

Primary Care Guidance On Smoking and Mental Health

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Smoking the biggest killer

Smoking is the largest cause of preventable illness in the UK with smokers dying on average 10 years earlier than non-smokers.¹ Smokers who smoke at least 20 cigarettes a day also have a 61% increased risk of type 2 diabetes compared with non-smokers.²

People with mental health problems smoke significantly more than others³ and therefore experience proportionally even greater smoke-related harm.

Smoking and mental illness

Smoking is associated with an increased prevalence of all major psychiatric disorders⁴ as well as higher suicide rates.⁵ Smoking also increases the lifetime risk of developing a mental health problem.⁶

Life expectancy for people with schizophrenia is 20% shorter compared to the general population.⁷ Since smoking is responsible for most of this increased mortality⁸, many premature deaths are preventable with appropriate smoking cessation support.

Furthermore, the amount of tobacco smoked is related to the number of depressive or anxiety symptoms and, after cessation, such symptoms reduce.^{4, 9}

Effective interventions exist

Pharmacotherapy and other support such as counseling can increase abstinence rates in those with mental health problems to similar rates as for the general population.^{10, 11}

However, people with mental illness have previously been less likely to receive smoking cessation interventions in primary care.¹²

Smoking and medication

Smoking increases metabolism of different medications including some anti-depressants (tricyclics and mirtazapine), anti-psychotics (clozapine, olanzapine and haloperidol), benzodiazepines and opiates. This can result in significantly lower plasma levels¹¹ and therefore, larger doses are required for a similar therapeutic effect.

However, following smoking cessation, doses of these medications can be reduced.

Key learning points

Smoking is a major determinant of health inequality for those with mental illness

With appropriate support, those with mental illness are able to stop smoking.

Smoking cessation for those with mental illness significantly improves mental and physical health while reducing the risk of premature death.

Doses of medication can be significantly reduced following cessation

Cessation and medication

Stopping smoking can reduce metabolism of some medication resulting in higher, sometimes toxic blood levels over a few days.^{11,13} Therefore, it is recommended that:

1. Blood levels of clozapine (and olanzapine if assays available) should be measured before smoking cessation.¹³ With clozapine and olanzapine, 25% dose reduction should occur during first week of cessation and then further blood levels taken on a weekly basis until levels have stabilised.¹³
2. Doses of fluphenazine and benzodiazepine should be reduced by up to 25% in first week of cessation.¹³

3. Tricyclic antidepressants may need to be reduced by 10-25% in first week.¹³ Further dose reductions within British National Formulary levels may be required with continued cessation.

The key role of primary care

Explain how smoking cessation can improve both physical and mental health and also reduce doses of medication.

Initially offer Nicotine Replacement Therapy (NRT) to all, including those who continue to smoke which supports smoking reduction as a first step to cessation.

Encourage engagement in group or individual smoking cessation counseling.

Coordinate with psychiatric secondary care services and NHS Stop Smoking Services to offer ongoing smoking cessation support as part of a more joined up health promoting service.

Following cessation, monitor mental state especially of those with depression since a minority who stop smoking experience an increase in depressive symptoms.¹⁴

Smoking cessation prescribing

Nicotine replacement is available in a variety of forms and strengths to encourage patient preference and acceptability. Combining patch and faster-acting oral NRT improves efficacy. Side effects include mild local irritation of mouth, throat or nose.

Bupropion has been shown to be effective for those with depression and schizophrenia¹¹ although it has been associated with increased anxiety and depression. It is associated with seizures and is contraindicated in bipolar affective disorder and epilepsy. It should not be prescribed with drugs which increase risk of seizures such as tricyclic antidepressants and some anti-psychotics. Bupropion can also alter blood levels of medication such as anti-psychotics and antidepressants.

Varenicline has been reported to be more effective and have fewer side effects than bupropion.¹⁵ However, since reports of exacerbation of depression and suicidal ideation are currently being reviewed, further data is required for those with mental illness.

Useful Resources

- RCGP News Article Dec 2008
- Faculty of Public Health position statement about smoking and mental health
- NHS Stop Smoking Services: Service and monitoring guidance 2009/10 (DH, 2009).

Download these resources from:

<http://www.primarymentalwellbeing.org.uk/>

Download the 2009/10 update of the NHS Stop Smoking Services service and monitoring guidance. This document provides best practice guidance relevant to the provision of all NHS stop smoking interventions including for those with mental illness. It sets out fundamental quality principles for the delivery of services and stop smoking support:

[http://www.dh.gov.uk/en/](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_096886)

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First Step Trust (FST) is a national charity providing real work and employment opportunities for people excluded from ordinary working life because of mental health problems and other disadvantages.
www.firststeptrust.co.uk

The Forum

The Forum for Mental Health in Primary Care is jointly hosted by the Royal College of Psychiatrists and the Royal College of General Practitioners. It aims to encourage communication, collaboration and creativity between individuals and organisations who work to enable day-to-day mental health in everyone.

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References

1. Doll R, Peto R, Boreham J, Sutherland I (2004). Mortality in relation to smoking: 50 years' observation on male British doctors. *British Medical Journal*. 328: 745.
2. Willi C, Bodenmann P, Ghali WA et al (2007) Active Smoking and the Risk of Type 2 Diabetes. A Systematic Review and Meta-analysis. *JAMA*. 298(22):2654-2664.
3. Kumari V, Postma P (2005). Nicotine use in schizophrenia: the self medication hypothesis. *Neuroscience and Biobehavioural Reviews*. 29: 1021-34.
4. Farrell M, Howes S, Bebbington P et al. (2001). Nicotine, alcohol and psychiatric morbidity. Results of a national household survey. *British Journal Psychiatry*. 179: 432-7.
5. Malone KM, Waternaux C, Haas GL et al. (2003). Cigarette smoking, suicidal behavior, and serotonin function in major psychiatric disorders. *American Journal Psychiatry*. 160(4): 773-9
6. Cuijpers P, Smit F, ten Have M et al (2007). Smoking is associated with first-ever incidence of mental disorders: a prospective population-based study. *Addiction*. 102(8): 1303-9.
7. Hennekens CH, Hennekens AR, Hollar D et al (2005). Schizophrenia and increased risk of cardiovascular disease. *American Heart Journal*, 150. 1115-1121
8. Brown S, Barraclough B, Inskip H. (2000). Causes of the excess mortality of schizophrenia. *British Journal of Psychiatry*. 176: 109.
9. Champion J, Checinski K, Nurse J, McNeill A (2008). Smoking by people with mental illness and benefits of smoke-free mental health services. *Advances in Psychiatric Treatment*. 14: 217-228.
10. Foulds JGK, Steinberg MB, Richardson D et al (2006). Factors associated with quitting smoking at a tobacco dependence treatment clinic. *American Journal of Health Behavior*. 30: 400-412.
11. Champion J, Checinski K, Nurse J (2008). Review of smoking cessation treatments for people with mental illness. *Advances in Psychiatric Treatment*. 14: 208-216.
12. Phelan M, Stradins L, Morrison S (2001) Physical health of people with severe mental illness. *British Medical Journal*. 322: 433-444
13. Taylor D, Paton C, Kerwin R (2007) Maudsley prescribing guidelines. 9th Edition. Informa Healthcare. ISBN-13: 978 0 415 45042 3
14. Hughes, J.R. (2007) Depression during tobacco abstinence. *Nicotine Tob Res*. 9:443-6
15. Cahill K, Stead L, Lancaster T (2007). Nicotine receptor partial agonists for smoking cessation. *Cochrane Database of Systematic Reviews*, issue 1, CD006103. Wiley Interscience.