

EDITORIAL

Many patients labelled as having mild asthma do not have well-controlled asthma

Key words: exacerbation, mild asthma, treatment.

Asthma is a common, chronic respiratory disease affecting 1–18% of the population in different countries.¹ The phase III International Study of Asthma and Allergies in Childhood reported that the prevalence of current asthma in the 13–14-year age group in China was 1.8%.² Given a population size of 1.4 billion, the number of patients with asthma in China is huge.

'Mild asthma' refers to asthma that is 'well controlled' with the Global Initiative of Asthma (GINA) Step 1 or 2 treatment, with as-needed reliever medication monotherapy or low-intensity controller treatment such as low-dose inhaled corticosteroids (ICS), leukotriene receptor antagonists (LTRA) or theophylline.¹ From the China National Health and Wellness Surveys conducted between 2010 and 2013 with 59 935 respondents, 1.99% were reported to have a diagnosis of asthma.³ Among those with asthma, 77% were considered to have mild asthma based on the GINA guidelines. Compared with the matched controls, subjects with mild asthma reported worse quality of life, more overall work impairment and more all-cause emergency room visits in the past 6 months.³ However, there are limited data on treatment patterns and control of mild asthma in Chinese patients.

Ding and Small⁴ in this issue of *Respirology* reported an interesting study that described the patient characteristics, treatment patterns and disease burden of subjects with mild asthma residing in urban areas of China. The study⁴ shared the same protocol as the Respiratory Disease-Specific Programme (DSP) study,⁵ which was a prospective cross-sectional survey conducted by primary care and specialty physicians in eight countries (France, Germany, Italy, Spain, UK, USA, Japan and China).⁶ The number of subjects from China in the multi-country DSP study that had been prescribed a GINA Step 1 or 2 regimen was 83.⁶ The number of subjects in the study by Ding and Small⁴ was higher, with 229 patients meeting the criteria for mild asthma while 25.3% were classified as Step 1 and 74.7% as Step 2, respectively. Both the subjects with mild asthma and the physicians who looked after these patients were surveyed. Their study⁴ found that the majority of physicians perceived their patients' asthma as 'well or completely controlled'. However, only 14.2% of all patients were classified as well controlled according to the GINA criteria. There was also a high frequency of nocturnal symptoms, exacerbations and use of inhaled rescue medications. The results were similar to the DSP study involving eight countries⁶ and the level of asthma control in other Asia-Pacific countries.⁷

The reason for the discrepancies between physicians' assessments of overall asthma control and patients' symptom control according to the GINA guideline¹ was not clear. Objective tools would help doctors make a more accurate assessment but this may not be utilized in busy clinics. Assessment of symptom control is important. For many patients in primary care, symptom control is a good guide to a reduced risk of exacerbations.⁸ In the study by Ding and Small,⁴ symptom control was mainly used to assess the level of asthma control of the subjects. In control-based management, both domains of asthma control, symptom control and future risk, should be taken into account when choosing asthma treatment and reviewing the response.¹

This study has also reflected the special treatment regimens for asthma patients in China. Apart from the usual drugs as recommended by the GINA guidelines, quite a significant proportion of subjects were on anti-tussives, mucolytic agents and traditional Chinese medicine. Only 13.8% of the patients were classified as high adherers to the prescribed drugs. Whether poor adherence has led to increased symptoms with need for other medications such as antitussives is unknown in this study. Furthermore, only 21.6% of the subjects received low-dose ICS. A recent study found that in mild recent-onset asthma, low-dose budesonide improved symptom control similarly across all symptom subgroups.⁹ ICS under-prescription might have led to poor asthma control in some subjects in this study.⁴

Many of the subjects with mild asthma in this study had exacerbations (17.8%) in the previous 12 months. The overall absenteeism was 5.8% in the past 7 days. These subjects who were on Step 1 or 2 treatment of the GINA had quite significant morbidity. On the other hand, this study did not assess mortality.

This study was limited by uncertainty of the diagnosis of asthma as it was only a physician's diagnosis without chest radiography or lung function tests. In over 60% of the subjects in this study lung function data were missing. The quality of the data depended on accurate reporting by physicians and patients but patients' memory of exacerbations over the past 12 months without verification with medical records might be subjected to recall bias. This was a cross-sectional study without longitudinal follow-up. A recent study has shown that the tendency to remain at a given control level varies significantly among patients with asthma.¹⁰

This study has provided interesting real-world data on the patient characteristics and treatment patterns, and disease burden of subjects with mild asthma residing in the urban areas of China. A high proportion of subjects did not have well controlled asthma and many

of them were not prescribed ICS and had significant morbidity. Further studies on the factors behind these findings, the role of education and intensification of treatment for improving morbidity of these asthma patients would be important to improve our clinical management of these patients.

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