Bipolar affective disorder and substance abuse

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Abstract

Epidemiological studies show that substance abuse and bipolar disorder are strongly associated. The reasons include of self-treatment and poor self-control during hypomanic/manic periods. Substance abuse influences the outcome of bipolar disorder and makes diagnosis more difficult. Patients with bipolar disorder who abuse substances tend to have a worse outcome and greater suicidal risk. If good outcomes are to be achieved, substance abuse in these patients cannot be ignored. An integrated treatment approach of both conditions together probably gives the best results.

Key words: substance abuse, alcohol, bipolar disorder, outcome, suicide, clinical implications.

Introduction

Both bipolar affective disorder and substance abuse are conditions that afflict many individuals with potentially disastrous consequences. These two conditions co-exist more than is expected by chance and influence each other.

Epidemiology

Studies have repeatedly shown that the rate of substance abuse in bipolar patients is higher than that in the general population (1). The Epidemiological Catchment Area (ECA) study (2) was a survey of 20,000 individuals in five U.S. communities. It showed a particularly high association between substance abuse and bipolar disorder. 60.7% of those with bipolar 1 disorder had a diagnosis of alcohol or other substance abuse at some point in their life, while in bipolar 2 disorder 48 % had such a diagnosis. This was roughly six times that found in the general population. Similar trends were found in the National Comorbidity Survey (3) that was conducted on individuals aged between 15 and 54. This study showed that bipolar patients were nearly 10 times as likely to have alcohol dependence than the general population. These patients also had a rate of 8 times as much as that in the general population of dependence on a psychoactive substance other than alcohol.

The reasons for the association between substance abuse and bipolar disorder

One of the principal reasons put forward for such a strong association between substance abuse and bipolar disorder is what is known as 'the self-treatment hypothesis'. This means that patients who have bipolar disorder use substances to alleviate their symptoms. For example, sedatives (such as alcohol or opiates) can be used to decrease the hyperactivity of hypomania or mania, or to decrease the anxiety and distressing symptoms of a depressive state. An alternative explanation is that during manic or hypomanic episodes the associated lack of self-control can lead to more alcohol or substance abuse (4, 5). It appears that the hypomanic/manic phase plays a key role in this association because the association between substance abuse and bipolar disorder is stronger than that between substance abuse and unipolar depression (3). Further studies need to clarify if use of substances can trigger the onset of bipolar illness.

The impact of substance abuse on bipolar disorder

The abuse of alcohol and substances has a strong impact on the manifestation, course and outcome of

bipolar disorder. It particularly causes instability of the illness, results in worse outcome and causes a higher suicidal risk. It also poses diagnostic difficulties.

a. Instability in the manifestation of the illness

Substance abuse in patients with bipolar disorder may increase the acceleration of the manifestation of the condition, and hasten the transition from hypomanic to manic state. Also when there is presence of substance abuse during an active episode of bipolar illness this episode tends to be longer (6). An important component in the prognosis of bipolar disorder is compliance with treatment. The erratic behaviour associated with substance abuse makes such compliance with treatment more problematic than usual.

b. Worse Outcome

Bipolar disorder in general has a better prognosis than schizophrenia. In a study conducted by Kaworski et al. (7), 40 subjects with schizophrenia were compared with 40 subjects with bipolar disorder. Both sets of patients were in the stable phase of the disorder. Patients with bipolar disorder who did not have substance abuse had better social adjustment and better outcome of their illness than those patients with bipolar disorder who did abuse substances. Also, the patients with bipolar disorder who abused substances had poor social adjustment and poor outcome, comparable to that of patients with schizophrenia

c. Suicidal Risk

Hawton et al. (8) in a meta-analysis of 36 studies conducted between 1966 and 2003 identified abuse of alcohol and drugs as one of the main risk factors for nonfatal suicidal behaviour. In the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) (9), 1,643 individuals with a DSM-IV lifetime diagnosis of bipolar disorder were studied. More than half of these (54%) also reported alcohol use disorder, and they were at greater risk for suicide attempt than those individuals without alcohol use disorder (adjusted odds ratio=2.25; 95% CI, 1.61-3.14).

d. Diagnostic Difficulties

Agitation and hyperactive behaviour associated with intoxication by substances or withdrawal states from these substances can mimic the behaviour associated with hypomania or mania. Such an example is stimulants causing hyperactivity or psychotic symptoms. On the other hand, substances can suppress the manifestations of bipolar illness, making it difficult to reach a diagnosis. For example, in a patient with bipolar disorder and heavy alcohol abuse, the manifestations of the bipolar illness tend to be suppressed by the effects of the alcohol.

Clinical implications

Considering the negative impact of substance abuse on the outcome of bipolar disorder, when the two conditions are present together it does not make sense to try to achieve mood stability without aiming to reach abstinence as well. With the trend towards the specialisation of services, treatment for affective disorders and substance misuse tends to be provided by different services in different settings. However, the best outcome occurs when an integrated treatment approach for both these conditions together is provided (10). In Malta we have a 9 year experience of offering services for dual diagnosis patients jointly by the Psychiatric Services and the services catering for substance abuse (11). These services are for both inpatient and outpatient settings. The outcomes since these services were set up seem to be better. It is very important that, in their assessment, all patients with bipolar disorder are screened for the presence of substance abuse. Research is underway to establish if there are particular approaches of pharmacotherapy and psychotherapy that are mostly effective in these circumstances. The conventional wisdom so far is to use the same approaches used when one of the two conditions manifests on its own, but in an integrated way.

GP Comment

What have I learned from this paper?

This article highlights the significant correlation between bipolar disorder and substance misuse. Not only does it accelerate transition from a hypomanic to manic state but can also increase risk of suicide. Substance misuse increases the possibility of non-compliance and thereby affects prognosis. Diagnosing bipolar can be more challenging in those who also misuse substances, as they may present with symptoms disguising bipolar traits. Therefore a combined, integrated approach to treating both bipolar mood disorder and substance misuse will achieve a better outcome for patients.

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