



Carolyn O'Shea

Is it all in the act?

Struggling to breathe is one of the most distressing symptoms to have, or to witness. Treating acute shortness of breath is rewarding for both the patient and the doctor. The patient often takes at least the initial dose of medication under your (or your practice nurse's) supervision. You know it was taken and taken correctly.

However, in chronic respiratory conditions the key issues in management change and adherence to medication are more of a concern. Prescriptions are provided, questions are asked about usage, and there may be intermittent observation of doses to check correct device use. While adherence can be influenced, it largely needs to be implemented outside the consultation room.

A conclusion that intrigued me was reached by a study published last year by Vestbo et al.¹ As part of a double blind, placebo controlled trial with three active treatment options, adherence to medication was assessed over the 3 years of the trial. Good adherence was defined as more than 80% of doses taken over the trial.

There were just over 1500 people with chronic obstructive pulmonary disease (COPD) in each of the four groups, meaning that about 1500 people received placebo inhalers and about 4600 people received one of the three types of treatment inhalers (with active drugs in differing combinations). It was found that those with good adherence had a statistically significantly reduced risk of death and hospital admissions for COPD. This was true for all groups – the placebo inhalers and the three treatment inhaler groups. It held true even after adjustment for disease severity.

A linked editorial² made the point that similar findings have been found in cardiovascular clinical trials, meaning there is a growing body of evidence that, in the clinical trial setting, adherence (to active medication or placebo) predicts better outcomes. Probably good news for

patients with some obsessive traits!

What does this mean for general practice? The clinical trial environment and patient may be quite different to the next patient in the consultation room. It has been suggested that perhaps the effect is in part a reflection of other healthy behaviours in adherers, such as eating well and being active. Another suggestion has been that the belief that you are doing something good will lead to obtaining a benefit, for example, through the act of using an inhaler you breathe easier. How might this fit with general practice?

Two research articles in this issue of *Australian Family Physician* considered a different respiratory condition – asthma. In their article, Brown and colleagues³ used a survey of parents of children in the Australian Capital Territory with asthma, considering if their asthma medication use was in line with National Asthma Council Australia guidelines. While there was a low response rate to a survey (which measures what you say you do, which may not be exactly what you actually do!), it found that the majority of home medical management for asthma preventers was not in accordance with the National Asthma Council Australia guidelines. Of note was that 35% of children prescribed inhaled corticosteroids were not taking them, or were using them intermittently. Perhaps this is the population that we want to target to improve their adherence.

But how can we achieve this? The research by Larson and colleagues⁴ looked at a general practice based single asthma education and action plan review appointment with an asthma educator in a practice followed by a general practitioner consult. In a prospective cohort study with small numbers they found this led to an increase in adults' (but not children's) asthma quality of life and an increase in self reported spacer use. Other changes were not statistically significant, but some showed trends in the right direction. There were no measures of adherence to medications reported in the paper, but if it increases a part of

the medication regimen (self reported spacer use), then one of the next questions would be, does the intervention increase adherence?

The focus of this month's *AFP* is chronic respiratory disease. Working out in a rational way what the likely cause of the problem is, is in the domain of the GP. The article by Simpson should assist the GP to reach a diagnosis in chronic lung disease; and the article by Walters considers the role of the GP in the diagnosis and management of COPD.

There are some respiratory diseases that are predominantly managed in general practice, such as COPD and asthma, for other diseases, such as interstitial lung diseases, specialists have a greater role. The article by Ward and McDonald provides an overview of interstitial lung diseases and provides an approach to diagnosis; and the article by Seccombe and Peters considers issues around lung disease and fitness to fly.

We hope that you find these articles useful in your clinical practice. If only the answer to improving adherence was as easy!

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