Key messages

- Information from asthma patients indicates substantial continuing morbidity due to asthma
- Despite rising prescribing of inhaled steroids there is still considerable room for more active treatment of asthma in general practice
- Feedback of information collected systematically from patients with asthma does not influence the pattern of attendance, prescribing, or morbidity
- As access to information increases, processes must be developed within which information can be used to augment strategies to bring about change

are contradicted by the findings of Winkens *et al*, who showed the strong influence that feedback of information on ordering laboratory tests had on general practitioners' behaviour. The striking difference between our study and the work of Winkens *et al* is that our study provides information based on the patients' experience whereas Winkens *et al* provided information based on the general practitioners' behaviour.[2]

Tuckett *et al* reported that general practitioners in the consultation did not value the role of the patient as information provider and "did not usually tailor advice and instructions to known details of the patient's life."[10] This may be a vital clue to understanding why the information in our study had no impact. Bringing about change in general practice requires an understanding of the processes of the system within which change is desired, after which the choice of intervention to bring about the change can be made.[11] It is clear from this study that information about patients' health needs is unlikely to be enough on its own to modify the way primary care team members work, even where the need for change seems to be compelling. Our findings point to the need for a context within which information is provided. The motivation to collect and distribute the information came from the researchers. Individual practices did not request it, did not choose the information to be collected, and did not decide on the way it should be presented or used. Lack of involvement in the design of the research process could have been a factor in the failure of the intervention to motivate a change in the care of asthma. However, this was not a factor in the work of Winkens *et al*.[2]

Information is a key facet of audit in health care. Most workers in audit now emphasise the importance of the process of audit, although many clinicians continue to view clinical audit as a matter of data collection.[12] The importance of the process of audit is strengthened by these results: an implication is that it would be fruitless to short circuit the audit cycle by simply providing the information around which the work of audit is built. Primary care teams first have to undergo the process of identifying their goals and then choosing the tools to help achieve them. As information systems become more widespread and more sophisticated the range and availability of information will expand. Access to information is also likely to improve, so that the problem facing health care workers will be one of how to choose and prioritise information rather than how to collect and interpret it.

CONCLUSION

In a primary care setting, access to information derived from patients does not lead to change in medical care. Even where information seems to be intrinsically powerful, as in the patient derived information used in this study, it is unlikely in itself to bring about change. The results of this study point to the need to establish a process within which information can be used to augment strategies for change.

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Moving house: a risk factor for the development of childhood asthma?

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Following the observation that asthma was commonly seen in children who had previously moved house we undertook a case control study to investigate the timing of house moves, taking account of other factors known to be associated with childhood asthma. A Medline search failed to identify any studies reporting house moves as a risk factor for childhood asthma.

Subjects, methods, and results

We carried out the study in a single, computerised practice serving a suburban population with modern housing. All children between their 4th and 16th birthdays receiving treatment for asthma in the year to February 1994 were identified from computerised prescription records.

The study subjects were 44 children treated for asthma. One control child without atopy, matched for sex and age, was randomly selected from the practice register for each asthmatic subject. A telephone survey using a structured questionnaire was undertaken and combined with information obtained from the child's and parents' practice records. The two groups were compared for house moves using McNemar's test for matched cases and controls, with adjustment for small numbers. Other differences were assessed using the χ^2 test.

The characteristics of the two groups are shown in the table. The 44 asthmatic children constituted 11·4% of the 4-16 year olds in the practice.

Twenty five (57%) asthmatic children had moved house by the age of onset of asthma, in contrast to

4 (9%) of matched control children at the same age ($P<0.0001$, McNemar's test; odds ratio 13·2, 95% confidence interval 4·0 to 43·2). There was no significant difference in the rate of house moves between the groups after the age of onset in the asthmatic child. There was no significant difference between the asthmatic and control children for rates of parental atopy, smoking, or separation; methods of heating (mostly gas central heating); the presence of pets kept indoors; breast feeding; prematurity; or birth order.

Characteristics of asthmatic and control children

Characteristic	Asthmatic children	Control children
Asthma treatments:		
β Agonist alone	9	0
Inhaled steroids	32	0
Cromoglycate	3	0
No sibling pairs	5	3
Median (range) age, years	8·7 (4·2 to 15·4)	9·0 (4·0 to 15·8)
Median (range) age at onset of asthma	2·1 (0·1 to 10·2)	
No (%) moving house at least once	38 (86)	16 (36)
Total No of house moves	71	21
No (%) moving house before asthma onset age	25 (57%)	4 (9%)
Previous home in Plymouth	33/38	12/16
No of house moves before asthma onset by birth order:		
Firstborn	16/21	2/13
One elder sibling	6/17	1/18
Two elder siblings	2/4	1/12
Three or more elder siblings	1/2	0/1

Comment

This study shows a strong association between house moves in families with young children to previously inhabited, centrally heated dwellings and the subsequent development of childhood asthma. Social class differences were unlikely to have explained such a strong association, and no family moved on medical grounds. Parental recall about the timing of previous house moves appeared excellent. Parents were blind to the purpose of the study, and recall bias should have been similar between the two groups. The difference in rate of house moves was confined to those occurring before the onset of asthma.

In one recent prospective cohort study,[1] house moves were not reported as a factor. Total house moves from birth were significantly associated with asthma in the 1958 British Births cohort.[2] One study on the 1970 cohort reported an association between house moves and lower respiratory illness in the first five years.[3] In another study the time at the present address was not associated with absence from school because of asthma.[4]

The reasons for the association are unclear: moving at a young age will expose children to new allergens, particularly in a modern house with central heating and limited ventilation, and is likely to be stressful. As most house moves were local, a change in the level of air pollution would not explain the findings.

The non-significant trend towards being the first-born in the asthmatic group was in accordance with the previously recognised association.[5] This may be explained by the effect of house moves.

The findings of the present study need to be confirmed in other populations before a definite association is established. If so, this would have major implications for public health measures aimed at reducing the prevalence of childhood asthma.

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Fit as a fiddle

Rather a good thing to be. I do not know the origin of this well known phrase, but it occurs to me that most of the finest instruments are a good deal older than many generations of fiddlers. They may have had minor surgical attention since manufacture, but are clearly in full voice. I believe that keeping fit in the elderly is important and because it would save the NHS a lot of money it is something that the government should devote more money to.

I went to Australia in September 1994 to take part in the third World Masters Games, one of the least advertised world events. Held every four years, like the Olympics, these games are for those deemed too old to win a national championship again in their sport. The lower age limit varies and anyone can enter. Competition is in five year age groups, which may be subdivided by past record of ability.

There were 27 000 competitors in Brisbane. The largest sporting meeting of any sort ever held in the world. Some participants had acquired sponsorship, but the majority paid their own way and expenses. A spirit of joyful rivalry and fun prevailed, things that are now sadly lacking in so many sports.

Because of the wisespread locations and intense activity it was difficult to follow any sport but your own (some I had never heard of). The only time we all met was at the opening ceremony in the stadium built for the Commonwealth Games in 1982. The athletes occupied most of the seating, with scant room for spectators. After a splendid series of opening displays, a theme song, and a flag raising we marched down to occupy the centre. It became a cheerful shambles. As I live in Mallorca I had got permission from the Balearic president to represent the islands. I was provided with a flag and coupled with the local costume, which I wear to fiddle for the traditional Mallorcan dances, an extra dash of colour was thrown in. It was wonderful to be part of such an overwhelming assembly.

The press outside Australia were interested only in one item. The rules of the games are that no medal may be won by a walkover, the course must be run, and the standard set. A woman of 101, having no others in her class, dived into the pool and swam 100 m freestyle to gain her gold medal.

The worry of organisers of such events is that death or illness will bring discredit. Many sports can be declared dangerous by detractors, even if they do not increase the risk of morbid events. One 80 year old cyclist of iron determination collapsed and died after his 25 km cycle race; I do not know if there were other contributory factors. This sad event was defused by the medical officer in charge, by commenting to the press that if 27 000 of our age group had been picknicking in a park the expected accident rate would have been much higher in a fortnight. The next games are in Portland, Oregon. For those interested the games have a concomitant sports medicine conference. I am confident I shall be there. This time round I managed the bronze medal in the over 70s open squash. I suspect that the opposition will weaken faster than I do so that I can go for gold.—GEORGE GIRI *is a retired surgeon captain and former BMA assistant secretary, living in Mallorca*