

## Smoking, Smoking cessation, and Respiratory Disease in People with a Severe Mental Illness Fact Sheet

### What is Severe Mental Illness?

The term “severe mental illness” is a frequently used phrase, but is imprecise in its nature. In the generally accepted form, the term has three elements: Diagnosis, Disability and Duration.

- **Diagnosis:** a diagnosis of schizophrenia, bipolar disorder, or other psychotic disorder is usually implied.
- **Disability:** The disorder causes significant disability.
- **Duration:** The disorder has lasted for a significant duration, usually at least two years.

### What happens in the general population?

- Smoking rates around the world vary a great deal – Ethiopia has the lowest rates at 9%, and the Indonesia the highest at 76%. In the UK, the rate is 14.9%
- In the Americas, Australasia, and Europe the rates of smoking are below 30%; in Asia, the rates are much higher.
- The WHO recommends a public health approach to change the social climate around smoking, and a health systems approach that focusses on promoting and integrating best clinical practice.
- A variety of interventions have been shown to be effective to support smoking cessation – these include brief interventions from a doctor, individual group or telephone counselling, behavioural therapy, and programmes to deliver treatment using mobile phones.
- Medication that has been shown to be effective include nicotine replacement products, and drugs such as bupropion and varenicline.

### What is the prevalence of smoking in people with severe mental illness?

- One in three of all cigarettes smoked, are smoked by people with a mental health condition.
- Smoking amongst the general population has fallen by over 25% in the last two decades, there has not been a similar decline in smoking amongst people with a mental health condition.
- Smoking is more prevalent amongst people with mental health disorders e.g. 45% of people with schizophrenia smoke cigarettes.
- The groups most likely to smoke are
  - Young (16 – 25).
  - Have long standing mental health problems e.g. schizophrenia.
  - To come from lower socio-economic groupings.

#### What are the risk factors for people with severe mental illness?

- People living in mental health institutions have a much higher prevalence of smoking, at around 80%.
- People with a long term mental health problem wish to quit smoking, but are more likely to expect to fail, compared to the general population.

#### What are the effects of anti-psychotic medication?

- Nicotine and tobacco smoke increase the metabolism of some anti-psychotic medication so that to achieve the same drug response, a higher dose of medication is needed in smokers.
- Evidence for clozapine demonstrates that a reduction of 25% of the dose is required when a patient stops smoking. Leaving the dose unchanged, risks the patient suffering toxic levels of the medication.

#### What is the effect of life style choices and social determinants of health?

- Programmes tailored specifically for the needs of those with a severe mental illness are effective
- Acceptance rates for these programmes are similar to programmes designed for the general population
- Outcomes are similar to programmes designed for the general population
- Medication such as varenicline used in smoking cessation programmes is safe for people with severe mental illness.

#### What is the effect of multi-morbidity?

- 40% of all cases of all chronic respiratory disease are caused by smoking.
- COPD is more common amongst people with severe mental illness.
- Rates vary around the world, but is 2 – 3 times more common for people with severe mental illness living in the community, and for institutions where up to 80% of in-patients smoke, very much greater.
- The commonest cause of death amongst people with severe mental illness is pneumonia.
- Smoking will exacerbate the management of diabetes, the management of cardiovascular disease, and increase the risk of thrombosis – all of which are more common in people with severe mental illness.
- After deprivation, and smoking is factored into the statistics, lung cancer is not more common in people with severe mental illness. However proportionately lung cancer is more common because a greater proportion of people with severe mental illness smoke, and as they present later for diagnosis and treatment, it is more likely to be fatal.

#### What Are Recommendations for Clinical Care?

- In all countries, every person with severe mental illness should be asked on an annual basis if they smoke tobacco. The response should be recorded in the clinical record.
- In every country smoking cessation advice should be offered to people with severe mental illness who do smoke tobacco. Advice that is effective utilises the principals of motivational interviewing.
- For those people with severe mental illness who do smoke tobacco, they should be offered simple spirometry investigations, to assess if they are developing chronic respiratory diseases such as chronic obstructive pulmonary disease. Where chronic respiratory conditions are developing, early treatment and advice should be offered, and these people should be followed up in the same way that others without severe mental illness are followed and regularly reviewed.
- Mental Health hospitals should be encouraged to ban smoking for its in-patients and for its staff.
- There are numerous country specific training packages available for primary care staff to address smoking cessation. There is also a WHO developed toolkit for delivering smoking cessation interventions in primary care (see the section on “Further reading”)
- Assess each patient’s beliefs and preferences, and assess levels of health literacy and barriers to care.
- Use interpreters as appropriate for patients with language barriers.
- Patients should have available self-management support from people who are themselves recovering from severe mental illness.

#### References and Further Reading:

- <http://www.who.int/respiratory/en/> Website accessed October 2015
- <http://www.euro.who.int/en/health-topics/noncommunicable-diseases/chronic-respiratory-diseases/data-and-statistics> Website accessed October 2015
- <http://www.who.int/respiratory/asthma/en/> Website accessed October 2015
- [http://www.who.int/topics/chronic obstructive pulmonary disease/en/](http://www.who.int/topics/chronic_obstructive_pulmonary_disease/en/) Website accessed October 2015
- <http://www.euro.who.int/en/health-topics/disease-prevention/tobacco/data-and-statistics> Website accessed October 2015
- Forum – The need for a comprehensive Approach to Excess Mortality in persons with severe mental disorders. Liu N, Daumit G, Dua T et al. World Psychiatry 16 pp30 – 40 2017.
- Smoking and Mental Health. A Joint Report of the Royal College of Physicians and the Royal College of Psychiatrists. London 2013
- Smoking and mental illness. Lasser K, Boyd JW, Woolhandler S, et al. Journal of the American Medical Association 2000;284:2606–10.

- <https://www.nice.org.uk/guidance/ph48>
- <https://www.gov.uk/government/publications/smoking-cessation-in-secondary-care-mental-health-settings>
- <http://smokefreeaction.org.uk/smokefree-nhs/smoking-and-mental-health/>
- [http://www.ncsct.co.uk/publication\\_mental\\_health\\_briefing.php](http://www.ncsct.co.uk/publication_mental_health_briefing.php)
- [Pulmonary Rehabilitation for COPD](#) Pubmed Health.  
<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0012318/>. Accessed August 2015
- What is pulmonary rehabilitation? Pubmed Health.  
<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0072615/> - Accessed August 2015
- Prevalence of Chronic Obstructive Pulmonary Disease among those with serious mental illness. Himelhoch et al. Am J Psychiatry 2004; 161:2317–2319
- Comorbidities and Mortality in Persons with Schizophrenia: A Swedish National Cohort Study. Crump et al <http://dx.doi.org/10.1176/appi.ajp.2012.12050599>
- Smoking in patients receiving psychotropic medications: a pharmacokinetic perspective. Desai HD SJ. CNS Drugs 2001; 15: 469-94.
- Tobacco use and cessation in psychiatric disorders: National Institute of Mental Health report. Ziedonis D, Hitsman B, Beckham JC, et al. Nicotine Tob Res. 2008; 10 (12):1691-1715.
- Impact of a total smoking ban in a high secure hospital. Cormac I. The Psychiatrist (2010), 34, 413-417, doi: 10.1192/pb.bp.109.028571
- Bespoke smoking cessation for people with severe mental ill health (SCIMITAR): a pilot randomised controlled trial. Gillbody et al [www.thelancet.com/psychiatry](http://www.thelancet.com/psychiatry) Vol 2 May 2015
- Maintenance Treatment with Varenicline for Smoking Cessation in Patients with Schizophrenia and Bipolar Disorder A. Eden Evins, et al JAMA. 2014;311(2):145-154. doi:10.1001/jama.2013.285113.
- WHO Smoking Cessation Toolkit for Primary Care:
  - a. [http://www.who.int/tobacco/publications/smoking\\_cessation/9789241506953/en/](http://www.who.int/tobacco/publications/smoking_cessation/9789241506953/en/)
  - b. [http://www.who.int/tobacco/publications/building\\_capacity/training\\_package/teachingtobaccodependence/en/](http://www.who.int/tobacco/publications/building_capacity/training_package/teachingtobaccodependence/en/)
  - c. <http://www.who.int/tobacco/quitting/en/>