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Characteristics of smokers with a psychotic disorder and implications for smoking interventions

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Abstract

Despite high rates of smoking among people with psychotic disorders, and the associated health and financial burden, few studies have investigated the characteristics of this group of smokers. This paper reports data from 298 smokers with an ICD-10 psychotic disorder residing in the community (56.7% with schizophrenia or schizoaffective disorder), including an examination of their demographic and clinical characteristics, smoking behaviours, severity of nicotine dependence, stage of change, and reasons for smoking and for quitting. Standardized self-report instruments were used, in conjunction with structured interviews, as part of the first phase of a randomized controlled trial. On average, participants smoked 30 cigarettes per day, commenced smoking daily at about 18 years of age (5 years before illness onset), and had made 2–3 quit attempts in their lifetime. Higher levels of nicotine dependence and concurrent hazardous use of alcohol or cannabis were associated with a younger age at smoking initiation. The present sample was also more likely to report stress reduction, stimulation and addiction as reasons for smoking, compared to a general sample of smokers. Males, precontemplators and participants with concurrent hazardous substance use cited fewer reasons for quitting smoking. These and other subgroup differences in smoking characteristics are used to illustrate potential implications for the nature and timing of smoking interventions among people with a psychotic disorder.

Keywords: Australia; Psychotic disorders; Smoking; Smoking cessation; Motivation; Nicotine

1. Introduction

1.1. Smoking and psychosis

The prevalence of smoking among people with psychotic disorders is very high. A recent meta-analysis of 42 studies across 20 countries (De Leon and Diaz, 2005) reported that the odds of people with schizophrenia

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or schizoaffective disorder being current smokers was 5.3 times higher compared to the general population. The corresponding odds, relative to other severe mental disorders, were 1.9, even after controlling for potential confounding variables. Such high rates of smoking among those with psychotic disorders may contribute to the 20% reduction in life expectancy reported in schizophrenia (Wilhelm, 1998). Further evidence for such an association is the finding that ischaemic heart disease is the most common cause of death among people with schizophrenia (Lawrence et al., 2001).

Based on the large number of studies describing high rates of smoking among schizophrenia and schizoaffective disorder samples, De Leon and Diaz (2005) have posited that a biological factor may make these groups more prone to smoke. In reviewing the literature on the 'effects of nicotine in populations genotypically and/or phenotypically related to schizophrenia', Kumari and Postma (2005) have suggested that smoking may serve as a form of self-medication to correct for sensory and cognitive deficits in schizophrenia. They further suggest that the beneficial effects of nicotine may be explained in terms of the drug's interaction with the dopaminergic and glutamatergic transmitter systems. In addition, Ziedonis and Williams (2003) have summarized the numerous psychological and social factors that may act to increase the risk of nicotine addiction among people with psychotic disorders. These include: limited education; poverty; unemployment; peer pressure; and the values held by those within the treatment system. As some patients start daily smoking after the onset of schizophrenia, there may be influences from other patients and the treatment environment on smoking behaviours. Certainly, neither mental health nor general medical providers routinely diagnose nicotine dependence, which would better allow for the opportunity to discuss smoking cessation (Peterson et al., 2003).

While many smokers with schizophrenia would like to stop smoking, available data suggest that smoking cessation rates among people with schizophrenia are quite low. The cessation rates reported in De Leon and Diaz's (2005) meta-analyses were 9% for schizophrenia versus 14% to 49% for the general population. Ziedonis and George (1997) have suggested that this may relate to lower motivation to quit. Motivation for smoking cessation refers both to reasons why smokers wish to quit and to the strength of their desire to do so (Marlatt, 1988). Little is known about the motivation to quit among people with a psychotic disorder.

The stages of change model, which measures smokers' readiness to quit, has been well validated in general samples (Prochaska et al., 2004). Diclemente et al. (1991) demonstrated that smokers in the precontemplation and contemplation stages of change were significantly less likely to make a quit attempt over a 6-month period compared to those in the preparation stages. Those in the preparation stage were also more successful in their quit attempts. In a recent study of smoking among people who were inpatients in a psychiatric hospital, Reichler et al. (2001) reported that nearly one-third of the sample (29.5%) were precontemplators, while almost half (45.9%) were either contemplating quitting or reducing their smoking and a small number were preparing for change (13%) or taking action (11.6%). Addington et al. (1997) reported comparable levels of motivation among a group of people with schizophrenia.

Curry et al. (1990) have posited a model of motivation based on intrinsically versus extrinsically motivated behaviour. Intrinsically motivated behaviours are those for which the rewards are internal to the person (such as one's health), while extrinsically motivated behaviours are performed in response to external rewards (such as money) or punishment. Curry et al. found that successful quitters differentiated between intrinsic and extrinsic motivation and had significantly higher levels of intrinsic motivation and lower levels of extrinsic motivation. While no formal assessment has been made of the type of motivation people with schizophrenia have for quitting smoking, one study by Kelly and McCreadie (1999) suggested that many patients would like to quit smoking for health reasons.

1.2. The current study

Despite the magnitude of the public health burden of smoking among people with psychotic disorders, increasing identification of the factors that influence smoking, and evidence that a sizeable proportion of people with psychotic disorders are prepared to consider quitting smoking, few studies have investigated the characteristics of this group of smokers or compared them with other groups. Such information may be important when designing smoking interventions for people with psychotic disorders. Detailed data relating to the behavioural domains of reasons for smoking, reasons for wanting to quit, type of motivation (intrinsic or extrinsic), level of dependence, and past history of quit attempts has not typically been collected from smokers with psychotic disorders. Moreover, most previous studies have focused solely on schizophrenia, not the spectrum of psychotic disorders.

The present paper had three aims: (i) to describe the demographic and clinical characteristics of smokers with a psychotic disorder residing in the community; (ii)