Supporting smoking cessation in patients with COPD is the most effective intervention

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Chronic obstructive pulmonary disease (COPD) is a common, preventable, and treatable disease that is characterised by persistent respiratory symptoms and airflow limitation. Smoking is the predominant cause of COPD, an association that has been well known for many years. Being a non-smoker reduces the risk of developing COPD.

Fletcher and Peto demonstrated accelerated decline in the lung function of people who smoke as early as 1977. Clinicians routinely use the Fletcher–Peto curve to help patients understand the importance of stopping smoking. Many patients continue to smoke, despite acknowledging the effects of smoking on COPD. Studies have shown a high prevalence of smoking, indicating that patients continue to smoke after diagnosis. Up to 35% of people with COPD still smoke in the UK. These patients require a structured approach to help them to stop smoking.

Smoking cessation and COPD

Smoking cessation is the most effective intervention available for the management of COPD. The Lung Health Study demonstrated that patients who stopped smoking had better survival rates and better lung function after 14.5 years. This confirms the hypothesis of Fletcher and Peto that stopping smoking prevents accelerated deterioration in lung function in patients with COPD. Other studies have also confirmed the beneficial effect on lung function in patients with COPD who quit smoking.

NICE guidance

Stop smoking interventions and services, NICE Guideline 92, was updated in March 2018 and includes a number of new recommendations for both commissioners and clinicians to provide effective support to patients to stop smoking. The purpose of the guideline is to ensure that every person who smokes is advised and encouraged to stop and given support as needed.

A number of topics are covered in NG92, including:
- the use of telephone quitlines
- the need to ensure that adults who smoke receive evidence-based interventions, such as: behavioural support; pharmacotherapy, including the use of nicotine replacement therapy (NRT), bupropion, or varenicline; and support in the form of ‘very brief advice’ for people who wish to quit
- the role of e-cigarettes in smoking cessation
- effective training of staff providing specialist counselling and support to patients
- the importance of setting and achieving targets (e.g. a successful quit rate of at least 35% at 4 weeks).

Role of the primary care clinician

The NICE guideline prioritises patients who are at high risk of tobacco-related harm, including those with COPD. Clinicians in primary care are well placed to screen for patients who smoke, and advise and support them in their quit attempts. Patients with COPD generally consult on a regular basis either through routine review or when their condition causes unacceptable symptoms. It is known that brief advice to stop smoking delivered by a GP or nurse will result in a 2.5% increase in quit rates.

Making every contact count (MECC) is a large-scale behaviour change programme.
that aims to reach as many people as possible with key health messages and to spread important public health messages among the general population. The purpose is to create a healthier population, reduce NHS costs, improve health outcomes, and reduce health inequalities.11

Adopting a MECC approach provides an opportunity to identify and support people wishing to quit. Applying the ‘five As’ will provide a structured approach that all clinicians can adopt to help people stop smoking (Table 1, right).12 Patients wishing to quit smoking should either be referred to the local smoking cessation service or managed by a professional who can offer pharmacotherapy and very brief advice.9 If patients are not ready to quit, the clinician should:9

• help them to understand how their health could further deteriorate
• ask them to encourage a harm reduction approach
• encourage them to seek help when they are ready
• record the fact that they smoke and continue to advise them accordingly.

It may take up to 30 quit attempts before a patient eventually gives up smoking, so GPs must always be ready to support patients.13

### Evidence-based smoking interventions

Evidence suggests that the effectiveness of counselling in helping people to stop smoking is related to the frequency of face-to-face sessions and the time allocated within these sessions.14 Behavioural interventions and pharmacotherapy, alone or in combination, improve smoking quit rates.15 Group therapy also seems to be a very effective way to address smoking cessation.14,15 Completion of a pulmonary rehabilitation programme improves abstinence rates in patients with COPD.16

In patients with COPD, NRT is an effective treatment that can be delivered in the form of gum, inhaler, nasal spray, skin patch, or mouth spray.10 Similarly, both buprenorphine and varenicline have robust evidence of effectiveness in smoking cessation.10 All of these forms of pharmacotherapy coupled with smoking cessation counselling provide the most effective treatment to aid patients to quit smoking.17

In its guidance on COPD, NICE recommends that at every opportunity, every person with COPD who is still smoking should be advised and encouraged (regardless of their age) to stop, and offered help to do so.2 It goes on to say that NRT, varenicline, or bupropion should be offered as appropriate to people who want to stop smoking, combined with an appropriate support programme to optimise quit rates.2,18

### E-cigarettes

Although e-cigarettes are not licensed medicines they are used by many people in the UK, including those with COPD. However, the evidence as to the safety of their use in patients with COPD is still controversial. The lack of standardisation in relation to devices may also be a concern to some clinicians. Although e-cigarettes

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Adapted from Agency for Healthcare Research and Quality website. Five major steps to intervention (The ‘5 A’s’). www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/5steps.html
SUPPORTING SMOKING CESSATION IN PATIENTS WITH COPD

Implementation of the guideline

The NICE guideline challenges commissioners to provide effective stop smoking services. However, there is concern about what is perceived to be a decline in the support for stop smoking services. For example, in 2017, there was a reduction of budgets for stop smoking services in 50% of local authorities in England. The NICE guideline recognises that the number of people using stop smoking services has declined and that the number of prescriptions of pharmacotherapy has also fallen by 50% since 2011.

Summary

Smoking is the main cause of preventable illness and premature death in England. Smoking cessation is the most effective treatment for patients with COPD. Compared with usual care, implementation of intensive counselling with and without pharmacotherapy for patients with COPD resulted in low costs per quality-adjusted life years gained comparable to the benefits shown in the general population. Several meta-analyses confirm that a combination of counselling plus pharmacotherapy is the most effective cessation treatment for smokers with COPD. The NICE guideline indicates that stop smoking interventions are cost-effective and cost-saving to the NHS.

The GP has a key role in identifying and supporting patients to stop smoking. Adopting the ‘five As’ will help clinicians to provide a structure to aid patients to stop smoking. A combination of smoking cessation counselling with effective pharmacotherapy provides the best outcomes for sustained quit rates (>1 year).

Conflicts of interest

Noel O’Kelly has received an honorarium for the work on this article. He has also presented on behalf of AstraZeneca Limited and consults on behalf and is a shareholder in Spirit Digital.

References

9. NICE. Stop smoking interventions and services. NICE Guideline 92. NICE, 2018. Available at: www.nice.org.uk/ng92