REPORT OF A FULLY INTEGRATED OUTPATIENT PROGRAM FOR THE TREATMENT OF CO-OCCURRING SUBSTANCE USE AND MENTAL HEALTH DISORDERS

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Abstract

Objective

This report studies one model of integrated care for co-occurring disorders in an abstinence-based outpatient substance treatment center. Demographic, diagnostic and treatment outcome data are discussed.

Methods

The report includes a review of the literature regarding treatment of co-occurring disorders and a study of data collected from 314 patients who requested admission over a 12 month period from June 2011 through May 2012 to a fee for service program in Burlington, Vermont. Patients are admitted when diagnosed with an active substance use disorder and treated simultaneously for diagnosed co-occurring psychiatric disorder with pharmacotherapy and psychotherapy. Active withdrawal precludes admission.

Results

The patients studied revealed a 62.6% co-occurring disorders rate and mental health diagnoses of, primarily, depression and anxiety in this outpatient treatment center cohort. Seventy-four or 39.7% of the patients completed treatment and were abstinent at 12 months from alcohol and all illicit drugs.

Conclusion

The author's objective was to present diagnostic and treatment data reflective of typical integrated outpatient treatment programs to contribute to the discussion about the merits of full integration of treatment. The author concludes that the scope and complexity of treatment and research associated with this prevalent condition underscore the necessity for continuing efforts to develop effective treatment models. This report did not address nicotine dependence, detailed pharmacotherapy, relapse indicators and management.

Introduction

Studies of patients with co-occurring disorders highlight the heterogeneous nature of this high risk patient population and the complexity of standardizing their treatment (Baldacchino, 2007; Drake, et. al., 2001; Pincus, Spaeth-Rublee &Watkins, 2004).

Prevalence studies elucidate the expanding pattern of comorbid substance use in the psychiatrically ill. While reports of co-occurring disorder (COD) rates range from 15% to 85% (Weaver, et. al., 2003; Flynn and Brown, 2008; Torrens, Rossi, Martinez-Riera, Martinez-Sanvisens & Bulbena, 2012), the majority estimate that 50% to 60% of patients diagnosed with one or more substance use disorders are also diagnosed with one or more psychiatric condition (Sacks, Chandler & Gonzales, 2008; Tiet & Mausbach, 2007).

Treatment models and terminology have evolved over the past 20 years. For more than two decades, there has been a growing consensus that full integration of care is the most effective treatment for COD patients (Mangrum, Spence & Lopez, 2006; Drake, Mercer-McFadden, Muser, McHugo & Bond,1998). However, agreement on treatment models is lacking and much of the literature focuses primarily on inpatient, residential and community programs where more severely mentally ill patients receive treatment (Buckley & Brown, 2006; Drake, Mueser, Brunette & McHugo, 2004; Kandel, Hunang & Davies, 2001; Kessler, et. al., 1996; Watkins, Hunter, Burnam, Pincus & Nicholson, 2005; Siegfried, 1998).

Method

The setting for this report is the outpatient substance abuse rehabilitation program at Fletcher Allen Healthcare/University of Vermont. The program is identified as the DayOne program, a division of the Department of Psychiatry, Fletcher Allen Health Care, and is the clinical component of a major research center studying cocaine, opioid, alcohol and nicotine use. The facility is located in Burlington, one block from the Medical School.

Most of the referrals for the 314 patients who were studied originated from the primary care clinicians and residential/inpatient facilities. A complete list includes the legal system (i.e. probation officers, the drug court, private attorneys, Department of Child and Family, social service programs), residential treatment programs, other dual diagnosis and substance abuse services, private mental health clinicians, outpatient mental health programs, inpatient psychiatric services, primary care providers, student

health, employee assistance programs and some were self-referred or referred by friends, family or other DayOne program patients.

Results

From 6/1/11 to 5/31/12, patient data was collected, entered and stored on a software program developed for the purpose of this report and long-term data collection for the DayOne program (Table 2). During this 12 month period, 314 patients completed intake (pre-admission paperwork) and 251 returned for screening evaluations by the DayOne clinician. One hundred ninety-five, or 77.7% of the patients were recommended for admission. Twenty-two percent, 56 patients, either did not start or were not recommended because they were not appropriate for treatment, unwilling to commit to abstinence, required a higher level of care or were diverted to an inpatient or outpatient detox program. One hundred eighty-seven patients, or 74.6% of the screened patients, returned to start and engage in treatment. One hundred twenty-nine or 69% of the patients who started treatment, were diagnosed with a psychiatric disorder. All of the patients admitted for treatment had a substance use disorder. Seventy-four patients completed treatment. .

The patients studied included 81 females and 106 males ranging in age from 18 to 80 (see Table 1). Seventy-nine patients (42.2%) were younger adults, including college students. Fifty-six patients (29.9%) were age 30-45. Seventy-two percent were below the age of 45 and nearly 28% were between the ages of 46 to 80. Nine patients were 60 or over. One hundred forty-four, or 77%, were single or divorced and 47, or 23%, married. One hundred eighty-four patients were Caucasian and 3 were non-white.

The primary substance diagnosis was determined at the time of screening by history and drug choice and the subsequent data is derived from the 251 screened patients. One hundred twenty-four, or 50.8% were diagnosed with alcohol dependence or abuse; 80, or 32.8%, were treated for opioid dependence; 21, or 8.6%, with cocaine dependence; 16, or 6.6%, with marijuana dependence; 2, or 0.8%, with benzodiazepine dependence and 1 patient, or 0.4%, with other substance use (Table 2&3). Other substances were most often psychostimulants. Marijuana abuse was most frequently reported as the secondary substance diagnosis in 34% of cases and alcohol and cocaine were also secondarily abused in 43% of cases.

The mental health data reports the primary and secondary mental health diagnoses in patients admitted and identified with co-occurring disorder. Approximately 38% did not have co-occurring disorder. The mental health data lists 6 diagnostic categories (Table 2 & 3). Diagnoses were determined by results of ASI, BDI, BDAI, clinician evaluation and assessment by psychiatrist using DSM-IV criteria.

The software recorded all diagnoses from the time of screening. The mental health diagnoses formulated by the Licensed Alcohol and Drug Counselor (LADC) were corroborated for 43.8% of the patients who started treatment and referred to the psychiatrist for a psychiatric evaluation. At the time of screening 193 patients were identified with a mental health disorder. One hundred twenty-nine, or 69%, of these patients identified with a mental health disorder were further assessed and 117 or 62.6% had co-occurring psychiatric disorders. In all substance diagnostic categories except for marijuana, depression was the most prevalent diagnosis. Ninety-two patients, or 47.7%, of the screened patients with a mental health diagnosis had a primary diagnosis of depression. Seventy-two, or 37.3%, had an anxiety disorder (Watkins, et. al., 2004). Nineteen patients, or 9.9% were diagnosed with bipolar disorder. Five patients, or 3.1%, had ADHD. Two patients had no axis I diagnosis other than substance use, but were diagnosed with personality disorder. Two patients had other diagnoses. Other disorders included drug induced psychotic disorder. While depression and anxiety were ranked 1 and 2 in all substance categories, anxiety was the more prevalent mental health diagnosis among primary cannabis users (McGovern, Xie, Segal, Siembab & Drake, 2006; Schuckit, 2006).

There were requests for 82 psychiatric evaluations (43%) from the 187 patients who started treatment. Eighty-two patients, who were referred to the DayOne psychiatrist, presented for a variety of reasons and range of chief complaints. Approximately 35 of the COD-diagnosed patients were actively engaged in outpatient mental health treatment at the time of treatment. These patients did not request and were not initially referred to the DayOne psychiatrist; 12 of these patients later requested a second opinion. Their mental health treatment outside DayOne consisted of psychotherapy with a mental health professional and/or medication management by a primary care physician or in less than 2%, by a psychiatrist.

More than half of those evaluated by the psychiatrist, had a history of psychiatric symptoms treated unsuccessfully with pharmacotherapy by non-psychiatric physicians. In some cases, the medication

was recommended by their therapist and prescribed by their primary care physician or psychiatric nurse practitioner. The pharmacotherapy was occasionally started during an inpatient admission to a psychiatric facility or dual diagnosis residential facility or during prior contact with a psychiatrist. More than 75% of the patients seen by the DayOne psychiatrist were currently taking one or more prescribed psychotropic medications started or maintained by primary care physicians who were agreeable to the consultation and assistance with medication management. Less than 5% of these patients had not informed their primary care physician of their substance-use disorder and received prescribed psychiatric medications while continuing to use substances. Approximately 2% of these patients were clinically impaired by the side effects of multiple prescribed medications, sometimes combined with continued use of substances at the time of screening.

Approximately 20% of these patients engaged in brief psychotherapy with counselors or therapists outside of DayOne were dissatisfied with treatment and had either discontinued mental health treatment or were encouraged by their providers to seek psychiatric evaluation for medication. Depending on the stage of substance use and treatment at the time of the therapeutic encounter, patients sometimes failed to disclose their substance use to their counselors or therapists. Approximately 20% of these patients were referred to DayOne for outpatient aftercare and medication management after residential treatment and approximately 2% after psychiatric inpatient care.

Discussion

This report would be incomplete without a discussion of the complexities associated with treating and researching this patient population. The literature, while prolific in recent years, has concluded with more questions than answers. Despite the strong emphasis in the past 2 decades on integrated treatment for dual diagnosis, considerable barriers have prevented implementation and evidence-based research has not standardized guidelines for a uniform approach to care (Watkins et. al., 2004).

As other reports suggest, perhaps we must first clarify what diagnostic class and severity of illness the majority of co-occurring disorder population have in common (Harris and Edlund, 2005). Based on our results, the patients treated in fee for service outpatient programs for substance abuse and comorbid mental health problems are primarily diagnosed with a variety of affective including bipolar disorder and anxiety disorders including PTSD. To a lesser extent, patients are diagnosed primarily or secondarily with ADHD.

Axis II diagnoses include borderline personality and antisocial disorder. There are also a smaller number of younger patients of college age who present with brief psychotic disorder, usually drug induced. Patients diagnosed with schizophrenia and severe mental illness are seen infrequently in substance abuse programs and treated primarily in mental health programs (Watkins,et. al., 2004). Fifty-five patients had a secondary mental health diagnosis.

Secondly, the heterogeneity of the treatment population is complicated by the lack of consensus about the definition of an integrated program. Many recent reports have expanded the variety of integrated models ranging from associate programs, coordination of treatment sometimes sequential, geographically colocated programs, parallel programs and partially to fully integrated programs. There is still too little data about the cost benefits of each and whether differences in the program influence outcome. Lastly, what needs to be more clearly defined are guidelines to a more efficacious treatment model. The literature has promulgated a long list of recommendations, but comparative models are frequently disparate in results.

Conclusion

Patient data collected in this study revealed a cooccurring disorders rate of 62.6%. The primary substance use diagnoses reported in this study were alcohol, opioid, cocaine and marijuana dependence ranked in that order. The primary mental health diagnoses were affective and anxiety disorders which is consistent with data from other outpatient substance use programs. Many patients had comorbid psychiatric disorders and required more than one psychiatric medication. Over the course of this 12 month study, 39.7% of the patients who started the program maintained abstinence and completed the program regardless of primary substance.

Flexible treatment models that promote cost-effective long-term relapse prevention and improved treatment outcomes should be tested and reported. This paper supports the need for continued research and study of integrated treatment models.

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References

Baldacchino, A. (2007). Comorbid misuse and mental health problems: Policy and practice in Scotland. *American Journal Addictions, 16,* 3, 147-159.

Buckley, P.F., Brown, E.S. (2006). Prevalence and consequences of the dual diagnosis of substance abuse and severe mental illness. *Journal of Clinical Psychiatry, 67,* 7, 5-9.

Drake, R.E, Essock, S.M., Shaner, A., Carey, K.B., Minkoff, K., Kola, L., Lynde, D., Osher, F.C., Clark, R.E., Rickards, L. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services, 52,* 4, 469-476.

Drake, R.E., Mercer-McFadder, C., Muser, K.T., McHugo, G.J., Bond, G.R. (1998). Review of integrated mental health and substance abuse treatment for patients with dual disorders. *Schizophrenia Bulletin, 24,* 589-608.

Drake, R.E., Mueser, K.T., Brunette, M.F., McHugo, G.J. (2004). A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatric Rehabilitation Journal, 27,* 4, 360-374.

Flynn, P.M., Brown, B.S. (2008). Co-occurring disorders in substance abuse treatment: Issues and prospects. *Journal of Substance Abuse Treatment, 34,* 1, 36-47.

Harris, K.M., Edlund, M.J. (2005. Use of mental health care and substance abuse treatment among adults with co-occurring disorders. *Psychiatric Services, 56,* 8, 954-959.

Kandel, D.B., Hunang, F.Y., Davies, M. (2001). Comorbidity between patterns of substance use dependence and psychiatric syndromes. *Drug and Alcohol Dependence, 64,* 233-241.

Kessler, R.C., Nelson, C.B., McGonagle, K.H., Edlund, M.J., Frank, R.G., Leaf, P.J. (1996). The epidemiology of co-occurring addictive and mental disorders: Implications for prevention and service utilization. *American Journal of Orthopsychiatry, 66,* 17-31.

Mangrum, L.F., Spence, R.T., Lopez, M. (2006). Integrated versus parallel treatment of co-occurring psychiatric and substance use disorders. *Journal of Substance Abuse Treatment, 30,* 1, 79-84.

McGovern, N.P., Xie, H., Segal, S.R., Siembab, L., Drake, R.E. (2006).. Addiction treatment services and co-occurring disorders: Prevalence, estimates, treatment practices and barriers. *Journal of Substance Abuse Treatment, 31,* 3, 267-275.

Pincus, H.A., Spaeth-Rublee, B., Watkins, K.E. (2004). The case for measuring quality in mental health and substance care. *Health Affairs, 30,* 4, 730-736.

Sacks, S., Chandler, R., Gonzales, J. (2008). Responding to the challenge of co-occurring disorders: Suggestions for future research. *Journal of Substance Abuse Treatment, 34*, 139-146.

substance use disorders and psychiatric conditions. A*ddiction 101,* 1, 76-88.

Siegfried, N. (1998). A review of comorbidity: Major mental illness and problematic substance use. *Australian and New Zealand Journal of Psychiatry 32,* 707-717.

Torrens, M., Rossi, P.C., Martinez-Riera, R., Martinez-Sanvisens D., Bulbena, A. (2012). Psychiatric comorbidity and substance use disorders: Treatment in parallel systems or in one integrated system? *Substance Use and Misuse 47,* 1005-1014.

Watkins, K.E., Hunter, S.B., Burnam, M.A., Pincus, H.A., Nicholson, G. (2005). Review of treatment recommendations for persons with co-occurring affective or anxiety and substance abuse disorder. *Psychiatric Services, 56,* 8, 913-926.

Watkins, K.E., Hunter, S.B., Wenzel, S.L., Tu, W., Paddock, S.M., Griffin, A., Ebener, P. (2004). Prevalence and characteristics of clients with co-occurring disorders in outpatient substance abuse treatment. *American Journal of Drug Alcohol Abuse, 30,* 4, 749-764.

Weaver, T., Madden, P., Charles, V., Stimson, G., Renton, A., Tyrer, P., Barnes, T., Bench, C., Middleton, H., Wright, N., Paterson, S., Shanahan, W., Seivewright, N., Ford., C. (2003). Comorbidity of substance misuse and mental illness in community mental health and substance misuse services. *British Journal Psychiatry, 183*, 304-313.