

CURRENT THINKING ON... CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Welcome to our CPD module series for community pharmacy technicians. Written in conjunction with the *Pharmacy Magazine* CPD series, it will mirror the magazine's programme throughout the year. The series has been designed for you to use as part of your continuing professional development. Reflection exercises have been included to help start you off in the CPD learning cycle.

Contributing author: Mark Stone MPharmS, pharmacist practice partner, independent prescriber.

Chronic obstructive pulmonary disease (COPD) is the general name for a collection of diseases that affect the lungs, including chronic bronchitis, emphysema and chronic obstructive airways disease. The lungs of people with COPD become inflamed due to irritation (usually caused by cigarette smoke), and this obstructs airflow, causing breathing difficulties and symptoms such as:

- Increasing breathlessness when active
- A persistent cough with phlegm
- Frequent chest infections
- Wheezing.

The importance of COPD

COPD is currently the fifth leading cause of death worldwide and is set to become

the third by 2030. The numbers of COPD hospital admissions have increased by 50 per cent over the last 10 years and now account for around 10 per cent of all medication admissions (the second most common cause). These admissions account for over a million bed days.

Supporting COPD patients

There are around 835,000 patients in the UK currently diagnosed with COPD, which means an average pharmacy will have approximately 60 patients to support with medicines.

The patient's correct use and compliance with their treatment plan is an important factor in reducing

exacerbations, hospitalisations and improving morbidity and mortality. The new medicine service (NMS) and the medicines use review (MUR) are exceptionally well placed to support COPD patients with their medicines, and essential pharmacy services such as promoting public health can help to raise awareness among the high numbers of undiagnosed sufferers.

Pharmacies are also well placed to provide the single most effective health intervention – smoking cessation, which can reduce the rate of decline and improve survival.

Self care and treatment

• **Stopping smoking**
Stopping smoking is the single

MODULE NUMBER: 69

AIM: To consider how community pharmacy can contribute to the care and monitoring of patients with chronic obstructive pulmonary disease (COPD).

OBJECTIVES: After completing this module, pharmacy technicians will be able to:

- Recognise the signs and symptoms of COPD
- Describe the self care measures and treatment options that are available to patients
- Understand how advanced and enhanced pharmacy services can support COPD patients.

most important intervention that can be made, regardless of disease severity. In fact, on average, each smoker who manages to stay off tobacco for the rest of their life gains 3.6 life years.

Smoking cessation interventions are four times more effective if they include counselling support, and can achieve long-term quit rates of up to 25 per cent.

• Pulmonary rehabilitation

Pulmonary rehabilitation is defined by NICE as "a multidisciplinary programme of care for patients with chronic respiratory impairment that is individually tailored and designed to optimise the individual's physical and social performance and autonomy."

After pulmonary rehabilitation, patients should be able to handle



breathlessness better, feel more in control of their condition and gain more self confidence. Pulmonary rehabilitation has been shown to reduce the three-month readmission rate in COPD patients from 33 per cent to seven per cent.

• Immunisation

Many exacerbations of COPD are caused by viral and bacterial infection. Unless contraindicated, all patients with COPD should have pneumococcal and influenza immunisations. COPD patients are an at-risk patient group to target for the community pharmacy flu vaccination service.

Community pharmacy's role

• Essential Services

Dispensing – With the introduction of LABA (long-acting beta agonist) and LAMA (long-acting muscarinic receptor antagonist) inhalers, there are now a large number of varying inhalers that COPD patients can be prescribed, and each will have a different technique for correct use. When a patient receives a new inhaler, the pharmacist should introduce the device and demonstrate how to use it, and of course offer the NMS to every patient.

Signposting – If not already provided by the local primary care organisation as part of the Community Pharmacy Signposting Folder, it would be useful for pharmacies to hold information about local pulmonary rehabilitation programmes and COPD care services, including chest or respiratory clinics and stop smoking providers, as well

MUR and NMS consultation tips

- 1 Checking inhaler technique is very important, as is teaching good technique where required. Pharmacy technicians can use the InCheck device to check patient inhalation technique
- 2 Does the patient know how to tell if their inhaler is nearly empty?
- 3 Is the patient experiencing any side effects?
- 4 All patients who smoke should be offered support to stop
- 5 Help the patient understand the chronic and progressive nature of their disease
- 6 Advise patients on signs of exacerbation, such as worsening breathlessness and/or cough, increased sputum volume and/or change in sputum colour, and tightening of the chest
- 7 If the patient has rescue medication, inform them to take this as soon as they recognise the exacerbation symptoms
- 8 Generic prescribing can lead to a choice of devices – find out which inhaler type your patient requires and mark on the PMR
- 9 Theophylline medicines are not bio-equivalent – patients require a consistent brand of medication
- 10 Many patients suffer from anxiety and depression because of their condition. They may benefit from referral to a GP if you have concerns about their wellbeing, or they may benefit from participation in an expert patient programme
- 11 Make sure the patient understands the signs of an exacerbation and how to manage it
- 12 Ask the patient during the flu season if they have received the influenza vaccine. Reinforce the benefits of this
- 13 Patients on long-term oral steroids or high dose inhaled steroids should be given a steroid warning card.

as organisations like the British Lung Foundation.

• Advanced Services

MURs – Since 1 April 2015, community pharmacies have been contractually required to carry out at least 70 per cent of their MURs among one or more of the MUR target groups. Respiratory medicines and patients recently discharged from hospital are two of the four target groups. An MUR provides the ideal opportunity for community pharmacists to identify patients who may be struggling with their COPD medication, help the patient understand why these are used and check and/or teach inhaler technique. Improving a patient's inhaler technique will help them self manage their condition to relieve symptoms, aid exercise tolerance, and prevent complications.

The NMS – This service will help COPD patients understand

the benefits of any new medicines they may be on, and the pharmacist will be able to support the patient if any side effects occur. The NMS also includes the provision of lifestyle interventions such as brief advice on stopping smoking or promotion of exercise.

Adherence issues

Several studies have indicated that around 60 per cent of patients with COPD do not adhere to their medicines. You can help by explaining why the medicines have been prescribed and minimising any obstacles that are preventing them from being taken. It's important to consider the following:

- Be aware that drug treatments are given to relieve symptoms and improve quality of life, but they will not reverse the underlying lung damage
- Check inhaler technique – only one in 10 patients with a metered dose inhaler (MDI) performs all essential steps correctly. Studies have indicated that patients make fewer errors with dry powder inhalers (DPI) than with aerosol metered MDIs. The elderly, in particular, may have problems with

worsening of COPD, when to use 'rescue' courses of antibiotics and steroids and when to contact the GP or other appropriate healthcare professional

- Advise COPD patients to exercise within the limits of their disease, as exercise will improve their quality of life. Patients should be advised to walk more often and further, and be told that being out of breath is not dangerous – as long as they are not gasping

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- Dexterity, so handling inhalers and timing medicine inhalation may be difficult. Dry powder inhalers require less timing ability
- Give advice on the benefits and use of spacer devices where appropriate
- Oxygen may be used to support patients with severe COPD. Questions about this service, such as holiday arrangements, replacement masks and tubing, should be directed to local service providers
- Discuss self management plans with patients who have frequent exacerbations. Self management plans should include details of how to recognise an exacerbation, triggers associated with

for breath. Advise them to use bronchodilators 20 minutes before exercise to reduce breathlessness

- Patients on oral steroids or high dose inhaled steroids can be given a steroid warning card
- Patients who live on their own may need access to the pharmacy delivery service, if it's available, when their exacerbations are bad
- Recent studies have indicated that COPD patients are at an almost three-fold increased risk of iron deficiency, and that iron-deficient patients are more likely to report COPD exacerbations. Symptoms to watch out for include leg cramps when climbing stairs, increased fatigue and unusual cravings for ice cold food.

Useful resources

- NICE guideline CG101: *Chronic obstructive pulmonary disease in over 16s: diagnosis and management* (this is due to be updated later in 2016)
- British Lung Foundation: blf.org.uk / Patient helpline: 03000 030 555
- British Thoracic Society: brit-thoracic.org.uk
- Respiratory Education UK: educationforhealth.org/REUK
- Patient UK (for leaflets): patient.co.uk.



reflective exercise

- What types of questions should be asked when a patient presents with a cough?
- Which 'red flags' would trigger a referral to the pharmacist?
- Are you able to signpost your patients to take part in local pulmonary rehabilitation courses?

Go to www.tmmagazine.co.uk to answer the CPD questions. When you pass, you'll be able to download a certificate to showcase your learning. You can also add this to your online, personalised learning log.

Next month: We will focus on working with GPs.