

Nicotine Dependence in Schizophrenic and Bipolar Disorder Patients: A Comparative Study

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Abstract

Objective: we aimed to determine the prevalence of smoking and the severity of nicotine dependence in patients with schizophrenia and bipolar disorder and find the relationship between smoking status and some sociodemographic and clinical characteristics. **Method:** a sample of consecutive admissions of all patients with schizophrenia (n=70) and bipolar disorder (n=46) admitted to psychiatric units of a private hospital over a period of three months was recruited. Patients were diagnosed according to DSM-IV. Demographic and clinical data were collected. The total sample (n=116, male=75.9%) was assessed as regards the cigarette smoking status and the age of initiation of smoking. For the smokers, the severity of nicotine dependence was assessed using the Fagerstrom Tolerance Scale. A control group (n=30) smokers, who were age and sex matched with the case smokers, were assessed for the severity of nicotine dependence. Results: 58.6% of patients with schizophrenia were smokers (60% of them were dependent) compared to 32.6% of patients with bipolar disorder (38.5% were dependent). In the total case sample, smokers differed significantly from non smokers as regards the diagnosis, sex and history of substance abuse and their age of initiation of smoking correlated with the age of onset of the disorder. 83.6% of cases that were current smokers initiated smoking at or before the onset of the disorder (72.7% before). Schizophrenia smokers initiated smoking significantly earlier than bipolar smokers. Case smokers scored significantly higher on the Fagerstrom Tolerance Scale than control smokers denoting severer nicotine dependence but there were no significant difference between schizophrenia and bipolar smokers on the scale score. **Conclusions:** Nicotine dependence is higher in patients with schizophrenia and bipolar disorder compared to normal controls. Factors that influence cigarette smoking in psychiatric patients include diagnosis, sex and history of substance abuse. Age of initiation of smoking may be related to the onset of the disorder.

Introduction:

Patients with mental illness have a higher incidence of smoking than the general population and are the major consumers of tobacco products (Leonard et al., 2001). Several recent findings suggest that increased smoking in the mentally ill may have an underlying biological etiology (Leonard et al., 2001). However, the relationship between smoking and psychiatric status may not be simply a biological one as several socio-cultural and economic factors could influence smoking behavior (Srinivasan and Thara, 2002). Research during the past decade has revealed that nicotine is an especially addictive substance for people with schizophrenia and bipolar disorder. Approximately 85% of people who have schizophrenia are also heavy cigarette smokers (and 60% to 70% of people with bipolar disorder) and they smoke two to three times as much as an average smoker. Little is known about factors that affect smoking in these patients. This may reflect self-medication of symptoms

and/or adverse effects of neuroleptics (Weiser et al., 2004, Tidey et al., 2005). Some studies have found that patients with schizophrenia may show a greater frequency of tobacco smoking than patients with mood disorders (de Leon et al., 2002), others have found no difference in the rate of smoking between bipolar and schizophrenic patients (Itkin et al., 2001). The present study aims are:

- To determine the rates of smoking in schizophrenic and bipolar disorder patients.
- To find the relationship between smoking status and some sociodemographic and clinical characteristics.
- To test the hypothesis that severely mentally ill patients have higher nicotine dependence when compared with control smokers.
- To compare the severity of nicotine dependence in schizophrenia and bipolar disorder patients.
- To explore the relation of the age of initiation of smoking in schizophrenia and bipolar disorder