2.1

Smoking & Mental Health

Prevalence & Impact

Smoking Prevalence

Smoking rates are significantly higher among those with mental illnesses compared with the general population (Coultard et al, 2000). This seems to be particularly the case among psychiatric in-patients of whom 74% of are smokers (Meltzer *et al*, 1996). This smoking rate is over three times higher than that found among the general population (see section 1.1).

Not only are mental health service users more likely to be smokers, but also they are more likely to be *heavy* smokers. Illustrative of this is data from a survey in the US, which suggested that around 45% of all the cigarettes smoked are consumed by individuals with a psychiatric disorder (Lasser et al. 2000).

Furthermore, smokers with a mental health condition seem to increase the amount smoked over time. From a random sample of British adults examined by Ismail et at al (2000), it was evident that people with a mental disorder were about 30% more likely to have increased their cigarette smoking over the previous year.

Mental health service users are a heterogeneous group, and smoking rates do vary across diagnostic categories. The highest smoking prevalence would seem to be among those living with schizophrenia, with Hughes et al. (1986) reporting a smoking rate of 88% within this group. A later study found 68% of patients with schizophrenia who smoked to be classed as heavy smokers (25 or more cigarettes daily) (Kelly & McCreadie, 1999). Notably, this latter study also found that the average age when patients with schizophrenia started smoking was the same as in the general population, namely mid-teens. A total of 90% of patients who smoked had started smoking before their illness began.

Physical Impact of Smoking among Mental Health Service Users

Mental health service users generally exhibit poorer physical health and higher death rates than the general population. In particular, people with schizophrenia exhibit a life expectancy roughly 20% shorter than that of the general population (Hennekens *et al*, 2005). A number of factors have been hypothesised to underlie the high morbidity and mortality rates among mental health service users. These include cigarette smoking, obesity, diabetes and hypertension.

Brown et al (2000) carried out a 13-year prospective study of 370 community-based people with schizophrenia, looking at who died and the causes of their death. The analysis revealed that the standardised mortality ratio (SMR) for all cause mortality was indeed significantly higher than expected for all age groups, and that most of this excess mortality was due to cigarette smoking.

Of course, the physical impact of smoking among mental health service users is not just limited to higher mortality rates. This group also exhibits higher rates of many physical illnesses than the general population, including many conditions directly related to smoking. For example Makikyro et al. (1998) found respiratory disorders to be twice as prevalent among women with a psychiatric diagnosis than among the general female population.

© 2009 Lisa McNally & The London Development Centre

Mental Impact of Smoking among Mental Health Service Users

An increasing amount of research evidence indicates that long-term smoking is actually associated with adverse mental health effects. These effects include the onset and worsening of depression (eg-Pasco et al., 2008) and anxiety disorders (eg - Johnson et al. 2000). In several studies, the smoking & mental health relationship did not seem to be bi-directional in that mental disorders during adolescence were not significantly associated with chronic cigarette smoking during early adulthood.

In addition to predicting the onset of mental health problems, smoking may also have adverse effects on the course of existing conditions. For example, a study by Oquendo et al (2007) suggest that smoking among mental health service users increases the risk of suicide.

The mechanisms hypothesized to underlie the effect of smoking on mental health include the effects of smoking on serotonin levels (Malone et al., 2003). Section 2.3 addresses this issue in more detail.

Social Impact of Smoking among Mental Health Service Users

As discussed in Section 1.2, the effects of smoking go beyond that which can be diagnosed by a healthcare practitioner. For example, there are also costs relating to one's financial resources from the constant spending required to maintain a smoking habit (£1800 per year for 20-cigarettes a day). Mental health service users are particularly vulnerable to any factor that drains financial resources. As they they tend to come from the lower socio-economic groups in society.

The mechanism behind this is likely to be bi-directional, with mental health problems causing poverty (due to their effects on one's ability to sustain employment) and poverty causing mental health problems (possibly via effects on stress and social isolation) (Weich & Lewis, 1998; Mueser & McGurk SR, 2004).

The issue of the financial impact of smoking on mental health service users has been addressed directly. McReadie & Kelly (2000) estimated that a person living with schizophrenia and smoking an average of 26 cigarettes will 'give back' between 18 to 31% of his or her state benefit income to the treasury in the form of tobacco tax. The same authors also presented data indicating that mental health service users who smoke were over 3 times more likely to report that they did not have enough money to take care of their daily needs compared to non-smoking service users.

The social impact of smoking on mental health service users is not limited to financial resources however. Smoking is now a less socially acceptable behaviour in society, and a smoking habit can therefore potentially add to the social exclusion many mental health service users already feel and experience.

Possibly the most notable implication of the increasingly lower tolerance of smoking within society for mental health service users relates to the settings in mental healthcare is provided. Due to the recent legislation, smoking is now banned in (at least in England) in all in-patient mental health units. While this policy serves to protect both non-smoking staff and service users from the effects of second hand smoke, it does pose significant difficulties for the service user facing a hospital admission, especially given that this admission may come at a time of significant distress.

© 2009 Lisa McNally & The London Development Centre

References

- Brown, S., Barraclough, B. & Inskip, H. (2000) Causes of the excess mortality of schizophrenia. British Journal of Psychiatry, 177, 212–217
- Coultard M, Farrell M, Singleton N and Meltzer H, (2000) Tobacco, alcoholand drug use and mental health London: Stationery Office
- Hennekens, C. H., Hennekens, A. R., Hollar, D., et al (2005) Schizophrenia and increased risks of cardiovascular disease. American Heart Journal, 150, 1115–1121.
- Hughes, J. R., Hatsukami, D. K., Mitchell, J. E., et al (1986) Prevalence of smoking among psychiatric outpatients. American Journal of Psychiatry, 143, 993–997.
- Ismail K, Sloggett A & De Stavola B. Do common mental disorders increase cigarette smoking? Results from five waves of a population-based panel cohort study American Journal of Epidemiology, Vol 152, Issue 7 651-657.
- Johnson J., Cohen P., Pine D. (2000) Association between cigarette smoking and anxiety disorders during adolescence and early adulthood. JAMA; 284: 2348–51.
- Kelly, C. & McCreadie, R. G. (1999) Smoking habits, current symptoms, and premorbid characteristics of schizophrenic patients in Nithsdale, Scotland. American Journal of Psychiatry, 156, 1751–1757.
- Lasser, K., Boyd, J.W., Woodhandler, S., Himmelstein, D.U., McCormick, D., & Bor, D.H. (2000). Smoking and mental illness. A population-based prevalence study. JAMA, 284, 2606-2610.
- Makikyro T, Karvonen JT, Hakko H, Nieminen P, Joukamen M, Isohanni M, et al. Comorbidity of hospital-treated psychiatric and physical disorders with special reference to schizophrenia: a 28 year follow-up of the 1966 northern Finland general population birth cohort. Public Health 1998; 112: 221-228
- Malone K., Waternaux C., Haas G. (2003) Cigarette smoking, suicidal behaviour, and serotonin functioning in major psychiatric disorders. Am J Psychiatry; 160: 773–9.
- McCreadie, R. G. & Kelly, C. (2000) Patients with schizophrenia who smoke. Private disaster, public resource. British Journal of Psychiatry, 176, 109
- Meltzer H, Gill B, Petticrew M et al (1996) Economic activity and social functioning of residents with psychiatric disorders (OPCS Surveys of Psychiatric Morbidity in Great Britain, Report 6) London: HMSO
- Mueser KT, McGurk SR; (2004) Schizophrenia. Lancet. Jun 19;363(9426):2063-72.
- Oquendo MA, Galfalvy H, Russo S, Ellis SP, Grunebaum MF, Burke A, Mann JJ. (2004) Prospective study of clinical predictors of suicidal acts after a major depressive episode in patients with major depressive disorder or bipolar disorder. Am J Psychiatry. Aug;161(8):1433-41.
- Pasco JA, Williams LJ, Jacka FN, Ng F, Henry MJ, Nicholson GC, Kotowicz MA, Berk M. (2008) Tobacco smoking as a risk factor for major depressive disorder: population-based study. Br J Psychiatry. Oct;193(4):322-6.
- Weich S, Lewis G; Material standard of living, social class, and the prevalence of the common mental disorders in Great Britain. J Epidemiol Community Health. 1998 Jan;52(1):8-14.

© 2009 Lisa McNally & The London Development Centre