Headline: Smoking cessation aids and the primary care nurse

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Standfirst: Key learning points:

- Primary care nurses play a vital role in helping to reduce health inequalities by encouraging smoking cessation
- There are a number of smoking cessation aids available in the UK to help smokers quit, which can be used with or without psychosocial support
- E-cigarettes have high potential to assist smokers to successfully quit or cut down

Tobacco smoking is one the most preventable causes of death in the UK, claiming more than 80,000 lives annually through cancers, respiratory problems and circulatory diseases.[1] In addition to the burden of chronic ill health and mortality, the financial costs from smoking are estimated at £2.7 billion to the NHS[2] and £13.74 billion to the wider society.[3] Although the prevalence of smoking in the UK has generally declined over the last few decades, one-in-five adults aged 16 years and over reportedly smoke[4].

It has been identified there is a higher prevalence of smoking among individuals from lower socioeconomic groups, smoking-related illness and death is much higher in social groups with the lowest incomes.[1,5] Consequently, a widespread smoking cessation agenda plays a central role in reducing health inequalities[6] and is therefore a key priority for Public Health England.[7] It is argued there are many opportunities for health professionals to work towards the national goal of reducing health inequalities, through addressing their patients smoking behaviour.[8]

The role of the primary care nurse in smoking cessation

Primary care nurses have access to a broad scope of clients and frequently encounter individuals who smoke, therefore they ideally placed to identify smokers who wish to address their use.[9] The Royal College of Nursing[10] believes that every nurse has a contribution to make in navigating care 'upstream', whereby health problems, such as smoking-related illnesses are addressed through prevention rather than treatment. A Cochrane Review of nursing interventions for smoking cessation conducted by health academics Rice and Stead concludes that there is reasonable evidence to suggest that smoking cessation interventions delivered by nurses are effective in helping smokers to achieve abstinence.[11]

The National Institute for Health and Care Excellence (NICE) guidelines recommend that all practice nurses are required to advise clients who smoke to stop as soon as they can, to determine the level of interest in smoking cessation and discuss quitting options. [12] Quitting options may include a referral to specialist services although in instances where the client declines the support of these, the nurse is required to spend 5-10 minutes providing brief smoking cessation advice and encouragement to smokers (see Figure 1). This may include advising clients about suitable smoking cessation aids.

However, the topic of smoking cessation advice is not necessarily broached, although smoking cessation is an integral component of nurses' agenda, nurses have expressed that they lack the specific knowledge and skills required to address smoking cessation with their patients.[13] Additionally, as smoking becomes increasingly stigmatised, nurses are worried that raising this issue may be damaging to the nurse-patient relationship.[14] Consequently in general practice settings, smoking cessation pharmacotherapies tend to be prescribed at the request of patients, rather than at the offer of healthcare professionals.[15] It has been suggested that practice can be improved through the provision of adequate training and encouraging nurses to adopt positive and non-judgemental attitudes towards smoking cessation.[16] Additionally, nurses who smoke themselves should be given strong personal and professional support to explore their values and address their smoking behaviour.[17]

Smoking Cessation Aids

The following section discusses the range of products that are available. (This article does not include a discussion about 'smokeless tobacco products' – for a detailed description about these products and an examination of the evidence base for their effectiveness as smoking cessation strategies, see journal article by US tobacco harm reduction experts *Rodu and Godshall*[18].

Pharmacotherapies

Pharmacotherapy interventions otherwise known as prescribed courses of drugs, are available to adult smokers who wish to quit. The pharmacotherapies that are available for use in the UK are varenicline (Champix), bupropion (Zyban) and nicotine replacement therapy (NRT).[19]

Varenicline and bupropion are orally administered tablets which alleviate symptoms of nicotine craving, withdrawal and reduce the rewarding effects of smoking for the user.[20] Evidence shows that smokers who attempt to quit using these pharmacotherapy interventions have increased chances of success[21] and if the pharmacotherapy intervention is combined with psychosocial support such as self-help materials and counselling, the likelihood is increased further.[22] One particular drawback of varenicline is the reported side effects including nausea, headaches and insomnia, which can result in users deciding to discontinue the therapy.[23] A wider issue concerns the high prescribing costs, which totalled an estimated £48.8 million in England in 2013-14.[24] Nevertheless, the evidence suggests that investment in pharmacotherapies and psychosocial support is cost-effective.[19]

NRT is a method of administering nicotine to the body without the use of tobacco, which has been evaluated as a safe and effective therapy for those who feel they cannot or do not wish to quit smoking abruptly.[25] NRT products that are available from pharmacists in the UK include gum, skin patches, nasal sprays, inhalators, sublingual tablets and lozenges.[26] Although nicotine is a highly addictive substance, it is mainly the carcinogens and toxins contained within tobacco smoke that cause chronic illness and premature death, rather than the nicotine itself.[18] Therefore, smokers who undergo this treatment continue their use of nicotine, but reduce the harms to health caused by tobacco smoke. This takes a harm reduction approach, where long-term abstinence from nicotine may or may not be an end goal, depending on the individual circumstances of the client. Nurses have voiced concerns that the use of smoking cessation aids may simply be *'replacing one addition with another'.*[17] Nevertheless, guidance for health professionals published by the UK public health charity

'Action on Smoking and Health' (ASH)[26] advises that the benefits of NRTs considerably outweigh the risks from smoking tobacco, particularly in clients who are suffering from cardiovascular heart disease, for whom smoking cessation is of the most importance.

E-Cigarettes

Introduced to Europe in 2005, e-cigarettes or 'electronic nicotine delivery systems' (ENDS) are products that deliver nicotine to the user in a similar method to regular cigarettes.[27] E-cigarettes consist of a plastic tube containing an electronic heating device and a liquid that is comprised of propylene glycol, glycerol, nicotine of varying concentrations (although there are nicotine-free versions available) and numerous flavours.[28] Unlike NRTs that are licensed by the Medicines and Healthcare Products Regulatory Agency (MHRA),[29] e-cigarettes are available from shops and online in the UK. A recent study estimates there are now at least 466 brands of e-cigarette available online,[30] illustrating their popularity among the estimated 2.1 million adults who use e-cigarettes, a practice termed 'vaping'.[31]

E-cigarettes possess considerable potential in reducing smoking-related harm, like NRTs, nicotine can be administered to the body without causing the harms associated with tobacco smoking, including that from second-hand smoke.[32,33,36] Users have expressed a preference for e-cigarettes over prescribed pharmacotherapies and NRTs, as they can offer adequate substitution for the behavioural and sensory dimensions of cigarette smoking, unlike patches, gum and even inhalators.[34,35] A recent study suggests that smokers who wish to quit smoking without professional help are around 60% more likely to be successful than those who use prescribed medications or willpower alone.[36] E-cigarettes are also substantially cheaper than tobacco cigarettes,[37] which is an important consideration in light of the fact that those who smoke tend to be among the poorest groups in society.

Despite these advantages, there are fears that marketing e-cigarettes could promote smoking, or undermine smoking cessation attempts.[19] There are concerns for users' health as vaping is a relatively new social phenomenon, there is a paucity of evidence for the long-term safety of e-cigarettes.[38] As a result of these issues and the fact that e-cigarettes are not regulated products, nurses have reported that they are cautious about discussing their use with clients.[39] However, this report recommends that nurses encourage conversations with clients about e-cigarettes, as it suggests that the smoker is contemplating behaviour change. Broaching this topic may also provide opportunities to reduce the risks of second hand smoke to children and other family members,[40] although evidence evaluating the harms of e-cigarette emissions is inconclusive,[41] we can be confident that the risks are considerably less than that of tobacco smoke. E-cigarettes are to be regulated and licenced as a smoking cessation aid from 2016,[42] which may serve to alleviate some of the nurses' concerns in addressing this issue.

Conclusion

The growing availability and popularity of e-cigarettes provides a great opportunity for primary care nurses to address smoking cessation using a harm reduction and patient-centred approach. There is a pressing need for research that investigates the longer-term health impacts of e-cigarette use, in order that effective, evidence-based smoking cessation policies can be developed and recommendations for best practice disseminated among the nursing community.

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