

## PRACTICE OBSERVED

## General Practice in the Year 2000

## Point of view of an overseas doctor

ABBAS VIRJI

The conventional use of the term "overseas doctor" was coined to embrace all doctors working in the United Kingdom who had obtained their basic medical qualifications in medical schools abroad. Numerically, the largest group of overseas doctors is from the Indian subcontinent—17% of all doctors in the National Health Service (30% of hospital doctors and 20% of general practitioners). Those from white anglophone countries and Arab countries account for only 6% of all NHS doctors. Graduates from Eire are traditionally considered "home grown," as are doctors born overseas who qualified in Britain. In this article the term "overseas doctor" is used in a limited sense to define those doctors with particular ethnic, cultural, and linguistic characteristics that influence their future.

The history of the overseas doctor is one of the most incongruous and anomalous quirks of the twentieth century. How did large numbers of doctors trained in one of the poorest parts of the world end up working for one of the richest? Most doctors came from ex-colonies of Britain, especially India where medical schools are run on the British model and students are taught in English. Substantial immigration to the United Kingdom took place in the 1950s and 1960s for several reasons, one of the most important being the lack of British graduates to fill vacancies in the NHS. Furthermore, British training and qualifications were highly regarded, and immigration of overseas doctors was facilitated by the lack of the usual entry restrictions and the recognition of their degrees by the General Medical Council.

Thus having been allowed freely into Britain, these doctors discovered that the streets of Vilayat (United Kingdom) were not paved with gold as they had been led to believe. Handicapped by cultural and linguistic differences, the unfortunate immigrant doctor was regarded as having lower standards of

practice, and often his basic qualifications were questioned. Many found that the only jobs available were the unpopular junior hospital posts. In 1975 the report of the Merrison committee on the NHS voiced official reservations felt towards overseas doctors by the British medical profession. This resulted in the introduction of the Temporary Registration Assessment Board (TRAB) examination, which doctors who qualified overseas were now required to pass to prove their knowledge of medicine and skill with the English language. Fuelled by this development, the Overseas Doctors Association was formed officially to express the difficulties faced by its members.

## Overseas Doctors Association

The Overseas Doctors Association levelled much criticism at the NHS for failing to improve conditions for overseas doctors. The main areas of concern were the difficulties in obtaining desired jobs and the subsequent uptake of the less popular specialties such as psychiatry and geriatrics. Overseas doctors were working long hours with little or no time for training or studies, and they were caught in a "catch 22" situation—that is, the lack of training facilities prevented them from being appointed to desired jobs that required previous training and experience. This often resulted in failure to obtain the further qualifications that had attracted the overseas doctor to the United Kingdom in the first instance. Many returned home without their FRCS or MRCP, while others sought refuge in the NHS, filling the jobs that no one else wanted.

There are 20 000 overseas doctors working in the NHS. Every year 2000 enter the United Kingdom, and of these, about three quarters return home with or without further qualifications. Among the 500 who stay some achieve their desired goal of consultancy and others choose to become principals in general practice. Unfortunately, there are also many whose only option is either to provide casual medical labour or to form a body of

Liter Health Centre, Camden Square, Peckham, London SE15 2LW  
ABBAS VIRJI, MB, MRCP, general practitioner

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junior hospital doctors "waiting in the ranks" for opportunities. Whether overseas doctors pick up an alias NHS for you, decide, but the image of overseas doctors is a function of their role in the NHS, their peculiarities of religion, culture, language, and to a certain extent their "way of life." It is easy to see the problems they face and to appreciate why they often feel victims of prejudice and exploitation.

## Future

What of the future? It certainly looks bleak if you are trying to settle in a foreign land and receiving endless rejections of your "work anywhere do anything" application forms. Only an optimistic futurist could predict total and satisfactory employment for all overseas doctors by the year 2000. Some will have to come to terms with the limitations, relative to absolute, imposed by the fabric of the NHS and dictated by a shortfall in their own training and experience.

I foresee that in 20 years most doctors working full time in providing casual medical labour will be overseas doctors, their ranks being swelled by women doctors with family commitments working part time and by local graduates who are temporarily unemployed. The establishment of a national local organisation will revolutionise the way night and weekend cover is handled and should end the monopoly currently enjoyed by some private organisations. The local organisation will come under the umbrella of the NHS, and all locums and casual part timers will be employed and paid by the organisation. In effect this should bring order and respectability into what has been a somewhat shambolic part of general practice, particularly in inner cities. It will be feasible for locums to become permanently attached to health centres and groups in an area. The practices wishing to use this service will be able to interview and select suitable locums to provide regular weekend and night cover plus the occasional surgery. Contracts will be drawn up and terms of service agreed. Thus locums will feel more a part of a team than before and it is hoped will assume a great deal more responsibility for their work.

Furthermore, more practices will have computerised patient records and the night doctor will be able to summon relevant information from the data base. He will thus have a resume of therapies and past medical history and plans of continuing management in chronic cases. The locum's actions and decisions will be fed into the main computer at the health centre and be instantly available for the rest of the team. This will require a computer terminal in the "lounge," which will also be equipped with the latest electronic wizardry, such as portable x-ray camera, ultrasonicography, cardiotocography, and a complex transport facilities for the patient. Regular meetings will take place at the health centre between locums and principals to discuss cases, policies, plans, and equipment.

## OOHAAH

One can visualise yet another bureaucratic complex of the national local organisation with divisions and subdivisions. One of these could easily have a jolly acronym OOHAAH—out of hours area health authority. The locum organisation, however, will be an answer to many an overseas doctor's prayers. It will provide job prospects, pension schemes, and a "future" for thousands of doctors who would otherwise either be unemployed or suffer exploitation in the hands of private organisations. With a guaranteed minimum income, a permanent place of work, and a feeling of being as much part of a community as the rest of the health centre team, the "out of hours" doctor will be at the pinnacle of our predictions for the year 2000.

In tandem with this development the general practitioner will retain his independent status but will have a much more predictable work schedule due, firstly, to list sizes shrinking to that magic number 1700, and, secondly, to greater acceptance of

computerisation. Whether the "dragon" will be replaced by a "manmade android" in a brain the size of the earth by the year 2001 is not sure, but storage, retrieval, follow up, diagnosis, therapeutics, referral, and, indeed, interdepartmental co-ordination will be smoother and surer. Many doctors will cultivate outside appointments to widen their horizons.

Overseas doctors who have given up long hospital careers to enter general practice have a vast and enviable store of experience in various specialties. Some use this experience by working as clinical assistants in, for instance, rheumatology or chest medicine. In future there will be a great expansion of this interface between general practice and hospital, and hospital practitioner posts will become widely available. Many of these appointments will be three year rotations with options for renewal of contract by mutual agreement and will most likely be in geriatrics, psychiatry, rheumatology, ear, nose, and throat medicine, and dermatology, but others will follow suit. One would expect the emphasis to be on training rather than service to overworked departments.

## Better life for the elderly

By the year 2000 the average life expectancy will have approached 90, and consequently there will be enormous increase in the geriatric age group. Although most hospital specialists will accept a greater share of responsibility for the aged, geriatrics will be numerically the largest hospital department. The geriatrician's role in the care of the elderly patients will expand as more and more geriatric wards will contain general practitioner beds. Thus the general practitioner will care for geriatric patients with both short term and long term problems and care for the dying where appropriate.

The overseas doctor, particularly from Asia, will have an important contribution to make towards society's attitude as regards the aging population. He will be ideally placed to share his cultural attitudes about the care of the elderly. In his home his cultural attitudes about the care of the elderly are rarely severely because relatives become old and physically infirm. Continuing social stimulation should keep the octogenarians (and even nonagenarians) active and viable citizens like their counterparts in the East. Thus the family unit will adopt an axiomatic role in the life of the citizen of the twenty first century, with care of the elderly becoming part of normal family life. As for ethnic minorities in the United Kingdom in the year 2000, the results of recent population studies have shown lower birth rates among certain groups than was forecast. Thus second and third generation Asians will still be a minority group, but they will have none of the language problems or cultural entrenchments of their forefathers. One can foresee communication gaps narrowing and previous prejudice dwindling into insignificance. In areas of high ethnic populations the local general practitioner will no longer need to look Urdu or Punjabi, but there will still be a need for the Hakim. His herbal potions will still be prescribed in the next millennium, which may seem inexplicable in the face of high technology offering major advances in medicine. But the reason is that although most major diseases will bite the dust, the virus will be vanquished and the rheumatoid toxin, the "symptoms" will always remain. Aches and pains, giddy spells, intractable headaches, and the down and gloom of the polysymptomatic under-achiever will always ensure a place for the Hakim, the ayurvedic herbalist, or the homeopathist. Moreover, the simplicity, efficacy, and economy of acupuncture will win this form of alternative medicine a wide acceptance among the public and the profession, particularly among the overseas doctors for whom it has a special appeal.

What of the future of the Overseas Doctors Association? Hitherto its role has been to safeguard the interests of overseas doctors by ensuring equal job opportunities and providing a platform to voice grievances and complaints. It is not too optimistic to foresee better management of the overseas doctors

by the NHS while control of influx of new doctors and integration of those who are here will eliminate the association's raison d'être. Perhaps it will be renamed the Overseas Doctors Association or exist only to serve the needs of doctors from overseas taking part in training programmes.

British medical practice will continue to be held in high regard, and the great demand for training graduates from overseas will continue. Training programmes with a planned succession of jobs both in hospitals and in general practice will be available, tailored to the needs of the overseas graduate to ensure sufficient

training and experience. Entry to the United Kingdom will be impossible unless a place on one of these programmes is obtained beforehand. This would not only guarantee a higher calibre of candidate but also greatly increase his chances of success in the specified period of time.

Financial security, better working and living conditions, excellent training facilities, freedom from exploitation, better integration, and equal job opportunities will herald the dawn of the new century for the overseas doctors. By then the term used to describe these doctors will seem anachronistic.

## Practice Research

## Improving the care of asthmatic patients in general practice

MICHAEL MODELL, JENNY M HARDING, ELIZABETH J HORDER, PETER R WILLIAMS

The management of asthma still poses many problems. Despite the advances in treatment made in the past 20 years, control is often inadequate and asthma may cause much disability.<sup>1-3</sup> Patients with asthma do not always make full use of health services,<sup>4</sup> and poor communication between patients and doctors may result in poor care.<sup>5,6</sup> These important reasons for the failure of care are of special concern to us as general practitioners,<sup>7</sup> and influenced us to design a study (a) to discover whether a team of general practitioners could agree on a plan of management for asthma; (b) to examine their adherence to the plan; and (c) to devise ways of measuring the severity of asthma and use them to assess the effect of a management plan on a group of patients with asthma during one year.

The results of the study showed that though there was an appreciable improvement among younger patients, many of those who remained most severely affected at the end of the study had been inappropriately assessed and inadequately treated. We suggest ways of overcoming this.

## Methods

The study took place in a group practice of eight doctors with a list of 13 000 patients. Patients with asthma aged between 5 and 55 were identified from the practice disease register and after the records were scrutinised were included in the study if they had either more than one recorded episode of wheezing in the past 12 months or a diagnosis of asthma recorded by a general practitioner in the previous two years.

Because it was too difficult to identify a control group of asthma patients, defined according to our criteria, we assessed the study group before and after a 12 month period, so that the patients acted

as their own controls. To achieve objectivity a research worker identified and interviewed the patients and examined the records.

The general practitioners discussed the care of asthma patients and without much difficulty agreed on a plan of management and treatment. This emphasised the importance of (a) giving drugs appropriate to the severity of the asthma; (b) discussion and education in the consultation; and (c) instruction in self management by the patient.

A new record card that was printed with details of the management plan was used by the doctors as an aide-memoire and a record of action taken and by the research worker to assess how well the doctors adhered to the management plan. The plan was implemented when patients came spontaneously to consult about their asthma.

Consultations for asthma during the year included the following: taking a detailed history, including past and present drug treatment and family history; measuring height and weight; examining the chest, taking peak expiratory flow readings; discussing the natural history of the disease, provoking factors, the appropriate use of medicines between and during attacks; and guidelines about when to seek medical help; discussing the plan of treatment proposed for the patient; estimating the length of the consultation; assessing severity on a four point scale.

The patients were interviewed by the research worker before the management plan was introduced and 12 months after. On both occasions she assessed the severity of asthma using the following indices:

**Peak flow**—The best of three peak expiratory flow readings was compared with that predicted for a non-asthmatic person of equivalent age, sex, and height and the difference expressed as standard deviations from the expected mean.<sup>8</sup>

**Disability**—This was expressed as "days of disability" in the four months before interview. Days spent in bed or in a chair score two units; entire days lost from usual activity scored one unit; and days of reduced activity scored a half unit.

**Symptoms**—Shortness of breath, wheezing, tightness in the chest, coughing, and sputum production were graded according to whether they occurred less than (grade 1) or more than (grade 11) once a week during the four months before interview.

The research worker also used a prepared questionnaire to assess the patients' attitudes to asthma and their knowledge of it and its treatment. This information was not given to the doctors. Of the 150 asthma patients identified, 111 patients gave the start of the study (25 had already left the practice list, and 30 preferred not to take part), and 92 were interviewed again 12 months later (19 had left the area and four others wished to participate). Both interviews were conducted in winter.

James Wigg Practice, Kenilworth Health Centre, London NW5  
MICHAEL MODELL, MB, MRCP, general practitioner and senior clinical lecturer in general practice, University College, London  
JENNY M HARDING, MB, MRCP, research assistant  
ELIZABETH J HORDER, MB, MRCP, general practitioner  
PETER R WILLIAMS, MB, MRCP, general practitioner

Correspondence to Dr Modell, General Practice Unit, School of Medicine, University College London, University Street, London WC1E 6BJ.

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Patients aged under 15 and patients over 15 were analysed separately, because although the children were encouraged to speak for themselves, half were helped by a parent and this influenced their responses. The distribution by age and sex of the group is shown in table 1.

TABLE 1—Distribution by age and sex of the final study group

Age (years)	No. of males	No. of females	Total No.
Under 15	26	16	42
15 and over	19	21	40
Total No.	45	47	92

Forty seven patients had atopic conditions. During the year three children and one adult were admitted to hospital and 17 attended the outpatient department. There were no deaths during the year.

## Results

## ADHERENCE TO THE MANAGEMENT PLAN

From the record cards prepared for the study and from the research worker's interviews with patients the doctor's adherence to the plan of management was assessed. Seventy one per cent of the cards of patients who were interviewed were completed in the first six months and 87% by the end of the study. The doctors were asked to see those patients with incomplete record cards eight months into the study; 42 patients were then recalled. The cards showed that the doctors had made considerable efforts to follow the agreed plan, although this meant longer consultations with additional examinations and discussion of a wide range of topics. The assessment consultation took an average of 14 minutes.

TABLE 2—Age, type of drug treatment, and severity of asthma graded by doctor at recorded on management cards

Type of treatment	Patients aged under 15 (n=42)	Patients aged 15 and over (n=40)	All patients (n=82)
None	10	3	13
Bronchodilators only	12	10	22
Bronchodilators and sodium cromoglycate	12	14	26
Bronchodilators, sodium cromoglycate, and oral corticosteroids	7	13	20
Inhaled steroids only or with the above	1	1	2
Change in prescription recorded during study year	11	9	20
Severity graded by doctor			
Grade 1	20	21	41
Grade 2	12	10	22
Grade 3	5	6	11
Grade 4	5	3	8
Not recorded	2	5	7
Unclassified 1			
Unclassified 4			

TABLE 3—Severity of asthma at recorded at first and final interviews by research worker

Indicators of asthma severity	First interview (n=47)	Final interview (n=92)	Total (n=139)
(1) Disability: No. of disability days			
11 "Peak flow" days	45	66	111
12 "Peak flow" days	17	51	68
13 "Peak flow" days	15	25	40
(2) Peak expiratory flow readings			
1 "Standard deviation from mean predicted"	15	35	50
2 "Standard deviation from mean predicted"	10	21	31
3 "Standard deviation from mean predicted"	14	26	40
(3) Symptoms: Frequency			
1 "Less than once a week"	64	76	140
2 "Once a week or more"	14	44	58

\*Two patients were unable to obtain readings.

TABLE 4—Final interview: number of patients at all ages with peak expiratory flow reading related to disability and symptom grades

Disability grades	Symptom grades	1	11	111	1111	11111	111111
Peak expiratory flow reading grade 111	10	3	6	8	8	11	11

## GRADING OF SEVERITY AND TREATMENT MANAGEMENT

When filling out the cards the doctors considered that most of their patients had "mild" or "moderate" asthma (grades 1 & 2, see table 1). They tended to recommend the less potent treatment regimens; 13 patients had no drugs, and 56 had bronchodilators or bronchodilators with cromoglycate only. Fewer children than adults were on treatment and fewer received steroids, although the severity grades in the paediatric and adult groups were closely similar.

Changes in the severity of asthma during the year as measured by the research worker (table 11) show a general tendency towards improvement in all three measures. The most significant improvement was in the children's peak flow readings (p<0.001) from statistically normal in children's peak flow readings (p<0.001) to 62% of whom improved peak flow by changing from category 111 to 11 or from 11 to 1 compared with only 28% of adults. Forty one per cent of children and 24% of adults reported fewer disability days at the end of the study.

At both interviews discrepancies were noted between the subjective indicators—disability and symptoms—and peak flow readings (table 11). The subjective indicators gave a retrospective estimate of the severity of asthma, whereas the peak flow readings gave an accurate measurement at the time of testing. Peak flow readings are especially useful if repeated often over a long period.

## ATTITUDES OF PATIENTS

Table V shows that at the end of the study nearly half of the patients were still dissatisfied with their own understanding of asthma and also with the explanations given by their doctor. In table VI patients' views and behaviour are related to their disability, and this shows a clear relation between severity of asthma and lack of knowledge, understanding, and control. Disability may be aggravated by these factors but may also be rationalised in terms of them.

Adults were more likely than children to say that they disliked taking medicine and less likely to comply with the doctor's advice—perhaps because they do not have a "parent" to do the work. At the final interview 52 out of the 92 patients reported seeing their doctor about asthma from sources other than their doctor, mainly from books, magazines, other people with asthma, and television programmes. Seven children and 18 adults had had non-medical treatment; in addition to or instead of their prescribed medicines.

Twenty three patients remarked that during the study the doctor spent more time with them and showed more interest in their asthma, and they felt in less of a rush. Twelve remarked that they had been asked to visit their doctor specifically for a review of their asthma. Twelve patients did not attend for asthma during the study. Nine of these were assessed by the research worker as mildly affected or corresponding to all indicators. These patients seemed to be more "adequate"

and critical of medical management than the rest of those in the study. Only four of the 12 thought that they did not know enough about asthma, though nine did not think their doctor's explanation adequate. Seven did not use medicines as recommended and 10 had sought information from other sources.

#### "FAILURES"

At the end of the study 17 patients were considered by the research worker to still be severely disabled by asthma. Table VII shows that in 14 the asthma had been graded by the doctor as mild to moderate. There is some discrepancy between the drug data recorded by the doctor and that reported by the patient. Perhaps doctors underestimated or patients manipulated their own drug regimens. When patients reported using more drugs than recorded it is likely that doctors failed to write down amended treatment.

Five of these patients, all female, were severely asthmatic according to both disability and peak flow recordings. One, a child on oral steroids, attended a hospital outpatients department regularly and

TABLE VI—Views and behaviour towards asthma expressed by patients at first and final interviews

Patient's views	Percentage of patients aged under 15 (n=42)	Percentage of patients aged 15 and over (n=32)	Total (n=115)
(1) Do not think they know enough about asthma	44	49	55
(2) Do not think doctor's explanation adequate	45	40	42
(3) Do not use medicines as advised	64	62	63
(4) Do not take medicines as advised	50	46	46
(5) Do not feel they know enough about asthma	36	38	37
(6) Do not take medicines as advised	36	38	37
(7) Do not feel they know enough about asthma	15	40	30
(8) Do not take medicines as advised	15	40	30
(9) Do not feel they know enough about asthma	36	41	36
(10) Do not take medicines as advised	36	41	36

TABLE VII—First interview: views and behaviour of patients related to disability

Patient's views	Percentage of patients aged under 15 (n=42)	Percentage of patients aged 15 and over (n=32)	All patients (n=115)
(1) Do not think they know enough about asthma	26	71	44
(2) Do not think doctor's explanation adequate	39	63	59
(3) Do not use medicines as advised	22	54	32
(4) Do not take medicines as advised	17	47	31
(5) Do not feel they know enough about asthma	22	34	42
(6) Do not take medicines as advised	22	34	42

TABLE VIII—Severity of asthma at final interview, treatment as reported by doctors and patients, and doctors' assessment

Treatment	Disability grade III (n=17)	All interviewees (n=45)	Doctors' assessment (n=45)	Patients' assessment (n=45)
1. Bronchodilators or steroids	4	1	7	10
2. Steroids, inhaled or oral	4	1	2	8
3. Steroids, inhaled or oral	4	1	2	8
4. Steroids, inhaled or oral	4	1	2	8
5. Steroids, inhaled or oral	4	1	2	8
6. Steroids, inhaled or oral	4	1	2	8
7. Steroids, inhaled or oral	4	1	2	8
8. Steroids, inhaled or oral	4	1	2	8
9. Steroids, inhaled or oral	4	1	2	8
10. Steroids, inhaled or oral	4	1	2	8

\*Five unrecorded

the family considered that the hospital was mainly responsible for the management of her asthma. The remaining four were adults, all graded as mild to moderate by their doctors; one reported treatment, one bronchodilators only, one regular sodium cromoglycate, and one inhaled steroids. The management of these patients, whose condition did not improve during the study, seems to have been less than ideal in three ways: (a) the failure of communication between doctor and patient, possibly leading to (b) poor assessment by the doctors, possibly leading to (c) the inadequacy of the treatment prescribed.

#### Discussion

The results of our study suggest that family doctors can agree on a management plan for their asthmatic patients and put it into practice. Cards were filled in and patients who had not been seen were recalled and their treatment reviewed. Patients with asthma were aware that interest was being taken in their care, and active and continuing participation in the study enhanced the doctors' interest. Thus during the year 66 new asthmatic patients of all ages were added to the disease register (but not included in this study). Change of behaviour by the doctors was shown, but we cannot say whether this is permanent or not.

According to our indicators of asthma severity "improvement" after a year was most noticeable in those aged under 15. This may be partly due to parents insisting that the child follow medical advice. Furthermore, asthma in childhood is more amenable to treatment and tends to improve with age. In wheezy children are only mildly affected, and over half of these will have stopped wheezing by the age of 21.

Improvement was less noticeable among the adults. There was a general feeling, especially among many of the most severely affected patients, that they did not have sufficient knowledge of asthma and that their symptoms were not adequately controlled. Half of the adults did not take their medicines as advised and a fourth had tried non-medical treatment such as acupuncture, homeopathy, and relaxation techniques, which may indicate a failure of conventional medicine or a lack of conviction that their own doctor could help. People who continue to be severely affected by a chronic disease that in others is clearly under control are bound to question aspects of their medical management.

What effect has the management plan had on patient care? Although our measurements showed an overall improvement in the severity of asthma, it was impossible to establish causal links between the doctors' changed behaviour and patients' health. Perhaps future studies of this nature would benefit if preceded by two years of observation of existing care of asthmatic patients.

Perhaps the most noteworthy feature of this study is the range of discrepancies shown. Discrepancy exists among the three indicators of asthma severity, between views of doctors and patients about what is an adequate explanation, and between the doctors' and the interviewers' assessment of severity. We assumed that the research worker, who saw patients for about an hour each time, made a more valid assessment of the severity of the patient's disease than the general practitioner, who made a quick, often intuitive, decision at the end of a relatively short interview. A discrepancy was evident between how patients perceived their physical condition and the results of lung function tests. This finding agrees with Rubinfeld and Payne,<sup>10</sup> who found that 15% of 82 patients assessed were not aware of severe airflow obstruction. Assessment by patients of how severely they are affected by their asthma depends on many personal, environmental, and social characteristics including powers of recall, age—"It doesn't affect me at all, I wouldn't want to run around at my age"—life-style, and occupation. In a patient in a sedentary occupation daily symptoms may perhaps be managed without time ever being lost from work. Alternatively, in a patient who has a physically strenuous occupation relatively minor symptoms may result in days off from work.

## Interesting GPs of the Past

### Samuel Taylor Chadwick: 1809-73

IVOR FELSTEIN, NASIM NAQVI

In Victoria Square, Bolton, Lancashire, a magnificent bronze statue with the simple legend CHADWICK looks down on contemporary passersby. Set boldly alongside the town hall, this memorial to a local nineteenth century family doctor was erected by the townspeople in the name of Chadwick's surgery. The statue was paid for from funds contributed by over 20,000 citizens of the town, and over 30,000 attended the unveiling. Few general practitioners in any era can have inspired such admiration and respect from ordinary working citizens in their town. For a whole town to honour a family doctor in such lasting fashion his role in their health, welfare, and everyday life must have been outstanding.

Sam Chadwick did not reach Bolton until he was 14 years old. He was born in 1809 at Newcroft House, a family farm in Urmoston, Manchester, and was educated with his twin brother James (later the Reverend James Chadwick of Trinity Church, Bolton) at Streteford School. In 1823 Sam and James went to live with their uncle, John Taylor, a popular Bolton general practitioner, called affectionately "the Sweet Green Doctor." Impressed and enthralled by Uncle John's work, Sam Chadwick began his medical studies at the University of London in 1828, becoming a licentiate of the Society of Apothecaries and member of the Royal College of Surgeons.

Three years on he returned to Lancashire and set up practice in Wigan. Here he married an attractive young lady, Ann Hall, daughter of a wealthy wine merchant and a determined and affectionate wife who would support Sam Chadwick in all his future medical and philanthropic ventures. In 1837 the couple moved to Bolton where Dr Chadwick succeeded his uncle as the local practice. He soon became convinced that his medical and surgical skills needed considerable enhancement. In a personal programme that made modern postgraduate education look limited he went to Dublin, where he spent two winters and qualified LRCS, and then went to Scotland in 1845, where he took the LRCS of Edinburgh. He then studied and wrote a thesis on catarrhal epidemics and was awarded MD at Edinburgh.

He returned to settle down in practice in Bolton, living in an impressive house called "The Heights," and established a series of dispensaries for specialised work in addition to his own general practice. There was an eye clinic, sited in a place called Squint Alley, which is still extant, and an ear, nose, and throat clinic. Still not satisfied with his contribution to local medicine, he became an honorary surgeon at the Bolton Infirmary. The conditions and amenities of that infirmary were a constant source of dismay to him, so he determined to use some of his growing wealth—for the rich and famous travelled far to receive

#### Manchester

IVOR FELSTEIN, MA, author and journalist

#### Bolton

NASIM NAQVI, FRACS, consultant anaesthetist

Correspondence to: Dr Felstein, 14 Rochford Ave, Whitefield, Manchester M20 7PS.

his surgical skills—in establishing a new, modern Bolton Infirmary. He was not to live long enough to see his gift of £5000 turned into the Chadwick ear, nose, and throat ward of the new Royal Infirmary, a ward still active in 1983.

The breadth of his skill and surgical dexterity comes over well in the wide range of clinical papers that he contributed to

medical journals of the day. For example, in the *Lancet* of 1851 he reported the successful outcome of his surgery in a severe wound of the face and scalp in a woodman's 13 year old son, inflicted by a circular saw, lacerating muscles and several branches of the external carotid artery. The initial debridement and wound apposition seemed to be successful, but on the fourth day after the injury Dr Chadwick was called to the boy's home and diagnosed secondary haemorrhage. He operated in the bleak and awkward circumstances of a Victorian slum and had to ligate the common carotid artery. As he wrote in the *Lancet* of the ultimate outcome: "an unceremonious exists on the side of the neck and face but he had no cerebral disturbance after the operation; indeed, not one unfavourable symptom was manifest." Other articles in the *Lancet* included

At the end of the study there were still 17 patients whose asthma caused severe disability, and there was a discrepancy between the interviewers' assessment of severity and that of the general practitioner who graded the asthma of 14 as "mild" or "moderate." Thus it is likely that they received suboptimal treatment. The commonest reason for failure to control asthma effectively is improper use of the available drugs.<sup>11</sup>

The results of a recent study of the management of 90 patients who had died from asthma concluded that in half the cases the asthma was not satisfactorily controlled and milder patients were not adequately supervised or educated in the management of their disease. Good understanding between doctor and patient is clearly important, but it may be inhibited by the structure of consultations. If this is so does the style and length of consultations in general practice lead to failure of communication, inaccurate assessment, and inappropriate treatment for patients with other chronic conditions?

The answer is almost certainly yes, but the consultation may be made more productive by using simple "tools" to supplement the work of the doctors. More use of peak flow meters and hand-held spirometers would be made of booklets and hand-held spirometers.

Asthma diaries might be tried and a Mini-wright Peak Flow Meter could be loaned to severely affected asthmatic patients. But there is no way a substitute for good communication between the doctor and patient in the consultation.

The small degree of improvement in patient satisfaction and compliance because the management plan had been agreed by both parties, and the importance of discussion, explanation, and education. Doctors need to understand the precise words and phrases that patients use. They need to elicit the concealed questions and not be afraid to admit the limitations of their own knowledge. A plan of management cannot by itself lead to optimal care.

#### Conclusions

To improve the care of their patients with asthma a group of eight general practitioners introduced a new plan of management that emphasised education and self care as well as appropriate drug treatment. To measure the effects of this, criteria of asthma severity were devised, and 92 patients of this criteria

viewed before and after the study year. There was an overall reduction in the severity of asthma, particularly in children, but the reasons for this are speculative. At the end of the study 17 patients were still severely affected by asthma, 14 of whom had been considered by their general practitioner to have only "mild" or "moderate" asthma. This suggests a failure in assessment leading to inadequate treatment. There was a disappointing lack of change in the patients' attitudes and knowledge about asthma during the year. We suggest ways of overcoming these problems.

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#### Diary of Urban Marks: 1880-1948

One Saturday night a woman called Eliza Ann Keast was brought into the casualty department. She was quite dead and her throat showed signs of finger marks. Francis, the constable who brought her in, said that she had been struggling on the Strand by a man called Mitchell, who had been arrested. The constable was on Monday morning. On Sunday morning I went into the mortuary and had a good look at the corpse. There were so many nail marks and finger marks that I decided to get a photograph taken. Opposite the hospital was a photographer called Smith. I persuaded him, much against his will, to come over. I propped Eliza up in the best position to show her throat and Smith clicked the camera and almost clicked himself. He was very relieved when the photographs had been taken. At the inquest the photographs were shown and I was complimented by the coroner, Verley Leader. The press was enthusiastic about them and I became famous overnight. The man, Mitchell, was of course committed for trial to the magistrates first and from there to the assizes, where he was tried before Mr Justice Jelf.

Just before the assize trial, I was rung up by Laurence Richards, the Public Prosecutor, who wanted to know whether any money had been found in the gutter of Eliza at the postmortem. I said I had not looked at the cause of death was obvious. He then said that he understood the defence. He therefore insisted that an entomologist should take place so that the theory could be proved or otherwise. Eliza had been buried for nine weeks at Rabell churchyard and the weather

had been very rainy. I insisted that this time Elsworth should accompany me. He agreed, and after the necessary order had been obtained from the Home Office Elsworth and myself in company with many police officers hired ourselves in cabs at daybreak to the scene of operations. The police kept people from watching the proceedings since the Camberwell Works overlooked the graveyard. The grave was identified and the digging operations commenced. The coffin was reached floating in water. With great difficulty, it was raised out of the grave and conveyed to a small room at the back of the mortuary chapel. Elsworth and I went to the room and saw the body. He pried open the coffin without difficulty. The door of the room was open while the police kept guard outside. The effluvia was horrible. It took me all my time to keep myself from being sick. Elsworth was smoking a strong cigar and advised me to have one. If I had done so I should have been prostrate. Then he advised me to have a drink of brandy from a flask which he had had the forethought to bring with him. In the meantime we could hear the officers outside retching, which did not tend to make me feel better. I had a look at the remains of Eliza but they were indescribable. Beyond saying that one could tell that it had been human flesh at some time or other I cannot go further. No money was found. I was wearing a cashmere suit and the smell permeated the room. Elsworth and myself, however, remained. I finally gave it away. At the trial Mitchell was sentenced on the ground of manslaughter to six months' imprisonment. On the day of his release he was arrested again for being drunk and sentenced to a further period of detention.

Owing to the inquest, three police court proceedings, and the assize fees together with those from the assizes, I collected quite a lot of money and with it bought May an engagement ring, to which I referred ever afterwards as "Blood money."

"It is history" in 1850, "Gunshot wounds of the cervical region" in 1852, and "Umbilical hernia" in 1854. National acknowledgment of his surgical expertise came in 1856 when he was made a fellow of the Royal College of Surgeons in England.

#### Public health

Not content with surgery and medicine in therapeutic form, he turned his attention to public health and preventive medicine. Firstly, he set about tackling health education. He gave a large amount of money to establish a mechanics institute, then offered a series of lectures to members and the public on the importance to health of water and air. Using the visual presentation of simple but scientific experiments and explanatory comment he gave, for example, a dissertation on 9 February 1859 on "Water, its distribution, physical and chemical properties, its impurities and its mode of detecting them." Another such lecture was "Atmospheric air, some of its properties and its relation to animal and vegetable physiology."

Next in his own campaign for public health he established with personal funds a charitable trust of £22,000 to erect "model dwellings for workpeople now condemned to living in cellars." These clean, spacious, and low rental houses were built in Peabody Street in Bolton (Peabody was the architect who designed the premises) and are still there. Dr Chadwick had no doubt that bad housing encouraged "contagious and unsanitary diseases" in the working but poorer citizens. His idea of slum clearance was 90 years ahead of its time.

The third prong of his public health attack on the unsatisfactory environment of his adopted town was to seek election to the Bolton Council where he could not only speak his mind as a doctor but make official representations as a councillor. When possible he spoke up for improvements and better facilities for his fellow Boltonians. In one address at the town hall he declared, "If you were to tell persons to wash up after dinner and then insist they put that water aside for making tea you would see the absurdity of this. Where then is the propriety of offering citizens already used water?"

On another occasion, ridiculing his wealthy fellow councillors who decamped to seaside towns whenever an epidemic broke out in Bolton or nearby Manchester, he assured them that, "I can cross the Irish Sea with less difficulty than I can ride round [the sewage and garbage] to the shores of the town. He established the Bolton Council where he could not only speak his mind as a doctor but make official representations as a councillor. When possible he spoke up for improvements and better facilities for his fellow Boltonians. In one address at the town hall he declared, "If you were to tell persons to wash up after dinner and then insist they put that water aside for making tea you would see the absurdity of this. Where then is the propriety of offering citizens already used water?"

#### Orphans and the workhouse

Prosperous, famous, and happily married, Sam Chadwick shared one overwhelming sorrow in his life with the woman he so loved. Both his son and daughter died in infancy and there could be no more children. This undoubtedly encouraged him to turn his philanthropic attention to the needs of the orphaned. He established the Chadwick Orphanage in Bolton, which housed as many as 80 girls at a time, and went on doing so until the coming of the welfare state in 1948. He then turned his attention to his philanthropic attention to the needs of the orphaned. He established the Chadwick Orphanage in Bolton, which housed as many as 80 girls at a time, and went on doing so until the coming of the welfare state in 1948. He then turned his attention to his philanthropic attention to the needs of the orphaned. He established the Chadwick Orphanage in Bolton, which housed as many as 80 girls at a time, and went on doing so until the coming of the welfare state in 1948. 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