ORIGINAL ARTICLE

A Survey of Smoking Behaviour and Attitudes to Quitting in Psychiatric Outpatients

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ABSTRACT

Background: Patients with psychiatric illnesses, especially schizophrenia smoke in excess compared to general population. Smoking is associated with excess morbidity and mortality in general population as well as psychiatric patients. Smoking cessation is associated with improved physical and mental health outcomes.

Aim: To ascertain the smoking behaviour and attitude to quitting in a sample of Pakistani psychiatric outpatients with a view to increasing awareness and suggest appropriate interventions.

Method: One hundred willing patients from psychiatry outpatient department, who identified themselves as smokers were invited to take part in a semi-structured survey. The questionnaire included inbuilt CAGE screening questionnaire modified for smoking

Results: Out of 100 smokers who participated in the survey, 45% screened positive for nicotine dependence and 62% of them smoked at least 20 or more cigarettes a day. 91% of all smokers attributed their smoking to habit. Amongst a range of emotional states, boredom and anxiety or worry were identified as the most common reason for smoking by all smokers, whether nicotine dependent or non-dependent.

Conclusion: A high proportion of psychiatric patients who smoke are dependent on nicotine. Habit and anxiety or worry and boredom have been identified as the most common reasons for smoking. Majority of smokers are able to identify potential health and economic benefits of quitting, however find the idea of quitting difficult.

Keywords: Smoking, nicotine, dependence, psychiatric

INTRODUCTION

Smoking is a major health hazard worldwide and is a leading cause of premature death[1]. Tobacco use is increasing in developing world and according to WHO estimates in 2010, 21% of Pakistan's population smoked including 38% of men and about 4% of women and the highest rates in men were in the age group 40-54 years[1]. People with mental illness smoke in excess compared to the general population and tend to be dependent smokers[2,3]. The rates of smoking in depression and anxiety have been observed to be around 32% whilst it is estimated that 60% to 70% of people with schizophrenia[4,5,6] smoke compared to around 20% of the general population. The rates are much higher in people with substance misuse disorders, one study[7] estimating this to be 88%.

Smoking acts synergistically with other risk factors[8] and it is estimated that about a third of cardiovascular deaths and around 80-90% of deaths due to chronic obstructive pulmonary disease (COPD) are caused by smoking[9]. People with severe mental illness are more likely to suffer from chronic diseases including cardiovascular disease, non-insulin dependent diabetes, respiratory disease, cancer[10,11] and infectious diseases[12] and as a result have shortened life expectancy and die 10-20 years younger compared to general population[11,13].

Although most mentally ill smokers report a desire to stop smoking, many continue to smoke and report that it improves their mental health despite no supportive evidence[14]. Studies indicate that people who smoke regularly, report smoking cigarettes to help with their emotional difficulties, reduce anxiety and depression, and for relaxation and relief from stress.[15-21] Such behaviour has been reported by both smokers with and without diagnosed mental disorders[17-21]. Smokers' expressed views about smoking predict whether or not they attempt to quit[22] and whether or not they are successful[23].

In this survey we set out to assess the smoking behaviour and attitudes to quitting in a sample of psychiatric outpatients with the aim to raise awareness on the health hazards related to smoking and suggest appropriate interventions.

PATIENTS AND METHODS

This cross-sectional study was carried out at the Psychiatry Outpatient Department of Dr A Q Khan

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Hospital, Lahore from January to March 2017. Patients were asked if they smoked and were willing to participate in the study. One hundred consecutive patients who identified themselves as smokers and were willing to participate were given a semi-structured questionnaire to complete. Assistance was offered to those who could not read or understand. The questionnaire incorporated modified CAGE[24] screening questionnaire for smoking[25] and asked additional questions on the amount of average daily smoking, the reasons for smoking and if they smoked to relieve any uncomfortable feelings as identified by the options given in the questionnaire. The survey also enquired about potential benefits of quitting smoking and whether they had thought about quitting. Patient identifiable information was treated confidentially. The data was analyzed using Microsoft Excel and SISA (Simple Interactive Statistical Analysis)[26] and frequency tables with percentages were calculated.

Table 1 CAGE questionnaire modified for smoking Behaviour[24,25]

No	CAGE Questionnaire Modified for Smoking Behaviour*
1	Have you ever felt a need to Cut down or control your smoking, but had difficulty doing so?
2	Do you ever get Annoyed or angry with people who criticize your smoking or tell you that you ought to quit smoking?
3	Have you ever felt Guilty about your smoking or about something you did while smoking?
4	Do you ever smoke within half an hour of waking up (Eye-opener)?

**Two "yes" responses constitute a positive screening test*

RESULTS

Out of 100 smokers from the psychiatric outpatients who participated in the survey, 45% screened positive for nicotine dependence. The mean age of the nicotine dependent group (43.2 years) was comparable to the non-dependent group (42.5 years). 96% of the dependent group and 100% of the non-dependent group were males. 62% of those who screened positive for nicotine dependence smoked at least 20 or more cigarettes a day compared to about 45% of the non-dependent group.

91% of all smokers attributed their smoking to habit and there was no significant difference in nicotine dependent and non-dependent group in this regard. Amongst a range of emotional states explored, anxiety or worry was identified as the most common reason for smoking by all smokers, although the proportion of those was higher (44%) in the dependent group compared to the non-dependent group (33%). 51% of the non-dependent group identified boredom as a significant factor in their smoking behaviour compared to 33% of the nicotine dependent group.

Table-2 Characteristics of smokers, daily consumption and behaviour (n=100)

	Nicotine Dependent (n=45)	Non Dependent (n=55)
Age (mean±SD)	43.2±10.3	42.5±8.2
Daily amount		
10 or less	4(8.9%)	21 (38.2%)
11 to 20	13(28.9%)	9 (16.4%)
20 & above	28 (62.2%)	25 (45.5%)
Reasons		
Habit	40 (89%)	51(93%)
Uncomfortable Feelings		
Boredom	15 (33%)	28(51%)
Anxiety or Worry	20(44%)	18(33%)
Angry	3(7%)	2(4%)
Depression	1(2%)	4(7%)
Loneliness	1 (2%)	2(4%)
More than one	5(11%)	1(2%)
Benefits of Quitting		
Improved Health	3(7%)	47(85%)
Money saving	4 (9%)	8(15%)
Attitude to Quitting		
Not Interested	10(22%)	14(25%)
Difficult to quit	26 (58%)	29(53%)
Good thing	09(20%)	12(22%)

All smokers identified potential benefits of quitting. The potential improvement in health was the most common identified benefit by both groups followed by saving money. A higher proportion (15%) of the non-dependent group identified money saving as a benefit compared to the nicotine dependent group (9%). There was no significant difference in attitudes to quitting between nicotine dependent and non-dependent groups. Around a quarter of smokers in each group were not interested in the idea of giving up smoking. More than half, 55% all smokers thought the idea of quitting was difficult and only 20% of the nicotine dependent group and 22% of the non-dependent group expressed a positive attitude and identified that quitting smoking was a good thing (Table 2).

DISCUSSION

There is strong evidence in literature that a high proportion of people with enduring mental ill health problems are smokers. Smoking is thought to be a common self-help strategy for those suffering acute episodes of distress[27,28]. Psychiatric patients are known to smoke in excess to help improve the cognitive alertness and to relieve the side effects associated with antipsychotic medication. However, smoking has an adverse impact on mental health recovery. It is associated with more severe symptoms of psychosis[29], higher rates of depression and longer time in hospital[29] and higher doses of antipsychotic

medication[30]. Smoking can reduce the plasma levels of clozapine and olanzapine[31,32], up to 50%, and as a result higher doses of these medications are required for the desired therapeutic benefit[30]. Smoking itself can have significant direct cost implications. Patients who smoke may spend up to one third of their income on smoking[33].

In our study 45% of the surveyed population of psychiatric outpatients screened positive for nicotine dependence. This is comparable rate to previous findings including a recent study[34] of nicotine dependence in Pakistani general surgical outpatients. The predominance of men smokers is in keeping with the observed smoking trends in general Pakistani population[1]. It is interesting however to note that the small proportion of women smokers in the survey sample smoked rather heavily and screened positive for nicotine dependence. Given the small sample size no conclusions can reliably be drawn from this.

As would be expected of this group, a higher proportion of the nicotine dependent group smoked in excess of 20 cigarettes a day compared to the nondependent group. Similar findings were reported by a study of smoking behaviour in schizophrenia[5]. 91% of all smokers attributed their smoking to habit and there was no significant difference in nicotine dependent and non-dependent group in this regard. This is suggestive of likely psychological dependence even in those who otherwise didn't screen positive for nicotine dependence. Amongst a range of emotional states explored, anxiety or worry was identified as the most common reason for smoking by all smokers and the proportion of those was higher (44%) in the dependent group compared to the non-dependent group (33%).There can be a number of possible explanations for this. It is likely that those with underlying anxiety symptoms smoked in excess to help relieve their anxiety and worry. 51% of the non-dependent group identified boredom as a significant factor in their smoking behaviour compared to 33% of the nicotine dependent group. These findings again are in keeping with the observed trends in earlier studies[15-19].

It was encouraging to note that all mentally ill smokers in our survey whether nicotine dependent or non-dependent, identified potential benefits of quitting. The potential improvement in health was the most common identified benefit by both groups followed by saving money although money was less of a consideration for the nicotine dependent group. This indicated a significant current awareness within the sampled psychiatric population about the potential benefits of quitting smoking. However given that the survey sample was drawn from a hospital that caters mainly for urban population, the findings may not be generalised to the mainly rural and semi-urban population of Pakistan. We also found that within our sample population, such awareness didn't translate into enhancing their motivation to stop smoking. There was no significant difference in attitudes to quitting between the two groups of mentally ill smokers. Around a quarter of smokers in each group were not interested in the idea of giving up smoking. More than half (55%) all smokers thought the idea of quitting was difficult and less than a quarter in each group expressed some positive attitude and identified that quitting smoking was a good thing. A lot of bad effects of smoking on health can be reversed. Stopping smoking can improve mood, anxiety and general well being and such effect has been found to be equal or larger than that of antidepressant or anxiolytic treatment for mood disorders[35,36].

Help and advice on smoking cessation should include proactive provision of preventive information and education on the effects of smoking. Advice on smoking cessation should be given in a considered and measured way as the effect of such advice is not entirely clear[37] although it is widely regarded that screening and specific advice to help reduce and quit smoking can improve physical and mental health outcomes. Such advice at the very least may improve peoples' motivation to seek further support and treatment[38] and should be part of overall treatment. Many of the adverse effects of smoking are directly associated with the duration of smoking[39], hence the aim of the intervention should be early stopping and preventing lapse.

It is crucial that the mental health practitioners and clinicians routinely ask about smoking and encourage their patients to stop. This would ensure that attempts at stopping smoking are supervised and adjustments are made to the doses of psychotropic medication as needed in particular after stopping smoking. Although a combination of behavioural and pharmacological treatments combined with professional counselling and advice may be required to achieve successful smoking cessation, a very brief intervention[40] based on 3 As, Asking about smoking status, Advising the patient of the personal health benefits of stopping smoking and taking Action on the response of the patient that may include prescribing nicotine replacement therapy can be a useful starting point.

CONCLUSION

A high proportion of psychiatric patients who smoke may be dependent on nicotine and this is likely contributing to poor health outcomes. There is evidence of existing awareness amongst urban mentally ill smokers regarding potential health and

economic benefits of smoking cessation; however such awareness hasn't translated into motivation to quit. Routine screening for smoking and nicotine dependence in psychiatric patients and appropriate advice and support for smoking cessation would promote healthy lifestyle and improve physical and mental health outcomes.

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