

Asthma — still a challenge for general practice

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SUMMARY. *Asthma is probably the commonest chronic disease in the United Kingdom, and its attendant morbidity extends outside the possible scope of the hospital sector. Innovations to improve the care of asthma must therefore come from general practice. The need for such care initiatives is demonstrated by the rising mortality and morbidity from this condition, and by the evidence of less than optimum treatment at both the primary and secondary care levels. This paper reviews this evidence, and considers possible solutions to the problems raised. Pragmatic guidelines are offered for the promotion of good asthma care, while the need for proper evaluative research is stressed.*

Prevalence of asthma

ESTIMATES of the prevalence of asthma are highly dependent on the criteria used for diagnosis, as shown by a recent review which found rates varying from 5% to 31% in British children.¹ It is also known that prevalence varies markedly between different countries, with figures of 0.09% for all ages in the highlands of Papua New Guinea and 75% for children in the Western Carolines.² In the United Kingdom a popular figure for the prevalence of asthma is 10% which means that there are some five million sufferers needing surveillance and treatment, but recent evidence suggests that there may be many more unsuspected elderly sufferers.³ This represents a burden of potential morbidity which is far beyond the capacity of secondary health care resources. Asthma must therefore be regarded as a disease predominantly of general practice and it is to primary care that we must look to improve the lot of asthmatic patients. This challenge was recognized in 1981⁴ but still remains to be met.

Measures of care

Before considering possible care initiatives it is pertinent to examine measures of care described in the literature. Quality of care is difficult to evaluate but mortality and morbidity surveys are a useful starting point. Despite the very real progress made in understanding the basic mechanism of asthma,⁵ and despite the introduction of effective inhaled treatments which are being used increasingly,⁶ the mortality figures are depressing. There is no evidence of any fall in the annual death rate of about 2000, with one study showing no change⁷ and another suggesting an increase.⁸

Morbidity studies indicate that the prevalence of asthma in general practice increased between 1970–71 and 1981–82⁹ and that admissions to hospital of children with asthma rose by 167% between 1970 and 1978.¹⁰ This probably includes an increase in the diagnosis of asthma, but actual disease prevalence has also risen. Avery and colleagues showed a lack of ability to self care in asthmatics¹¹ and Sibbald and colleagues found a marked degree of psychosocial morbidity in asthma sufferers with increases in their respiratory symptoms.¹²

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© *Journal of the Royal College of General Practitioners*, 1989, 39, 254–256.

Management of asthma

Management of acute asthma in hospitals is by no means uniform and is likely to be significantly better in units with a special interest in respiratory disease.¹³ Other medical wards are less likely to use oral steroids, measure peak flow rates regularly and to follow patients up after discharge.¹³ Furthermore, patients managed on ordinary medical wards are more likely to have residual symptoms and to be readmitted within one year, and less likely to have their regular treatment altered. A linked study following up all patients with asthma discharged from one hospital over one year found that undersupervision and undertreatment were common.¹⁴

How do asthmatics fare in general practice? Ever since Speight highlighted the underdiagnosis of childhood asthma in the community in 1978¹⁵ there has been abundant evidence that the diagnosis of asthma by general practitioners is far too slow. Anderson and colleagues, in a community survey, showed both underdiagnosis and undertreatment of asthma and stressed the important effect on quality of care of labelling children as 'asthmatic'.¹⁶ Levy and Bell showed that an average of 16 consultations for respiratory symptoms was needed before asthma appeared in the patient's notes¹⁷ and Levy went on to consider whether the nature of general practice was to blame.¹⁸ Hay and Higenbottam examined the results of the 1970–71 and 1981–82 national morbidity studies in general practice and the Department of Health and Social Security surveys of prescribing for 1968–85.¹⁹ The number of asthmatics diagnosed rose by 75%, but, for the average patient, consultation, home visits and out-patient referral rates fell significantly by 19%, 44% and 32%, respectively. Over the same period total prescribing for airflow obstruction rose by 76% and the proportion of treatment aimed at attack prevention increased from 10.6% to 19.4%. However, Anderson and colleagues have demonstrated considerable variation in the management of acute asthma by general practitioners²⁰ and recent evidence from Holland, whose system of primary care is similar to that in the UK, revealed a marked undertreatment of asthma in general practice.²¹

Areas for improvement

There is therefore some evidence of improvement but rather more that shows how much needs to be done. Areas for potential improvement in general practice include better use of diagnostic tests and tools such as the peak flow meter, better organization of care, and better management of the disorder through patient education and the use of self-management protocols. Patient education seems a logical starting point but its effect on morbidity is uncertain. Hilton and colleagues have developed a methodology for investigating patient education²² but a sizeable controlled study in general practice showed that, while patients' knowledge of asthma improved over one year, disease morbidity was unchanged.²³ In a similar recent study, Jenkinson and colleagues came to the same conclusion.²⁴

It would appear that patients' attitudes and beliefs about asthma need more investigation before further progress can be made in the area of patient education. A potentially useful instrument has been designed by Sibbald and colleagues²⁵ and further experience with this instrument has introduced the idea of perception of stigma by asthma sufferers and related this to morbidity and self-care ability (unpublished report to DHSS). Sibbald concluded that the problems in asthma self-care include:

delay in summoning medical help in an acute attack, inappropriate action in an acute attack, and irregular use of prophylactic medication. She found that factors which influenced self-care were: patients' feelings of stigma and pessimism, their confidence in the doctor and their understanding of drug treatments. Health education to improve self-care therefore needs to address patients' attitudes towards their condition, if it is to prove successful in reducing morbidity from asthma.

Mini-clinics in general practice, usually run by nurses, have become accepted for immunization, hypertension and diabetes. First discussed in the literature in 1985,²⁶ nurse-run asthma clinics are now proliferating under the auspices of the Asthma Society Training Centre at Stratford. Pearson has stated clear structures for such clinics²⁷ and a number of authors have reported their experiences of these clinics in their practices.^{28,29} However, no strict evaluation or cost-benefit analysis has been carried out in this area and indeed many general practitioners may not be happy with the concept of mini-clinics.

Experience of the use of complex, labour intensive and expensive self-management protocols has been gained in the United States of America and benefits have been demonstrated.³⁰ In the UK Beasley and colleagues used a simple self-management scheme among adult asthmatics attending a medical outpatient department, and revealed a significant reduction in a number of morbidity measures.³¹ The scheme involved self monitoring of peak expiratory flow and a personalized home treatment plan. This highlights another avenue of potential progress which demands a sizeable trial in general practice. Many hospital specialists stress the importance of peak flow meters in asthma yet they cannot be prescribed in the UK as they can in New Zealand.

The future

What then of the future? General practitioners need to make greater use of peak flow meters not only in diagnosis but also in the maintenance of care. They need to be able to interpret patient peak flow recordings and adjust treatment accordingly. Use needs to be made of reversibility, exercise and skin testing, and preventable factors require assessment. Patients need to have their condition and its treatment carefully explained on several occasions and inhaler techniques must be repeatedly taught. Asthmatic patients need planned surveillance in order to minimize morbidity. These are laudable aims but they are time consuming and require skilled handling, protected time and good organization of care. The busy National Health Service general practitioner needs help from other professionals.

The role of the practice nurse and other non-medical members of the primary care team is paramount, but proper evaluation of this extended role is essential. It is likely that more training centres and more teachers for primary care professionals will be needed, but adequate resources will only be provided by the government if clear benefits can be demonstrated. While waiting for such evaluative studies to be developed and reported, it is essential that every opportunity be taken to highlight awareness of asthma. Progress need not be delayed in primary care and the Royal College of General Practitioner's information folder on asthma is a useful starting point for change. Practices should be able to improve asthma care by addressing three points:

1. Asthma patients need to be identified and diagnostic criteria considered if the proportion is less than 5% of the practice list.
2. Each primary care team needs to develop its own therapeutic plan for asthma.
3. A well documented recall and follow-up system, probably implemented by the practice nurse, needs to be set up.

Help for nurses can be obtained from the Asthma Society Training Centre handbook³² or by attending courses at the centre. The Anticipatory Care Teams' first report concentrated on heart disease prevention,³³ but future work will include consideration of the roles of other primary health professionals in asthma care.

Finally, asthma sufferers themselves must become more aware of their potential for normal health. My subjective impression is that much chronic morbidity is accepted as normal by patients, and concerted effort is needed to alter this viewpoint. Community agencies and self-help groups can make a useful contribution to this process.

Asthma must belong to general practice. We have the drugs we need, we have the necessary access to patients and we have the skills and knowledge. This chronic disease awaits our attention.

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DIABETES: DO YOU CARE?

The RCGP/Lilly Diabetes Facilitators Project

After a successful pilot run in the north of England, the Clinical and Research Division has now secured a further grant from Eli Lilly Co Ltd, to continue the project in two more areas of the country. The project provides two facilitators, a general practitioner and a practice nurse, to help and advise practices wishing to extend the services offered to their diabetic patients, over a period of 12 months.

The grant provides each Faculty chosen with sufficient funding to allow the facilitators to devote up to 40 days (80 sessions) to the project, plus an allowance to cover travelling expenses and secretarial and administrative costs.

All Faculties of the College are being given the opportunity to administer the project in their area. The first project is scheduled for commencement in Autumn 1989 and the second project will commence in the Spring of 1990. Faculties wishing to compete for the first project must send their completed application form to Dr Colin Waine, c/o Clinical and Research Division, 14 Princes Gate, London SW7 1PU, by the 30 August 1989; and those wishing to compete for the second project must send their application forms by the 30 November 1989.

Members or Fellows of the College with a special interest in diabetes who would be interested in participating in the project, should contact their local Faculty Honorary Secretary.

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