

# ASTHMA MYTHS: FACT OR FICTION?

## A REVIEW

Saville N Furman, MB ChB, MFGP(SA)

Family physician in private practice and part-time lecturer in Departments of Family Medicine and Paediatrics, University of Cape Town, South Africa

### ABSTRACT

In order to be successful, parent education should focus on dispelling myths rather than just providing information. Common responses we hear from patients when asthma is first suspected or diagnosed include: 'It's just a chest cold...' or 'it's a bronchial chest... or wheezy bronchitis...' 'I'm sure he/she will grow out of it!'

When we prescribe inhalers there is often a fear/concern that it may 'weaken the heart' or cause dependence. When we suggest steroids there is often reluctance as parents fear the child won't grow.

Parental education is central to asthma care. The caregiver therefore needs insight into the beliefs of the parent and child which might affect their receptiveness to our information.

Surveys have shown that many patients with asthma remain poorly controlled even in well-organised general practices that take an active interest in asthma. Of patients surveyed in one study from Southampton,<sup>1</sup> 51% were waking at night with a wheeze, 49% were wheezy at least once a week, 31% had missed school or work in the previous year and 23% were avoiding physical activities between attacks.

Despite advances in pharmacological treatment, the case management of childhood asthma is often not optimal,<sup>2</sup> adversely affecting the quality of life of both patients and parents.<sup>3</sup> Inadequate management may be due to a number of factors, including **poor communication** between doctor and parents,<sup>4</sup> **misconceptions** and/or poor knowledge about asthma on the part of parents,<sup>5,6</sup> and a lack of adherence to medication and treatment regimens.<sup>7</sup>

Patients may hold various beliefs, concerns and misconceptions about asthma (Table I), some of which may be specific to a given population. It is important to study these in order to address the needs of a particular parent population. In addition, it has been argued that in order to be successful, **parent education should focus on dispelling myths rather than just providing information.** Within countries, a number of

**Table I. Common practice myths**

**Aetiology:**

Psychological illness, spiritual-cultural retribution. Signifies weakness.

**Treatment:**

Weakens heart, shortens adult height.

**Consequences of disease:**

Debilitating illness, should not exercise.

studies have shown the quality of asthma care to be poorer and the complications of asthma to be greater in lower socio-economic populations. In Jones *et al.*'s study<sup>8</sup> in Mitchell's Plein, Cape Town, respondents' main concerns were anxiety when their child could not breathe, fear of an attack, and fear of death.

A number of respondents denied that their child had asthma and referred instead to diagnoses such as bronchitis, chest problems, recurring flu, chest cold, and bronchial problems.

Non-users of inhaled medication were afraid that inhaled medication would weaken the heart and cause dependency and also that its use would signify that their child was severely asthmatic.

The reasons given by respondents for non-compliance were that they preferred to give medication only when the child was sick, and that they did not want the child to become dependent on the medication. Many respondents rubbed ointment on their child's chest. These ointments included or contained 'borsdruppels' (Dutch chest drops), 'Vicks' (mentholated ointment), menthol camphor oil, grated nutmeg, and castor oil. Other remedies were mixtures taken by mouth, the most common ingredients being fish oil, honey, vinegar, egg, castor oil and camphor.

In the opinion of respondents, **doctors did not tell them enough about their child's condition or about its treatment.** Table II outlines factors affecting management problems.

**Table II. Factors affecting inadequate management of asthma**

- **Communication** (Doctor: Parents: Child)
- **Misconceptions**
- Poor knowledge
- Poor adherence
- Poor administration device techniques

**Patient education is central to asthma care.** The clinic or office encounter between the health-care professional and the parent of an asthmatic child needs to be tailored to the specific patient's needs, yet be compatible with the pressures of a busy practice. The practitioner therefore needs insight into the variety of beliefs and practices which might affect the patient's receptiveness to the clinical message.

An important finding in Jones *et al.*'s study<sup>8</sup> was the resistance of parents to the use of inhaler therapy. Concern was expressed that inhaled therapy would weaken the child's heart or create dependence. Fears about inhaled therapy, as well as the belief that maintenance therapy would cause dependence need to be addressed in case management. **Health-care providers should be aware of these barriers** (Table III) when attempting to prescribe inhaled therapy, particularly for continuous anti-inflammatory purposes.

A UK survey<sup>9</sup> of patients, nurses and general practitioners reveals little enthusiasm for guided self-management plans in asthma care. To investigate, the researchers formed nine focus groups who met on 2 occasions to discuss the subject. The sessions

Correspondence: Dr SN Furman, PO Box 119, Milnerton 7435. Tel 021-552-5060, e-mail savfurman@iafrica.com

**Table III. Potential barriers to education**

- Denial of diagnosis
- Denial of disease severity
- **Misconceptions and myths**
- **Cultural preconceptions**
- Belief that 'relieving medicines are best'
- Negative stigma associated with asthma
- Drug side-effects, including 'steroid phobia'
- Depression

involved a total of 11 general practitioners in 2 groups and 13 asthma nurses in 2 groups. Thirty-two patients made up the remaining groups. This separation, say the researchers, was intended 'to facilitate maximum freedom of expression by participants.'

Although reasons differed, both patients and professionals 'were unenthusiastic about self-guided management plans.' For example, many patients with mild asthma were uncomfortable with a plan '**that reinforces asthma as a chronic, ongoing disease.**'

Among concerns of nurses were that patients would rely on their plan and 'not return for regular review.' Many doctors felt that patients were unable 'to take on board more than a very small amount of information at a time.' They and the nurses also stressed the need of continuing education and dialogue. They conclude that 'attempts to introduce self-guided management plans in primary care are unlikely to be successful. A more patient-centred, patient-negotiated plan is needed for asthma care in the community.'

Doctors and nurses play a large part in determining what it means for a patient to have asthma. Asthma varies enormously in its severity and impact – both between people and over time in the same person, and doctors need to be able to vary the fuss they make about it accordingly. A problem with management protocols is that they may activate a lot of unnecessary intervention for people with mild disease. Both doctors and nurses are prone to make this mistake. When our patients do not comply with the treatment we recommend, we are apt to threaten them with the seriousness of untreated asthma. We might be more successful if we made light of the diagnosis, thus making it easier for a patient to accept both the diagnosis and the treatment we are suggesting. We must take the time to find out what each of our patients believes



Fig. 1. All that wheezes isn't asthma.

and fears about asthma and its treatment. Fears about the effects of steroids are particularly important. Only by listening to these concerns can we effectively address them. We will only persuade our patients to accept and use effective treatment if we make our management less threatening, less intrusive and less fuss than the symptoms. This is a continuing challenge to our skills in communication and in organisation. Tables IV and V outline appropriate patient education and a strategy for treatment success.

**Table IV. Summary of what patients need to know**

- The diagnosis and how it was made
- How to use an inhaler
- Difference between reliever and preventer
- Peak flow meter use
- Signs and symptoms of deterioration and appropriate interventions
- When and where to be followed up

**Table V. Components of any successful management educational plan**

- Communication
- Address fears and concerns as they arise
- Acknowledge attitudes to medications
- Access patient-driven concerns re acceptability, affordability and appropriateness of treatment
- Negotiate goals
- Reinforce educational materials
- Address parents' desire to take control
- Group support
- Skills to monitor condition
- Caregiver/patient 'empowerment' and 'ownership' of management plan

Teens with asthma often feel isolated according to Chitra Dinakar and colleagues<sup>10</sup> of the University of Missouri, who have an ongoing study of 100 asthmatic patients, aged 8 to 18. They found that 40% report having asthma sets them apart from their healthy peers, 45% have felt excluded from school activities, athletics and clubs because of their asthma, and more than one-third of respondents feel uncomfortable using their inhaler in front of their friends.

A British study<sup>11</sup> concluded that stress caused by such events as moving, changes in family relationships, births and death can raise a child's risks for asthma attacks fourfold. They found that **stressful life events were linked to bouts of asthma** at two distinct time periods – first within 2 days of the worrying event, and then again 6 weeks later. The researchers suggest the symptoms are likely to be caused by different physiological and immune processes involving the autonomic nervous system and hormone and brain chemical regulation.

'Accidental' non-adherence may occur because of misunderstanding or because other life events take priority. Deliberate non-adherence may result from fear of side-effects. Table VI lists both medication-related and non-medication related factors involved in non-compliance. Conrad<sup>13</sup> describes three patterns of personal style that result in non-adherence. The first is testing - patients question 'do I really need it?'; the second is pragmatic practice, patients will 'stop and start' according to the symptoms; the third is stigmatisation – taking treatment regularly confirms that they have a chronic illness.



Fig. 2. Being nebulised in the doctor's surgery.

**Table VI. Factors involved in non-compliance**

**(a) Medication-related factors**

- Misunderstanding the need for both long-term preventative and quick-relief medications
- Impractical regimen (e.g. four times daily) or multiple medications
- Difficulty with inhaler devices
- Side-effects
- Fear of side-effects or addiction
- Cost of medication
- Dislike of medication
- Distant pharmacies

**(b) Non-medication factors**

- Disbelief or denial of cause of symptoms or attacks
- Misunderstanding of management plan
- Inappropriate expectations
- Lack of guidance for self-management
- Dissatisfaction with health-care professionals
- **Unexpressed/undiscussed fears** or concerns
- Poor supervision, training or follow-up
- Cultural issues (traditions, **beliefs about asthma** and treatment)
- Family issues (smokers, pets)

*Adapted from Global Strategy for Asthma Management and Prevention NHLBI/WHO workshop<sup>12</sup>*

Patient education is ongoing. Monitoring asthma care is as important as providing the correct information initially. Table VII suggests 10 questions to ask patients at follow-up.<sup>12</sup>

**CONCLUSION**

We have effective treatment for asthma at our disposal,<sup>14</sup> but patients continue to suffer unacceptably high levels of morbidity. As in many other areas of medical practice we are failing to accord sufficient importance to the proper implementation of what we already know. For guidelines to be followed<sup>15</sup> particular attention must be given to the promotion and justification of those management strategies in the guidelines which practising doctors find difficult to reconcile with previously held beliefs. It is also important that the guidelines are considered for the wise rather than for anyone's blind

**Table VII. 10 questions for monitoring asthma care**

Ask the patient:

- Has your asthma awakened you at night?
- Are you participating in your usual physical activities?
- Have you needed more quick-relief medication than usual?
- Have you needed any urgent medical care?
- Has your peak flow been below your personal best?
- Please show me how you take your medicine.
- So that we may plan therapy, please tell me how often you actually take the medicine?
- What problems have you had following the management plan of taking your medicine?
- During the last month, have you ever stopped taking your medicines because you were feeling better?
- What concerns might you have about your asthma, medicines or management plan?

*Adapted from Global Strategy for Asthma Management and Prevention NHLBI/WHO workshop<sup>12</sup>*

adherence.

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