



Viewpoint

Can e-cigarettes improve the well-being of people with mental health disorders?

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E-cigarettes have the potential to make an important contribution to mental health care. A recent RCT found that e-cigarettes were more effective than nicotine-replacement therapies in assisting smokers in the UK to quit smoking (Hajek et al., 2019). Secondary analysis from another clinical trial of e-cigarettes compared to nicotine patches found that e-cigarettes appeared to be as effective, safe and acceptable for people with a mental illness as those without (O'Brien, Knight-West, Walker, Parag, & Bullen, 2015). The clinical recommendation of e-cigarettes as a harm reduction strategy for people with mental health disorders who smoke thus warrants greater exploration (Sharma, Gartner, & Hall, 2016). This means, however, addressing research that highlights the negative correlation between smoking tobacco cigarettes and mental health (Vermeulen et al., 2019). People diagnosed with schizophrenia in Western societies are at least three times more likely to smoke and daily smoking may accelerate the onset of first-episode psychosis in vulnerable individuals (Gurillo, Jauhar, Murray, & MacCabe, 2015). Vaping is becoming more popular amongst people diagnosed with schizophrenia (Miller, Wang, Wong, Paletta, & Buckley, 2017). The role of smoking in mental health should therefore consider the everyday function of nicotine, not just tobacco, in people's management of their mental health.

The relationship between nicotine and mental health is more complicated than co-morbidities predicted by tobacco use or addiction. An ethnographic study conducted by one of the authors (JB) with 43 clozapine-treated schizophrenia patients in the United Kingdom and Australia in 2015–2016 suggested that patients explicitly used nicotine

for its believed 'antipsychotic properties' (Brown, 2018). There is some scientific evidence to support this belief: second-generation antipsychotics or neuroleptics appear to work on the same receptors as nicotine, and nicotine appears to alleviate the psychotic, cognitive, and negative symptoms of schizophrenia (Jacobsen et al., 2004; Koukoulis et al., 2017; Lawn & Pols, 2005). Regardless of whether or not smokers may mistake the relief from withdrawal symptoms afforded by cigarettes as genuine symptomatic relief from their mental illness, people have a strong motivation to continue in their day-to-day lived experience of maintaining well-being. Further, while smoking cessation may alleviate psychiatric disturbances in the longer term, and should form a fundamental element in mental healthcare (Vermeulen et al., 2019), it is also important to consider the role that nicotine plays in patients' health and well-being.

Considering the role and delivery of nicotine in psychiatric patients' experience of well-being may result in more effective healthcare strategies and increase patient's agency over their health. Psychiatric patients are more likely to engage in longer-term smoking cessation if they perceive an equitable clinical relationship with their healthcare provider (Lawn & Pols, 2005). Brown's ethnographic observations in a UK clozapine clinic where e-cigarettes were offered as a Nicotine Replacement Therapy found that patients who opted to vape instead of smoke were better able to plan towards future health (Brown, 2018). Patients reported that they smoked in the first instance to ground themselves in present time and to feel alive via the attention given to their breathing, providing self-confidence in the midst of serious self-

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doubt (Brown, 2018). While both vaping and smoking provided these benefits, vaping and smoking were very distinguishable from one another in terms of how people imagined their health. On the one hand, one clozapine patient spoke of how vaping e-cigarettes was ‘cleaner’ and ‘not so bad for your health’, with a more favourable aesthetic appearance in terms of both device (distinctive shape) and experiences of exhalation (second-hand vapour was perceived to be less harmful) (Brown, 2018). On the other hand, the inhalation experience from e-cigarettes and doubts over the nicotine cartridge quantity control (difficulty in measuring equivocal cigarette amounts and preparing for running them out) were less appealing to those who preferred the predictability available through smoking tobacco cigarettes (Brown, 2018). This indicates that these smokers may need e-cigarette devices that are designed to make titration of use and identification of how much is left in a cartridge easy as well as support to transition from smoking to vaping. Critically, the switch to e-cigarettes was associated with increased engagement in wider health concerns, such as the issue with second-hand smoke and an appreciation for cardiovascular fitness (Brown, 2018).

While the jury is still out on the harms of long-term use of e-cigarettes, there are clear practical clinical benefits to be gained by supporting the use of e-cigarettes for those who continue to smoke. This means paying attention to people who accept an alternative form of nicotine delivery that may lead to health improvements, rather than dismissing their wishes altogether for fear of renormalising smoking. Brown’s (2018) ethnographic data suggests that clozapine-treated schizophrenia patients who choose to vape instead of smoke do so for the same reasons as people in the general population do: to reduce health harms. E-cigarettes may be a gateway not to smoking tobacco, but rather to engagement in more desirable health attitudes amongst this particularly marginalised population group. In our opinion, this presents clinicians with valuable opportunities to engage their patients more effectively in healthcare strategies, beginning with but not limited to tobacco-free e-cigarettes.

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