Introduction

The Challenges of Dual Diagnosis: Managing Substance Abuse in Severe Mental Illness

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he course and treatment of severe mental illness can be complicated by the co-occurrence of substance use disorders. According to the Epidemiologic Catchment Area study, 47% of those with schizophrenia and 56% of those with any bipolar disorder meet the criteria for substance abuse or dependence at some point during their life. Patients with the dual diagnosis of substance use and schizophrenia tend to have an earlier age at onset and experience more frequent and longer periods of hospitalization, have more depressive and psychotic symptoms, and have more episodes of suicidal behavior, violence, and legal and financial problems than those who do not use or abuse drugs or alcohol. Patients with schizophrenia and comorbid substance use disorder also have an increased risk of relapse because they are less likely to adhere to their medication regimen. The impact of substance abuse on the course of bipolar disorder is just as grave. Compared with patients with bipolar disorder without substance use disorder, patients with bipolar disorder and a comorbid substance use disorder may experience an earlier age at bipolar onset. These patients are also less likely to experience remission and more likely to attempt suicide than those with bipolar disorder alone.² Despite the high prevalence of this co-occurrence, substance use disorder in patients with severe mental illness often remains undetected in both adolescents and adults.

In response to the need for more attention to dual diagnosis of severe mental illness and substance use disorders, this series of articles will explore the approaches to understanding and treating these comorbid disorders, focusing particularly on schizophrenia and bipolar disorder and substance abuse. The authors address the prevalence of dual diagnosis, options for the integrated psychosocial treatment of these disorders, substance abuse and comorbidities in adolescents, and specific medication treatment of substance abuse comorbid with bipolar disorder or schizophrenia.

Peter F. Buckley, M.D., defines dual diagnosis in the context of substance use disorders and severe mental illness and reviews the prevalence and impact of this comorbidity in the United States and internationally. The implications for comorbid substance use in mental illness are troubling. Buckley reports that over half of the schizophrenic patients who exhibited violent behavior had a comorbid diagnosis of substance abuse. Incarceration and increased risk of suicide in patients with comorbid diagnosis are just a few of the other disturbing potential consequences of the co-occurrence of substance use and schizophrenia or bipolar disorder. Because these disorders have such an important impact on each other during the course of illness, Buckley stresses the importance of integrating the treatment of comorbid disorders for a more effective approach. Buckley suggests that because the co-occurrence of severe mental illness and substance use disorders is so common, understanding these disorders in respect to each other could lead to a better understanding of the neurobiology of addiction and mental illness.

Mary F. Brunette, M.D., and Kim T. Mueser, Ph.D., discuss the importance of integrated dual disorder treatment (IDDT) for effective long-term management of co-occurring substance use disorder and severe mental illness. One study³ shows that patients receiving integrated treatment are more likely to achieve substance abuse remission than those receiving parallel treatment. Because schizophrenia, bipolar disorder, and substance use disorder are chronic illnesses, Brunette and Mueser stress the importance of offering treatment in a long-term format. They list and discuss the components of IDDT psychosocial intervention and the strategies of tailoring treatment to the patient's level of motivation to change. The article outlines the course of treatment from initial recognition of the co-occurring disorders to maintenance and relapse prevention. Brunette and Mueser discuss the synergistic effects of pharmacologic treatments combined with psychosocial interventions. Medication is important in stabilizing mental

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illness prior to treatment for substance use, and psychosocial techniques can be used to enhance adherence to medication treatment in the long-term management of comorbid disorders. Brunette and Mueser conclude that individualized long-term integrated treatment for both substance use disorder and severe mental illness is the most effective way to approach the management of patients presenting a dual diagnosis.

Because substance use is associated with an earlier age at onset of both bipolar disorder and schizophrenia, the prevalence of substance use in adolescents is an important issue. In her review of this topic, Deborah Deas, M.D., M.P.H., notes that the already high rates of adolescent substance use are often complicated by psychiatric comorbidity. Similarly, childhood mental illness is associated with higher rates of substance abuse and dependence. Deas reports that the lifetime prevalence for alcohol use among adolescents may be as high as nearly 85%, and youths who abuse alcohol are generally more likely to use illicit drugs. Diagnosing substance abuse or dependence disorders in adolescents can be complicated. Although not all adolescents will meet the full requirements of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision, for substance abuse or dependence, the existence of even 2 symptoms of substance dependence translates into a higher probability of developing a dependence disorder later in life. Deas concludes by suggesting that the earlier the initiation of treatment in adolescents for comorbid substance use and psychiatric disorders, the better the outcome.

Lana A. Vornik, M.S., and I provide an overview of managing substance use disorders specifically in the context of bipolar disorder. The rates of substance use disorders in bipolar patients are higher than those in the general population, and substance-related disorders are more common in patients with bipolar disorder than any other Axis I illness. We discuss the reasons that people with bipolar disorder use substances and the impact of substance abuse on the course of bipolar disorder. In agreement with Brunette and Mueser, we discuss the importance of integrated treatment models of pharmacotherapy and psychotherapy. We present the current pharmacologic treatment options for the co-occurrence of these disorders and discuss spe-

cifically studies of carbamazepine, lithium, and valproate for patients with dual diagnosis. Limited data exist for the efficacy of atypical antipsychotics for patients with dual diagnosis, and we review the available literature, suggesting that further studies would be beneficial.

Alan I. Green, M.D., highlights theories on how and why substance abuse occurs in schizophrenia. Green discusses the treatment of dual diagnosis schizophrenia and substance use disorders, particularly with atypical antipsychotics. He also discusses the pharmacodynamics of some atypical antipsychotics. Compared with typical antipsychotics, atypical antipsychotics might be more efficacious for the treatment of dual diagnosis because they are associated with fewer extrapyramidal side effects, lower rates of relapse, and better overall tolerability for patients with schizophrenia. Clozapine has the most information regarding its efficacy in dual diagnosis and has been shown to be effective in correcting the neurologic mechanisms that underlie substance abuse in patients with schizophrenia.

This supplement highlights the importance of understanding substance abuse in the context of severe mental illness. As the authors of this supplement explain, clinicians face many challenges in identifying dual diagnosis substance use disorders and severe mental illness, and identifying these illnesses early is important, especially in susceptible adolescents, in hopes to avoid serious complications from dual diagnosis later in life. Comorbid substance use disorders and severe mental illness complicate one another's courses, making treatment difficult. Research on treatments for dual diagnosis specifically of substance use disorders in bipolar disorder and schizophrenia has been limited, but the available treatment options reviewed in this supplement may be helpful in treating this population.

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