

Cross-sectional studies, such as these, can be a powerful and rapid method for demonstrating differences between different patient groups with respect to uptakes of treatments. Although it is reassuring that patients from different ethnic groups seem to be getting a fair deal, it remains concerning to uncover yet more inequalities by age, sex, location, and possibly deprivation.

These studies (and cross-sectional studies in general), however, leave us with many questions unanswered. They do not tell us why inequalities arise or at what point in the total care pathway they are most likely to occur — qualitative analyses and cohort studies are needed to address this.

These studies tell us little, if anything, about the potential impact of inequalities on hard outcomes such as mortality and reinfarction, and 'softer', but equally important, outcomes such as patient quality of life and satisfaction. We don't know whether inequalities are getting better or worse. Time series analyses are needed to determine this and to enable us to make future predictions.

We need studies such as these to identify and quantify problems, but we also need to focus on developing and evaluating effective interventions to reduce inequalities and maximise the health gain for the whole population. *Our healthier nation* aims to improve the health of the worst off in society and to narrow the health gap.¹³ Whereas some national policies, such as the *National service framework (NSF) for older people*¹⁴ and the *NSF for diabetes*,¹⁵ have the reduction of inequalities as key objectives, others have curious incentives that could inadvertently make things worse; the *NSF for coronary heart disease*, for example, specifically targets patients aged under 75 years.¹⁶ Older patients (and indeed those from deprived areas) tend to have higher absolute risks and therefore have the most to gain, and the most to lose if forgotten in the rush. We need to be vigilant about any perverse incentives within the new GMS contract that could adversely affect older and disadvantaged high-risk patients. The risk would come if care was more focused on patients with single diseases rather than those with complex comorbidities, including conditions such as connective tissue diseases or chronic neurological disorders, which are not included in the targets. Access to care is of fundamental importance in the National Health Service (NHS), since it was founded on the principle of equity of access for equal need. Furthermore, as society changes — and the NHS with it — the public increasingly expects to receive not only prompt, convenient, and effective services, but also fairness in access to care for all.

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Hayfever — practical management issues

IN this month's Journal Owen *et al*¹ compare the effectiveness of topical treatments, namely mast cell stabilisers (cromoglycate, nedocromil and lodoxamide) with topical antihistamines (azelastine, emedastine, antazoline and levocabastine) for the treatment of seasonal allergic conjunctivitis. They conclude that both are effective groups, but that there is insufficient evidence as to whether the benefits

of potentially faster treatment with topical antihistamines are worthwhile. The importance of patient preference in deciding on treatment options is noted.

Patients with allergic conjunctivitis or rhinitis present at varying times. Some sufferers experience symptoms in April, when tree pollens are abundant. For others, symptoms start with the onset of the grass pollen season,

usually in May.² Grass pollen is the chief allergen, some weed pollens also cause problems and fungal spores may be a factor at the end of the summer. The start of the pollen season varies with weather conditions and is generally later with northward progression. In some years, hay fever is particularly troublesome, for example in 1992.² This is chiefly because the somewhat fickle weather in the United Kingdom (UK) profoundly affects the level of airborne pollen and smaller fragments of allergenic material, known as paucimicronic particles. The latter have been implicated in exacerbations of asthma around the time of thunderstorms.³ This editorial was written at the end of a very wet April and, so far, hay fever rates are low in the North and average in the South.⁴ Peak incidence is in school age children and declines with age. A recent publication suggests that hay fever is declining in severity,⁵ a finding in keeping with reduced asthma attacks resulting in hospital admissions or presentation to general practitioners.⁶

Typical hay fever symptoms include sneezing, rhinorrhoea and irritating, watery eyes. A third of patients presenting with hay fever also report wheeziness.⁷ Peaks of asthma incidence have been described that are synchronous with hay fever⁸ and these are particularly obvious in children and young adults. For the vast majority of sufferers, hay fever is relatively mild and very few patients are referred to secondary care. Hay fever is a huge pyramid of disease, those at the base experiencing relatively mild symptoms, whereas a smaller group at the top are considerably incapacitated, with disruption of education, especially at exam time, and of work. It is estimated that as many as one in five people suffer from hay fever, but only 1–2% consult a general practitioner each year.² The rate of consultations with general practitioners increased during the 1970s and 1980s,^{2,9} but there is evidence of a downward trend over the last 10 years.⁴

In the UK many patients self medicate, particularly adults who pay for their prescriptions. Unless relatively large quantities of medication are required, the cost of a prescription and the inconvenience of a trip to the doctor further encourage patients to seek advice from a pharmacist. Additionally, prescriptions are often authorised without consultation where patients have consulted in previous years. Most patients consult having already experienced symptoms, rather than in anticipation of the forthcoming hay fever season.⁷

The challenge for the patient and the general practitioner is to pitch treatment at an appropriate level for their anticipated disease severity, without risking side effects more serious than the disease. PRODIGY guidance¹⁰ includes a classification of the severity of allergic rhinitis, but it is difficult to attach much therapeutic relevance to this. For example, mild allergic rhinitis is defined as 'symptoms are not troublesome and normal activities, such as sleep, sport, leisure, work and school, are unaffected'. It is difficult to imagine a patient in this category requesting treatment.

Management should be tailored to each individual patient, based on their previous experience of the condition, the effectiveness of treatments tried previously, the severity of current symptoms and the timing in relation to the hay fever season. The tendency of many patients to grow out of their

- Avoid picnics, camping, cutting the grass
- Wear wrap-around sunglasses when outdoors, showering and washing hair on return from the countryside
- Ensure pets are washed (preferably not by the hay fever sufferer)
- Holiday by the seaside or in mountainous regions
- Close bedroom windows
- Do not drive with car windows open and consider having a car with a pollen filter

Box 1. General allergen avoidance measures.¹²

hay fever,¹¹ or at least to have periods of remission, should be put into the equation. Awareness of likely prevailing pollen levels and simple advice on minimising exposure to pollen is potentially useful (see Box 1), but some of these suggestions may be excessive for all but the most severe sufferers.

Those with a history of severe symptoms and a history of concurrent asthma exacerbations should be treated with regular medication for both conditions and have a clear plan of action to deal with a worsening of their asthma.

It has been advocated that prophylactic treatment (topical nasal corticosteroids and sodium cromoglycate eye drops) should be started 2–3 weeks before the pollen season to prevent priming by allergen.¹² However, regular use of two preparations and the probable addition of oral antihistamines over several months should be restricted to those likely to have severe symptoms. For most patients with relatively minor symptoms medication is used as necessary and more regularly during the peak periods. Conventional treatments for hay fever are well tolerated by most people. Antihistamines and intranasal corticosteroids such as beclometasone and fluticasone are the usual treatment options; the latter are particularly useful in reducing nasal congestion. There is little evidence that the newer third generation antihistamines, such as desloratadine or levocetirizine, confer benefit over second generation versions such as loratadine and cetirizine.¹³ Antihistamines in current use have a good safety profile, but drowsiness may occur, particularly with some of the older products such as chlorpheniramine. Topical nasal or eye treatments have relatively few reported side effects, but there are potential problems with long-term usage of corticosteroid nasal sprays, especially in children.

Recent examples of serious problems with treatments should not be forgotten; terfenadine and astemizole were withdrawn because of concerns regarding cardiac arrhythmia, in particular torsade de pointes, which is potentially fatal. Desensitising injections are now only given in centres where full cardiorespiratory resuscitation facilities are available because of a number of reported deaths in the early 1980s. Depot corticosteroid injections are less frequently used because their effects cannot be reversed and skin atrophy or abscess formation may occur. Short courses of oral corticosteroids may be very useful in severe exacerbations of hay fever, but their significant side effect profile must be borne in mind. Prolonged use of oral corticosteroids should be avoided if at all possible; immune system suppression may occur, which is a particular concern in relation to chick-

en pox in younger persons. The herbal treatment 'butterbur' attracted attention recently, when it was found to be as effective as cetirizine for the short-term treatment of pollen related rhinitis.¹⁴ However, 'more data on safety are required because hepatotoxic alkaloids had been removed from the butterbur extract used in the trial'.¹⁰

Age, seasonal variation and weather conditions all influence hay fever. Thus, a dynamic and flexible approach to management is required, particularly for those with mild symptoms. These concepts can be discussed at a consultation to establish an appropriate management plan to cover different eventualities. This is likely to be time well spent.

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