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Guest Editorial

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The role of vaping nicotine in psychiatry practice

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Smoking remains the leading cause of health and financial disparities for people living with mental illness and new and effective strategies are urgently needed. Growing evidence suggests that tobacco harm reduction with nicotine vaping could benefit this population.

People with mental illness have higher smoking rates, smoke more heavily, are more nicotine dependent and have lower quit rates than the general population. As a result, smoking prevalence is declining more slowly than in the wider community, especially among people with serious mental illness (SMI).

Smoking cessation is an integral component of the management of patients with mental illness. Smokers with mental illness are more likely to die from a smoking-related disease than from their primary psychiatric diagnosis.

As well as the substantial improvements in physical health, quitting smoking leads to improved long-term mental health, better quality of life and reduced suicide risk. There are also huge financial savings, which are particularly relevant for many people with mental illness.

For smokers who are unable to quit with first line treatments and would otherwise continue to smoke tobacco, long-term substitution with a safer nicotine product could reduce tobacco-related harm.

Complete cessation of all tobacco and nicotine consumption is always the ideal goal. However, a large proportion of smokers living with mental illness are unable or unwilling to quit, therefore remaining at high risk of smoking-related death and illness.

In practice, tobacco harm reduction involves encouraging smokers to switch from high-risk combustible cigarettes to a lower-risk nicotine alternative such as vaping. The main purpose of tobacco harm reduction (THR) is to reduce (not necessarily eliminate) the harm from smoking. The aim is ***not*** to stop nicotine as nicotine in low doses causes little harm.

Vaping is a form of nicotine replacement therapy that delivers the nicotine that smokers crave. However, it is unique in also simulating the familiar behavioural, sensory and social aspects of the smoking ritual which can be so difficult to break.

Harm reduction is a well-established and effective concept in public health policy. Tobacco harm reduction is no different to other harm reduction strategies such as methadone for heroin users, clean needle exchange programs and even car seat belts.

While not risk free, there is overwhelming scientific agreement that vaping is far less harmful than smoking.[1] Vaping does not produce smoke. It is the 7,000 toxic chemicals in smoke released from burning tobacco which cause almost all the deaths and disease from smoking.

In contrast, vaping products (e-cigarettes) heat a liquid into an aerosol, without tobacco, combustion or smoke. Some potentially harmful toxins are present in the aerosol but at much lower levels than in cigarette smoke.[1]

Vaping is now the most popular quitting aid in western countries including Australia. In 2019, 22% of Australian smokers used vaping to quit or cut down their smoking.[2] Seventeen per cent used nicotine replacement therapy and 6% used a smoking cessation pill.

People with mental illness are more likely to use a vaping product to quit than those without.[3] Vaping is more acceptable than nicotine replacement therapy in this population and is associated with greater compliance.[4]

The growing evidence in the general population from randomised controlled trials (RCTs), population and observational studies and declines in national smoking rates where vaping is widely available indicates that vaping nicotine is an effective quitting aid, more effective than nicotine replacement therapy.[5]

The limited research so far suggests that vaping is also effective for smokers living with mental illness. In an RCT, O'Brien found that vaping was as effective for smoking cessation and reduction in people with mental illness as those without.[4] In a population study in

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England, Brose found that vaping was the most popular and most effective quitting aid in smokers with mental illness.[6]

Smokers who switch to vaping may continue to benefit from the positive effects of nicotine. Nicotine modestly improves attention, working memory and sensory gating which are specifically impaired in schizophrenia. Nicotine may counter some of the negative symptoms of SMI such as amotivation, withdrawal and blunted affect and may also help to ameliorate the sedation from antipsychotic drugs. It can also improve ADHD and transiently improve anxiety and mood.[7]

Switching from smoking to vaping nicotine can also enable a reduction in the dose of some antipsychotic medications, notably clozapine and olanzapine.[7]

Like cigarette smoking, vaping can help to alleviate boredom and can facilitate socialising in people with SMI. These effects may help improve social interaction and reduce isolation which are otherwise difficult to treat.[7]

Vaping nicotine may be especially beneficial in smoke-free psychiatric facilities. It may help to comfort distressed patients, alleviate boredom, aggression and the risk of injury to staff. In contrast to smoking, there is no evidence that passive vaping is harmful to health.

The UK government encourages the use of vaping in mental health facilities. In October 2019, the use of vaping products was permitted by 91% of NHS mental health trusts with 44% allowing indoor use.[8]

The Royal Australasian and New Zealand College of Psychiatrists (RANZCP) supports the use of nicotine vaping as a harm reduction tool for smokers who are otherwise unable to quit.[9]

Vaping is also acknowledged as a second-line treatment by the Royal Australian College of General Practitioners. The RACGP smoking cessation guidelines state, “for people who have tried to achieve smoking cessation with approved pharmacotherapies but failed, but who are still motivated to quit smoking and have brought up e-cigarette usage with their healthcare practitioner, nicotine containing e-cigarettes may be a reasonable intervention to recommend”.[10]

It is legal to possess and use nicotine liquid in Australia if the user has a prescription from a registered medical practitioner. Further practical advice on vaping is available from the Australian Tobacco Harm Reduction Association website (www.athra.org.au).

Vaping nicotine is a legitimate, evidence-based option for reducing harm in smokers who are otherwise unable to quit. Psychiatrists need to be informed about vaping to answer patient questions, provide appropriate advice and counselling, write nicotine prescriptions and support smokers in switching to the safer alternative.

Resources

Australian Tobacco Harm Reduction Association, www.athra.org.au. Health professionals can login for additional information.

Mendelsohn CP. Electronic cigarettes in physician practice. Intern Med J 2018[11]

Disclosure

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