The Pharmacist’s Role with Chronic Obstructive Pulmonary Disease Patients

by Michelle Roberts, PharmD

BACKGROUND
Patients with chronic obstructive pulmonary disease (COPD) are all too familiar in community pharmacy settings. COPD is a major disease state that affects more than 12 million patients, with potentially 12 million more patients that are improperly diagnosed or unknowingly living with the disease. COPD is the third leading cause of death in the United States. A COPD diagnosis indicates a progressive disease with potentially severe exacerbations for uncontrolled patients. Patients with COPD contribute to more than 700,000 hospitalizations every year. Of those patients, about one in every four will be readmitted into the hospital within 30 days of their discharge, and 50 percent of these patients will be readmitted within a year of hospitalization. The national projected annual cost of COPD estimates that patients, insurance, and health care teams spend nearly $50 billion per year in direct and indirect expenditures. For this reason, the Centers for Medicare & Medicaid Services (CMS) have initiated plans and incentives to decrease the readmission rate. Community pharmacists are in a unique position to reach these patients after a diagnosis or hospitalization.

In a hospital setting, patients are directly cared for by hospital staff for their new diagnosis or exacerbation, but are expected to go home and care for themselves. COPD is a complex disease state that entails balancing lifestyle changes and multiple medications. For this reason, the community pharmacist can have a positive impact in managing COPD and preventing complications that can lead to an exacerbation or hospitalization. The Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines identify strategies for pharmacists to decrease COPD exacerbations. Pharmacists play a vital role with this knowledge, not only in recognizing signs and symptoms for increased risk, but to also to help prescribers and patients choose the correct medication therapy. They can also offer counseling on medication adherence and proper medication technique with inhalers and nebulizers, and discussing lifestyle changes to improve quality of life.

PREVENTING READMISSIONS
The positive impact community pharmacists have on medication adherence is a vital part of the profession. Pharmacists are first line in filling new prescriptions and...
seeing patients on a regular basis as they continue to refill their medications. Adherence is critical for the patient population dealing with COPD because medication non-adherence contributes to 33-69 percent of all medication-related hospital admissions. It is the pharmacist’s job to ensure adherence to decrease re-hospitalization risks. Along with adherence to medications, it is crucial for patients to understand how to use their medications, specifically inhalers. Using the “teach-back” method, pharmacists can show patients how to use their inhalers to receive the most benefit from their medications.

Because pharmacists see patients more regularly than most other providers, they are at an advantage to witness issues that can lead to problems. Some signs and symptoms of exacerbation include cough, sputum production, and shortness of breath. Pharmacists also know the medical histories of patients, such as their immunization records. The GOLD guidelines recommend that patients with COPD receive influenza and pneumococcal vaccinations to decrease exacerbation risks. Pharmacists are able to counsel on over-the-counter medications to help with symptoms, and also give vaccines. Finally, pharmacists know a patient’s lifestyle habits and what modifications are helpful to decrease hospitalization risk and improve symptoms.

There is only one thing known to slow the progression of COPD, and that is smoking cessation. Many patients first develop their COPD from smoking habits, either in the past or ongoing. Immediately after a diagnosis, exacerbation, or hospitalization, a pharmacist should assess readiness to quit and offer counseling on smoking cessation. The Agency for Healthcare Research and Quality has developed a five-step technique to helping patients quit smoking, the “Five A’s” (see figure). Pharmacists are also equipped with the knowledge to recommend OTC aids to help patients quit smoking, such as nicotine gum, lozenges, and patches. Lastly, pharmacists can refer patients to their primary care physician if they need prescription pharmacologic treatment to help them quit smoking.

**CONCLUSION**

Pharmacists have all of the tools necessary to help hospitals and physicians take care of patients with this chronic disease. COPD can be managed with the continual care that the frequency of filling prescriptions and taking medications can provide, not to mention the vast knowledge that pharmacists possess. The information provided in the GOLD guidelines for managing COPD is invaluable for the care of this patient population. Pharmacists have the knowledge of the guidelines and beyond to ensure medication adherence, proper immunizations, and healthy lifestyles are maintained to decrease the risk associated with COPD exacerbations.

Michelle Roberts, PharmD, is a 2016 graduate from Lipscomb University and was a fall 2015 APPE rotation student at NCPA.