Adolescents growing up in stressful environments, dual diagnosis, and source success. *Brief Treatment and Crisis Intervention*, *5*(1), 1-8.
- Swofford, C.D. (1996). Substance use :A powerful predictor of relapse in schizophrenia. Schizophrenia Research, Vol 20(1-2), 145-151.
- William, C.B. (1996). Symptoms, severity, and personality differences among adolescent substance users with mental illness. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 57(4B), 2892.

Clinician Background Questionnaire

1. Your gender is O male O female	2. Your age is
	MFCC O LPN O RN B.S/B.A O PhD/Psy.D O M.D.
O School PsychologyO Substance useO Theo	ical Psychology O Counseling Psychology
5. Are you licensed or certified in the f	ield you specified above? O Yes O No
	be your job category? upervisor in Children's Services Other (please specify)
O 4-6 years O	6 months to 1 year 01-3 years
8. What age group do you currently wor □ 0-5 □ 6-12 □ 13-18 □ 19	rk with? (Check all that apply) 9-21 □ Parents and child clients □ Adults
treatment that report a substance use p 0 0 0 0 0	
treatment that report a substance use youths who report a substance use p 0 0 0 0 0	t of youths in your caseload seen for evaluation or e problem at any time after intake (not including problem at intake)? 0 0 0 0 0 0 50% 60% 70% 80% 90% 100%
11. What percentage of youth in your ca think likely have a substance use pro-	aseload seen for evaluation or treatment do you oblem, including those who never reported it or

who deny it?

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12. If you have treated youths with substance use problems, what percent had immediate family members with substance use problems?

											0
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Unsure

- 13. Do you screen for substance use problems in your job (i.e. ask specific question about substance use?) (check all that apply)
 - □ Yes, I screen all preadolescents and adolescents receiving services
 - □ Yes, I screen all adolescents receiving services
 - □ Yes, I screen youth if substance use is suspected to be a problem
 - □ Yes, I screen youths upon request by parents, school, or courts
 - □ Yes, I screen parents if substance use is suspected to be a problem
 □ No

If yes, what screening method and/or instrument do you use?_____

14. What is your agency's current protocol when a youth presents with a substance use problem?

Treat them at your agency:

- O your agency has specialty substance use services (e.g. support group, family services)
- your agency has a substance use specialist (e.g. a staff member who is a certified addictions counselor)
- the integrated dual diagnosis disorders treatment model has been implemented at your agency
- O your agency has staff who are experienced in substance use treatment
- O even though your agency does not have specialized substance use services for youths
- O Refer to program that specializes in substance use treatment
- Other (please specify):_____
- O Don't Know
- 15. For youths with a substance use problem who are treated at your agency, what percentages do you think show improvement in functioning?

0	0	0	0	0	0	0	0	0	0	0
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

- 16. Have you participated in training on co-occurring disorders using the integrated dual
 - diagnosis disorders treatment model?

O Yes O No

17. If yes to number 16, how long ago was this training?

0 1 month ago or less

- O Between 6 months and 1 year
- O Between 1 month and 6 months
 - O More than 1 year ago

18. If yes to number 16, what were the specifics of the training? Please estimate the total number of hours you received the following:

- Presentations by experts
- Meetings with consultants and/or peers
- Reading materials
- Presentation of cases
- Supervision of cases

The following questions ask about training other than a dual diagnosis training model done at your agency in Michigan.

- 19. Excluding possible training in the dual diagnosis model, have you received training in treating substance use problems in
 - a. adults? O Yes O No b. youths? O Yes O No

20. If yes to 19, what was the nature of the training? (Check all that apply and whether it applies to training in working with adults or youths)

Adults Youths

- □ □ In graduate school, treatment of substance use was included in a course.
- □ □ In graduate school, took a course that was totally devoted to treatment of substance use.
- □ □ In graduate training, received on-going supervision in treatment of substance use.
- □ □ Attended a workshop lasting at least 8 hours.
- □ □ On the job, received on-going supervision in treating substance use problems.
- \square \square Read about treating substance use problems.
- □ □ Have read a manual about treating substance use problems (e.g. manual for evidence based practice).
- □ □ Have used a treatment manual for substance use problems in therapy with my clients.
- \Box \Box Other (please specify):

For the following question please circle the number that corresponds to your level of interest

21. Would you be interested in receiving training in the following areas of substance use? Not InterestedModeratelyVery Interested									
Diagnosis	1			4		6	7	sicu	
Treatment	1	2	3	4	5	6	7		
On-going Supervision	1	2	3	4	5	6	7		
Dual diagnosis Disorders Treatment	1	2	3	4	5	6	7		

.

Appendix B

	his form all mental health work	ers m your agency
	Gender	Degree Please Write the Education Degree of the Clinician
Clinician 1	□ Male □ Female	
Clinician 2	□ Male □ Female	
Clinician 3	□ Male □ Female	
Clinician 4	□ Male □ Female	
Clinician 5	□ Male □ Female	
Clinician 6	□ Male □ Female	
Clinician 7	□ Male □ Female	
Clinician 8	□ Male □ Female	
Clinician 9	□ Male □ Female	
Clinician 10	□ Male □ Female	
Clinician 11	□ Male □ Female	
Clinician 12	□ Male □ Female	
Clinician 13	□ Male □ Female	
Clinician 14	□ Male □ Female	
Clinician 15	□ Male □ Female	

Appendix C

Variables

Variable name	Item on SA Questionnaire	Response Options	Categorization of Variable in Analyses
Substance use at intake	What is your estimate of the percent of youths in your caseload seen for evaluation or treatment that report a substance use problem at the time of intake?	0% to 100%	Percentages
Substance use after intake	"What is your estimate the percent of youths in your caseload seen for evaluation or treatment that report a substance use problem at any time after intake?"	0% to 100%	Percentages
Substance use Total Caseload	Substance use at intake + substance use after intake	0% to 100%	Percentages
Extent of substance use services	What is your agency's current protocol when a youth presents with a substance use problem	1-5 Treat at agency, 6 Refer to other agency, 7 Other, 8 Don't know	Trained staff in agency (1, 2, 3), experienced staff (4), & no special services (5, 6, 7).
Groupings of years in the practice	How long have you worked as a therapist?	Less than 6 months to 30 years or more	Less than 6 months, 6 months to 1 year, 1-3 years, 4-6 years, 7-10 years, 11-15 years, 16-20 years, 21-25 years, 26-30 years
Extent of substance use training	What is the nature of the training you received?	 In graduate school, treatment of substance use was included in a course. To 9. Other Please specify 	didactic (answers 1, 2, 4), supervision (3, 5), self study (6, 7, 8), and other (9)

Interest in training	Would you be interested in receiving training in the following areas of substance use?	1 (no) to 7 (very)	7 point scale
	Area 1 Diagnosis :	1 (no) to 7 (very)	7 point scale
	Area 2: Treatment	1 (no) to 7 (very)	7 point scale
	Area 3: On-going Supervision	1 (no) to 7 (very)	7 point scale
	Area 4: Dual diagnosis Model	1 (no) to 7 (very)	7 point scale
Average Interest in Training	(Interest Area 1 + Area 2 + Area 3+ Area 4)/4	1 (no) to 7 (very)	7 point scale

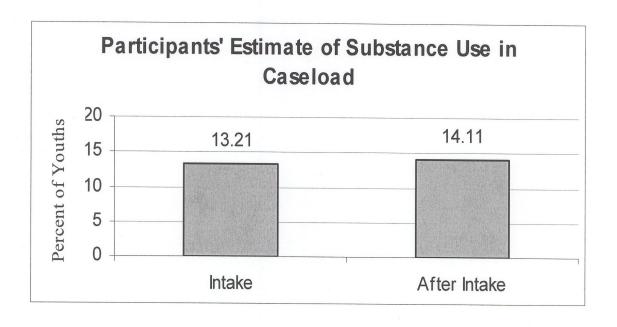
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The Four Quadrants of Dual diagnosis			
(Geppert and Minkoff, 2004)			
Quadrant I	Quadrant II		
Non-Serious Mental illness	Non-Serious Mental Illness		
and	and/or Substance-Induced		
Non-Serious Substance	Mental Disorder and Substance		
(Low-Low)	Dependence or		
	Severe Abuse		
	(low-high)		
Quadrant III	Quadrant IV		
Severe Mental Illness and	Severe Mental Illness and		
Non-Serious Substance	Serious Substance Dependence		
Abuse	(high-high)		
(high-low)			

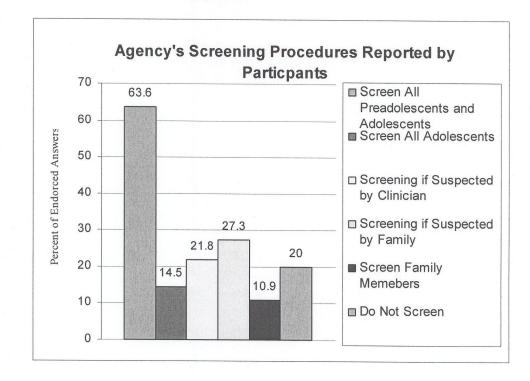
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Nine principles of Assessment and Treatment of Dual diagnosis Geppert & Minkoff (2004)		
Principle 1	Dual diagnosis is an expectation not an exception	
Principle 2	All people with a dual diagnosis are not the same	
Principle 3	Treatment success involves formation of empathic, hopeful, integrated	
Principle 4	treatment relationships, for complex clients The best outcomes result from continuous integrated treatment	
	relationships that provide disease management for both disorders across	
	multiple treatment episodes and settings.	
Principle 5	Integrated dual primary-diagnosis specific treatment interventions are recommended	
Principle 6	Intervention needs to be matched not only to diagnosis, but also to phase of recovery, stage of treatment and stage of change	
Principle 7	Intervention needs to be matched to the level of care and/or service intensity requirements utilizing well-established level of care assessment methodologies	
Principle 8	There is no single correct dual diagnosis intervention, nor single correct program.	
Principle 9	Outcome of treatment interventions are also unique, based on the above variables and the nature and purpose of the intervention.	



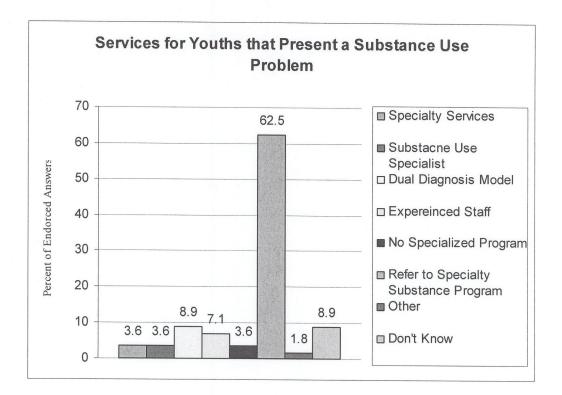


Graph 2

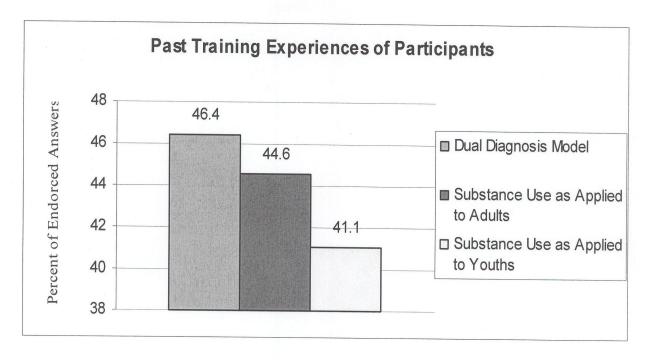


Note: Responses do not add to 100% because participants could endorse more than one option.



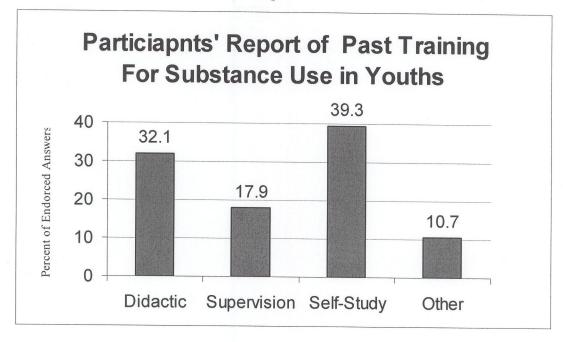






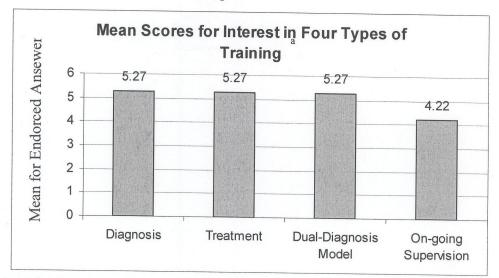
Note: Responses do not add to 100% because they are from four different response categories

Graph 5



Note: Responses do not add to 100% because they refer to four different response categories





^a Response options for interest in training was on a 7 point scale (1=not interested, 4=moderately interested, 7=very interested.

Note: Percentages do not add to 100% because options refer to interest in four different categories