



## Asthma management in practice

**To the Editor:** The prevalence of asthma is increasing worldwide and the morbidity and mortality attributed to undiagnosed or inappropriately treated asthma remains unacceptably high.<sup>1</sup> In 2000 the SAMJ<sup>1</sup> published a guideline to help practitioners to diagnose and manage asthma. Even though guidelines such as this are freely available, many patients remain less than optimally medicated.<sup>2</sup> The present study recorded the number of previously diagnosed asthmatic patients presenting at an occupational health clinic and the extent to which their medication complied with the asthma guideline.

All asthmatic patients aged 18 years and older who consulted the chief researcher (SK) during the study period were included in the study. Patients consulted either because of an acute exacerbation of asthma or because it was more convenient for them to obtain a prescription for their medication from the occupational health facility at the time. These patients, with medical insurance, had the freedom to choose their doctor and it is not uncommon for such patients to consult different doctors for their asthma medication.

All patients agreed to participate in the study. During the consultation patients were questioned about their medication (the names and uses thereof) and the severity of their asthma was assessed as described in the guideline. To avoid bias, those patients who had been diagnosed with asthma or who were

being treated for asthma by the chief researcher were excluded from the study.

Over a period of 18 months 33 patients met the inclusion criteria. The treatment regimen for 21 patients (63.6%) complied with the asthma guideline. Table I shows that the treatment regimen for 12 patients (36.4%) did not comply with the asthma guideline and that the majority of these patients (66.7%) had moderate to severe asthma. Eleven of the 12 patients (91.7%) did not use a steroid metered-dose inhaler (patients 2 - 12). Ten of these 11 patients (90.9%) had chronic persistent asthma and according to the guideline should have been using an inhaled steroid. One patient with intermittent asthma was using a cough mixture with bronchodilator properties and a short-acting  $\beta_2$ -stimulant for symptomatic relief. A patient with moderate asthma was also using a cough mixture for symptomatic relief. The third patient with intermittent asthma was correctly using a steroid inhaler but was using a long-acting instead of a short-acting  $\beta_2$ -stimulant for symptomatic relief.

### Discussion

In South Africa the management of asthma is still a problem. In 1996, asthma accounted for 1.4% of deaths in males and 1.6% in females. The years of life lost showed that asthma accounted

**Table I. Severity of asthma and the treatment regimens of patients who did not comply with the asthma guideline**

| Patient number                               | 1            | 2  | 3    | 4  | 5  | 6        | 7  | 8  | 9  | 10     | 11 | 12 |
|--|--------------|----|------|----|----|----------|----|----|----|--------|----|----|
| Age (yrs)                                    | 31           | 67 | 35   | 58 | 25 | 29       | 43 | 29 | 53 | 53     | 29 | 59 |
| Severity of asthma                           | Intermittent |    | Mild |    |    | Moderate |    |    |    | Severe |    |    |
| Inhaled steroid                              |              |    |      |    |    |          |    |    |    |        |    |    |
| Inhaled short-acting $\beta_2$ -stimulant    |              | *  | *    | *  | *  | *        | *  | *  | *  | *      | *  | *  |
| Short-acting $\beta_2$ -stimulant tablets    |              |    | *    |    | *  |          |    |    |    |        |    |    |
| Long-acting $\beta_2$ -stimulant             | *            |    |      |    |    |          |    |    | *  |        |    |    |
| Theophylline                                 |              |    |      | *  | *  |          |    |    | *  |        | *  | *  |
| Atrovent                                     |              |    |      |    |    |          | *  |    |    |        |    |    |
| Cough mixture with bronchodilator properties |              | *  |      |    | *  |          |    |    |    |        |    |    |

\* Denotes medication used



for 1.1% of male years of life lost and 1.4% of female years of life lost in the same year.<sup>3</sup> This high morbidity and unnecessary mortality occurred despite readily available and cost-effective treatment regimens. The aim of clinical guidelines is to promote good medical practice<sup>4</sup> by assisting practitioners to provide optimal and cost-effective care. Eccles *et al.*<sup>5</sup> in the former Northern Region of the UK, found that 25% of practices were not aware of the availability of guidelines for the management of asthma, diabetes and hypertension.<sup>5</sup> Studies have found that even when clinical guidelines are available they are not adopted. It is therefore imperative that a strategy promoting the acceptance and use of clinical guidelines by practitioners be developed.<sup>6</sup> By using asthma guidelines, the severity of asthma is more likely to be graded accurately and medicated appropriately. To encourage adherence to the prescribed regimen it is important for practitioners to ensure that patients understand the necessity for and the safety of inhaled steroids. The use of cough mixtures is neither recommended nor indicated in the management of asthma.

The finding in this study that 36.4% of patients did not

receive the recommended medication commensurate with the severity of their asthma is cause for concern. If this problem is not addressed, it is unlikely that there will be an improvement in the current unacceptably high morbidity and mortality associated with asthma in South Africa.

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