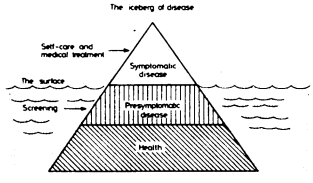
PRACTICE OBSERVED

Practising Prevention

What does it mean?

GODFREY FOWLER

The traditional view of the doctor's role is changing. Managing symptoms is no longer adequate and the scope for doctors—particularly general practitioners—to influence the health of their patients by preventive medicine is being acknowledged more and more. General practice provides a good framework for preventive medicine. Virtually everyone in Britain is registered with a general practitioner and, more importantly for prevention, each general practitioner has a defined list of patients. Two-thirds of these patients consult him at least once a year and nearly all of them at least once every five years. Every day almost one million consultations take place in general practice in this country. The fact that much disease is "below the surface" is illustrated by the diagram of the "iceberg of disease."[1]



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Primary, secondary, and tertiary prevention

The ideal form of prevention is removing the cause—so called *primary* prevention. Much illness today is due not to external agents but to unhealthy human behaviour. Diseases related to smoking are an obvious example, and avoiding cigarette smoking is the most important form of primary prevention. It requires the doctor to add an educational role to his diagnostic and therapeutic ones. *Secondary* prevention is the early detection of disease before symptoms, or disordered function, appear and when action may stop, or even reverse, the disease process. Detecting hypertension is an example. In secondary prevention *risk factors* are acknowledged, and their presence is associated with an increased chance of developing a disease. Raised blood pressure and smoking are risk factors, both being associated with the development of cardiovascular disease and smoking with respiratory and other diseases. Risk factors may be asymptomatic —until the damage is done. *Tertiary* prevention is the management of established disease to avoid or limit the development of a disability or handicap. Supervision of diabetic patients is an example of tertiary prevention.

Screening

Screening is synonymous with secondary prevention. Screening is the scrutiny of a population to find those who have risk factors for a disease or have the disease itself. Case-finding is a form of screening in which the initiative is limited to the opportunistic approach: the patient seeking advice from the doctor about symptoms is at the same time questioned, examined, or investigated for an unrelated condition. This contrasts with the more aggressive pursuit of the individual with no complaints to which a narrow definition of screening may sometimes be confined and which is a feature of population surveys. The term "anticipatory care" has also been used to describe case-finding.

Two views prevail about screening. The evangelists argue that doctors should be more committed to screening procedures than they are. The cynics, on the other hand, maintain that few

of the screening procedures that have been properly evaluated have been shown to be valid. The criteria that should be satisfied before screening is adopted have been listed by Wilson[2]:
—the condition screened for should be an important one;
—there should be an acceptable treatment for patients with the disease;
—facilities for diagnosis or treatment should be available;
—there should be a recognised latent or early symptomatic stage;
—there should be a suitable test or examination;
—the test or examination should be acceptable to the population;
—the natural history of the condition, including the development from a latent to a declared disease, should be adequately understood;
—there should be an agreed policy on whom to treat as patients;
—the cost of case-finding (including diagnosis and subsequent treatment of patients) should be economically balanced in relation to civil expenditure on medical care as a whole;
—case-finding should be a continuous and not a once-for-all project.

Ethical considerations

Screening and case-finding impose obligations on the doctor over and above those to which he is normally subject. In the conventional consultation concerned with illness the patient seeks the doctor's help, and though the doctor accepts the obligation to try to fulfil the patient's needs, there is no commitment to success. In screening or case-finding, on the other hand, it is the doctor who takes the initiative and thus implies that his intervention will benefit the patient. There is a presumption not only that the abnormality that is sought will, if present, be detected, but that detection will lead to effective treatment. Moreover, there may be costs to the patient—anxiety, inconvenience, possible discomfort, and even potential harm.

A further complication is false-positive and false-negative results. A false-positive result indicates that there is an abnormality when there is not; while a false-negative result is the failure to identify the abnormality when it is in fact present. While a false-positive result will cause unnecessary distress to the person and maybe expose him to the hazards of treatment that is also unnecessary, a false-negative result will be followed by erroneous reassurance and failure to treat the abnormality which in fact exists.

Health education

Preventive medicine in the nineteenth century was based largely on changes in the environment. Because much disease in the twentieth century is caused by the unhealthy habits of individuals modern prevention depends on achieving changes in human behaviour. Smoking, overeating, alcohol abuse, lack of exercise, and accidents are major contributors to morbidity and mortality. Health education is the first step in achieving healthy behaviour. Cynics may dispute the effectiveness of health education in producing healthy behaviour, but there is accumulating evidence of such effectiveness.[3] General practitioners may also be reluctant to see themselves as health educators but should remind themselves that the word "doctor" means teacher and that "of all the many and varied sources of health information available to the adult population it is the GP who is the most trusted and whose advice has most impact."[4]

Role of the GP

There can be little doubt that if preventive medicine is worth while general practice provides important opportunities to practise it. The GP and his team are available and accessible to the vast majority of the population. Most importantly they have contact with people who are least likely to seek preventive help themselves, yet whose needs are the greatest. The credibility of a GP's advice is high and the role of health educator therefore all the more important. Continuity of care—the continuing relationship between the general practitioner and the patient—is as important to preventive as it is to therapeutic medicine.

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THE ufual method of reducing a diflocated jaw, is to fet the patient upon a low ftool, fo as an affiftant may hold the head firm by preffing it againft his breaft. The operator is then to thruft his two thumbs, being firft wrapped up with linen cloths that they may not ftip, as far back into the patient's mouth as he can, while his fingers are applied to the jaw externally. After he has got firm hold of the jaw, he is to prefs it ftrongly downwards and backwards, by which means the elapfed heads of the jaw may be eafily puthed into their former cavities.

THE peafants, in fome parts of the country, have a peculiar way of performing this operation. One of them puts a handkerchief under the patient's chin, then turning his back to that of the patient, pulls him up by the chin fo as to fufpend him from the ground. This method often fucceeds, but we think it a dangerous one, and therefore recommend the former.

THE neck may be diflocated by falls, violent blows, or the like. In this cafe, if the patient receives no affiftance, he foon dies, which makes people imagine the neck was broken: It is, however, for the moft part, only partially diflocated, and may be reduced by almoft any perfon who has refolution enough to attempt it. A complete diflocation of the neck is inftantaneous death.

(Buchan's *Domestic Medicine*, 1786.)

WE cannot however make the fame obfervation with regard to poifonous vegetables. Thefe abound every where, and prove often fatal to the ignorant and unwary. This indeed is chiefly owing to carelefnefs. Children ought early to be cautioned againft eating any kind of fruit, roots, or berries, which they do not know, and all poifonous plants to which they can have acces, ought, as far as poffible, to be deftroyed. This would not be fo difficult a tafk as fome people imagine.

POISONOUS plants have no doubt their ufe, and they ought to be propagated in proper places; but, as they prove often deftructive to cattle, they fhould be rooted out of all paflure-grounds. They ought likewife, for the fafety of the human fpecies, to be deftroyed in the neighbourhood of all towns and villages; which, by the bye, are the places where they moft commonly abound. I have feen the poifonous hemlock, henbane, wolfsbane, and deadly night-fhade, all growing within the *environs* of a fmall town, where, though feveral perfons, within the memory of thofe living in it, had loft their lives by one or other of thefe plants; yet no method, that I could hear of, had ever been taken to root them out; though this might be done at a very trifling expence.

(Buchan's *Domestic Medicine*, 1786.)

Organising a Practice

Advantages of deputising services: a personal view

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By the summer of 1977 I had completed 22 years in practice and throughout had provided out-of-hours services for patients. Over the years I had developed and accepted other medical interests and responsibilities and had come to realise that night and weekend work had not only become less exciting and satisfying but indeed a positive hindrance to my making the best use of my normal working day as a family doctor. It was not just that I was getting older or that my sleep was disturbed that made me hate being on call but the fact that I could not convince myself that it was important for my patients that I should personally take my turn on the night and weekend rota. In other circumstances I might have been able to pay one of my younger colleagues to do this work for me but this was impossible, so the alternative was to use a commercial deputising service on a casual basis.

Few issues have polarised medical opinion more than deputising services. Individuals are seldom neutral, being either strongly for or strongly against. The debate seems to have been blurred by the lack of public recognition of the key issues that have led first to rotas and then to deputising services. Among these issues are the contractual independence and isolation of the general practitioner, the calculation of remuneration item by item, the difference between city practice (where deputising services flourish) and practice elsewhere (where they do not exist), doubts about how continuing care equates with continuing responsibility, and the recent but universal expectation of more time for leisure and recreation.

The debate so far

The most comprehensive examinations of the effects of deputising services have been carried out in the Sheffield area, and were reported on between 1973 and 1977 by Williams and his colleagues.[1 2] Their first conclusion was that the concept of personal doctoring was not being threatened. Secondly, throughout the period, despite the increasing use of deputising services, they could find no substantial evidence of shortcomings in the care provided. Lastly, they suggested that if deputising activities were reviewed regularly the limitations on their use could be lifted.

Fry[3] criticised the first Sheffield report on the grounds that the quality of service had not been assessed in any detail. But this criticism could be levelled at most other parts of general practice and indeed Fry's own case against deputising services, although expressed with conviction, relied on traditional opinion without producing the evidence to condemn. Criticisms have appeared from time to time in the lay press, and though these cannot be ignored they have been mainly anecdotal, describing single incidents when the service had been found to be wanting. Indeed a lay survey by *Which?* magazine in 1974[4] found that few patients complained about deputising services.

An editorial in the *Journal of the Royal College of General Practitioners* in 1976[5] supported the view that out-of-hours work should be done by those responsible for day-time work but concluded that the onus was now on those who supported this policy to produce the facts to justify it. There is no evidence that this challenge has been taken up. Crowe and his colleagues[6] suggested that members of a partnership covering their own out-of-hours calls could provide a more personal and economic service. But they then cast doubt upon that by assuming that, since 53% of patients who contacted their practice out-of-hours received advice, in an emergency most patients wanted advice and not a visit from a doctor.

Many letters have appeared in medical journals condemning deputising services on the grounds that they interfered with continuing patient care. Indeed, Murray and Barber[7] concluded that deputising services and continuity of care were incompatible. This criticism is rarely applied to group and team practice, where the same must hold true. I have discussed the issue of continuing care[8 9] and agree with Hall's[10] suggestion, based on his report on the off-duty arrangements of general practitioners in four European countries, that the case for continuing care being fundamental to good medical care cannot be made without further research.

On balance it seemed that there was as much objective evidence in favour of deputising services as against. This lessened the feeling of guilt that I had had when I first considered using a deputy. My decision to do so, however, was taken after retrospectively reviewing the way my partners and I had dealt from September 1976 to August 1977 with the out-of-hours requests of the 5200 patients in the practice, which is run by the Department of General Practice at Edinburgh University.

Doctors' response to out-of-hours calls during one year before employing a deputy

I defined out-of-hours work as requests for home visits made and dealt with between the hours of 1900 and 0700 Monday to Friday and between 12 noon Saturday and 0700 hours Monday. During the year there were 550 requests. They were evenly spread among the five practice doctors. Our records showed which doctor was on call, on how many occasions he visited, and how many times he gave advice. The proportion of visits done to advice given varied greatly among the five doctors. One of my colleagues visited on 97% of the times he was called, whereas when I was on call only 64% of requests resulted in a visit being made. The difference was even greater when the outcome of the 123 "out-of-bed" requests (from 2300 to 0700 hours) received during the year was considered separately. The same colleague visited every time he was called, while my visiting rate dropped to 37%. Differences were not accounted for by age or experience. The second highest "visitor" for both overall and out-of-bed

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calls was the oldest doctor, and he had been longest in the practice.

On the basis of this review I decided that our patients might well be better served out-of-hours by a deputy rather than myself. On 1 September 1977 I therefore started to employ a deputy to do my share of night and weekend work. My case in favour of deputising services is supported by the experience of the next three years when I monitored the work undertaken on my behalf by the deputy.

Results of using a deputy for three years

Between September 1977 and August 1980 I engaged a deputy for the hours 1900 to 0700 for each week night I was on call and between 12 noon Saturday and 0700 hours Monday when I was on call at weekends. For the first year (September 1977 to August 1978) I attempted to visit and reassess, either on the same or on the following day, each of the 76 patients seen on my behalf. Three of the 76 patients were admitted to hospital by the deputy and three were referred to the local accident and emergency department for x-ray after minor trauma. Of the remaining 70 patients, 13 were not at home when I visited and were not seen again during that episode of illness; 40 required no further follow-up; eight required further visiting in their home by myself or one of my partners; and nine subsequently attended surgery during the same episode. Thus 53 (70%) of the 76 patients seen by the deputy required no further follow-up during their episode of illness. Only one patient—previously known in the practice as being "difficult"—was dissatisfied with the deputy's management.

As a result of this I stopped revisiting all the patients seen by the deputy unless he thought it necessary, but continued to record facts about the deputising service either to confirm or refute some of the main criticisms levelled against it.

During the next two years (September 1978 to August 1980) a further 138 patients were visited by the deputy. Added to the previous 76 patients this made a total of 214 deputy visits. Twenty-four per cent of calls were for children between the ages of 0 and 5 years, though they represented only 10% of the practice population. There were no other significant differences in the "expected" distribution of requests by age or sex. Using information from the records of all 214 patients I examined five common criticisms of deputising services.

Common criticisms of deputising services

(1) *Deputies take too long to answer calls*—The average time taken from the patient's telephone call until the deputy arrived was 61 minutes. The variation was between six minutes (for a patient with chest pain when the deputy was nearby) to 4 hours 11 minutes (for a child prescribed penicillin for tonsillitis earlier in the day at the surgery and thought by the parents "not to be better yet"). On no occasion did a patient complain of the deputy delaying in answering a request for a visit.

(2) *Deputies do not have access to the patients' records*—This was not reported as a difficulty. In 54% of patients the reason for the call was a completely new episode of illness. In others the labelling of prescribed medicines made identification easy. The majority of calls were for common self-limiting illnesses of the upper respiratory tract (36%) and of the gastrointestinal tract (19%).

(3) *Deputies either overprescribe or prescribe inappropriately*—For 34% of patients no medication was prescribed by the deputy; 38% received only one item of medication; 25% received two and 3% three items. All the medication prescribed by the deputies seemed appropriate except that three patients were given antidiarrhoeal preparations containing non-absorbable antibiotics, which are expensive and are now widely reported as being unnecessary.

(4) *The patient does not see his regular doctor*—To examine this criticism I defined a patient as having a regular doctor if he or she had seen that doctor on six or more occasions in the previous 10 contacts. On this basis, 11% of the 214 patients visited by a deputy in my behalf had a regular doctor but, as would be expected, for only one fifth of these was the regular doctor myself.

(5) *Deputies interrupt the patient's continuing care*—To answer this criticism I again examined the patients' records to find out which doctors had been concerned in the previous five contacts with the 214 patients: 60% of the patients had not been seen by me at any of their previous contacts; 18 of the patients had been seen by five different doctors; 73% had been seen by at least three doctors. Only six patients had seen the same doctor at all five previous contacts (I was the doctor concerned for only one of these), and 14 patients had not been long enough in the practice to have had five contacts.

It is true that our practice is atypical, being staffed to take account of our other academic activities, but, on the other hand, since many "full-time" doctors also have activities that take them outside their practices during the day and join with others to form rotas for night and weekend cover the end result may be the same in "average" practices.

Deputy's work load

During the three years of the study a deputy acted as my locum on 125 nights and 23 weekends. On 55 (44%) week-nights there were no requests for visits. On 54 nights a deputy did one visit, on 14 nights two visits, and on two nights four visits. Forty-nine visits were done on Saturdays and 75 on Sundays. Forty-three (20%) of the 214 visits were between 2300 and 0700 hours. Advice was given or requested on 23 (10%) occasions without a visit being made; six of these were between 2300 and 0700 hours. The morbidity seen by the deputy corresponded closely with reported patterns of illness. His behaviour in response to out-of-hours requests over the three years was matched with that of the other four practice doctors and showed that the deputy ranked second highest in the proportion of visits made (90%) to advice given (10%).

Cost of employing a deputy

Our practice was reckoned to be of a size that would normally support three doctors and I was charged by Air Call as a casual user on this basis. Each night was charged as a single unit and each weekend as three units. During the three years of this study a deputy was therefore acting for me on 194 units of time (125 + (3 × 23)). In addition there was a surcharge for every visit made between 2300 and 0700 hours. All charges were subject to an annual increase throughout the period.

The total cost over the three years was £1581. This could be broken down as follows: £6·67 for each time that either a visit was made or advice given, or £7·40 for each visit made, or £8·15 for each unit of time. The total amount would normally be reduced to about £1200 by the doctor claiming night visit fees for the 43 qualifying visits, and in addition the £1200 would be regarded as a practice expense for income tax purposes.

Conclusion

The publication in 1978 of a code of practice for deputising services[11] and the introduction of professional advisory committees to oversee these has meant that all deputising services are now subjected to continuous review from outside. I rest my case in favour of deputising services with two final thoughts. Could other elements of general practice, let alone other forms

of providing out-of-hours care, survive such scrutiny? And, has the time not come to consider two separate contracts for general medical services—one for day-time care and one for night and weekend work?

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Innovations

Leicestershire: Encouraging specialisation in a general practice

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Since the advent of the National Health Service the organisation and content of general practice in Britain has become more and more distinct from that of hospital practice. Today, few British general practitioners have "hospital privileges," in contrast to their North American colleagues, for example. GPs often hold hospital posts, however, at clinical assistant or hospital practitioner grades, and clinical expertise acquired in this way is often valuable in general practice. Furthermore, it is not unusual for GPs to develop special interests in general practice—for example, family planning, child development, dermatology.

By encouraging specialisation in our own large practice we attempt to provide a comprehensive service, much of which would normally be available only in hospital. Our patients have access to a tier of GP specialist care through their own GP in the practice and in the local cottage hospitals, which are staffed by the practice partners. Thus there is some integration of primary and secondary care. What we try to achieve is not unique—similar patterns exist in other market towns—and we realise that the facilities of a cottage hospital are a prerequisite.

Organisation

We have 12 partners, a total list size of 31 000, and are the sole practice in the market town of Melton Mowbray (population 24 000). The community is served by an active cottage hospital (47 beds) at which visiting consultants hold outpatient clinics and operating sessions. There is also a GP maternity hospital (19 beds). The nearest district general hospital is 16 miles away in Leicester. Most of the partners in our practice are clinical assistants at the cottage hospital and assist with outpatient clinics and theatre lists (table I). We regard ourselves primarily as GPs, but the GP surgeon and GP gynaecologist have fewer patients on their lists to compensate for the heavier specialist commitment.

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The expertise in the practice, which would normally be found only in hospital, enables us to refer patients to GP colleagues either formally at the cottage hospital or informally at the surgery for a surgical, gynaecological, orthopaedic, and obstetric opinion.

TABLE I—*Clinical assistant sessions*

Surgery	5	(1 partner)
Gynaecology	2	(1 ,,)
Orthopaedics	3	(1 ,,)
Medicine	3	(1 ,,)
Anaesthetics	6	(4 partners)
Geriatrics	4	(2 ,,)

TABLE II—*Consultant sessions at cottage hospital per month*

	Outpatient	Operating
General surgery and urology	6	4
Gynaecology	4	4
Medicine (including chest and diabetes)	8	2
Orthopaedic	3	2
Physical medicine	4	–
Psychiatry	6	–
Paediatrics	2	–
Geriatric	2	–
Dermatology	2	–
Radiotherapy	4	–
Plastic surgery	–	1

Thus, many patients can be managed entirely by us using the resources and facilities of the practice, and beds are available at the cottage hospitals if needed.

If consultant referral is indicated a wide range of outpatient and operating lists enables many patients to be managed at the cottage hospital, and since the clinical assistants are responsible for postoperative care the patient retains contact with the practice (see tables II and III).

When recruiting new partners we often advertise for GPs with particular experience and qualifications. Sometimes our needs are quite specific—for example, anaesthetic experience; at other times an incoming partner is encouraged to develop his own interest.

TABLE III—*Operations in cottage hospital in 1981 (consultant and GP assistant)*

General surgery	323
Urology	107
Gynaecology	267
Orthopaedic	131
Plastic surgery	35
Dental	5
Total	868

Specialisation

GP SURGEON

One of the partners has the FRCS, and his sessions as clinical assistant include his own operating lists at the cottage hospital (two a week; table IV) and an outpatient clinic. He also has a monthly session for minor operations at the practice premises, when general anaesthesia, if needed, is provided by a GP anaesthetist. Having a surgeon in the practice not only helps partners to develop their own minor surgical skills, but also helps the medical students and trainees.

TABLE IV—*Operations performed by GP surgeon at the cottage hospital in 1981*

Inguinal hernia repair	74
Breast operations	28
Varicose veins	20
Cystoscopy	13
Ganglion	11
Pomeroy sterilisation	10
Circumcision	10
Sigmoidoscopy	8
Haemorrhoidectomy	8
Sebaceous cyst	7
Lipoma	7
Anal stretch	6
Others	93
Total	295

The following abbreviated case histories illustrate the pattern of practice.

Mrs A presented to her GP with a lump in her breast. The GP surgeon's opinion was obtained and a cyst aspirated the same day in the practice treatment room. Subsequent cytology of the fluid was benign.

Mr B presented with a painful perianal mass. Arrangements were made for the GP surgeon to incise an ischiorectal abscess under general anaesthesia that afternoon, and the surgically-trained district nurse supervised care afterwards.

Mr C, a teacher, presented with an indirect inguinal hernia. He was referred by letter to the GP surgeon's outpatient clinic and plans made for a repair operation during the school vacation.

We have virtually no waiting list for such procedures. Neighbouring practices occasionally refer surgical patients to our partner (12 in 1981).

GP OBSTETRICS

We have an open-access GP maternity unit. In theory this means that any GP in the area can book patients and assume responsibility for intrapartum care. To promote expertise and maintain experience, however, we have voluntarily agreed to delegate all intrapartum work to four GP obstetricians, all of whom are partners in the practice. They have their own separate duty rota. One of the GP obstetricians has the MRCOG, and he supervises the unit, which handles approximately 400 deliveries a year (see table V). About 70% of obstetric patients in the practice are delivered in the GP unit, and 30% at the district general hospital. We have a booking committee of GP obstetricians and midwives to agree the place of confinement. The GP obstetricians hold a booking clinic and a twice-weekly antenatal clinic at the hospital, shared antenatal care taking place with the remaining partners in much the same way as in a consultant unit. An unusual feature is that other practices in the area refer their patients to us for delivery in the unit, and we share antenatal care with them. These account for about 20% of the deliveries. A visiting consultant holds a weekly outpatient clinic, but sees only problem cases referred by us.

TABLE V—*Deliveries in GP maternity unit*

	1980		1981	
	No	%	No	%
Total No of deliveries	452	100	365	100
Normal	417	92	339	93
Forceps	35	8	26	7
Twins	–		1 (undiagnosed)	
Maternal transfers in labour to district general hospital	18	4	8	2
Oxytocin used in labour	73	16	43	12
Induced labours	34	8	25	7
Manual removal of placenta	5	1	5	1
Baby transfers to district general hospital	7	2	6	2
Post-partum sterilisation	8	2	4	1
Perinatal mortality (per 1000)	4		5	

It could be argued that these arrangements militate against a GP supervising the whole of a patient's pregnancy. We believe, however, that this is a desirable compromise, enabling us to practise good obstetrics yet preserving a small personal unit. Other isolated units operate along similar lines.[1]

GYNAECOLOGY

Two partners have a special interest in gynaecology, one of whom is an MRCOG. We can cope with many minor gynaecological emergencies, which are mainly incomplete abortions (15 patients had curettage for incomplete abortion in 1981). All the partners offer family planning, but the two partners who specialise in gynaecology hold clinics, mainly for the insertion of intrauterine devices and diaphragms.

GP ORTHOPAEDICS AND CASUALTY

All the partners provide cover for the minor accident department of the cottage hospital. One partner, however, holds a midday clinic at the hospital in which he sees same-day referrals of trauma and suspected fractures from his colleagues (a radiographer is there from 9 am to 1 pm). He is also asked to see orthopaedic problems, which he would either treat himself or refer to a weekly consultant clinic, and follows up post-operative orthopaedic patients. He can call on the services of a GP anaesthetist for manipulation of fractures. Other practices refer patients to this clinic. In 1981 1524 patients were seen, 1132 of whom were new referrals.

During the week of bad weather before Christmas last year he dealt with 12 Colles fractures, one scaphoid fracture, three dislocations of the shoulder, and two fractures of the radial head. (For 24 hours we were isolated from the accident unit at the district general hospital by snow.)

PAEDIATRICS

We have not followed the notion of GP paediatrics, as suggested by the Court Report,[1] because we feel that paediatrics is an essential part of family medicine. One partner, however, assumes responsibility for neonates in the maternity hospital, and this ensures that someone has continuing expertise in resuscitation on the labour ward.

ANAESTHETICS

The four partners who are GP clinical assistants provide an anaesthetic service for visiting consultants, the partnership, the maternity unit, and the town's dentists. They administer anaesthetics for four theatre lists a week at the cottage hospital. In 1981, 101 general anaesthetics were administered on the practice premises.

MEDICINE

Primary care can be delivered to patients more comprehensively and with continuity if suitable facilities are available. We can admit patients to beds in the cottage hospital when the indications may be for nursing care, terminal care, supervision of treatment, or investigation appropriate to general practice. We have support from visiting consultants. An example: Mrs D, aged 63, had asthma that failed to respond to medication at home, and her elderly husband was unable to cope with her. Admission to the district general hospital would have been necessary had we not been able to admit her to the cottage hospital. She remained under the care of her GP and responded to proper supervision of her treatment, which remained unchanged.

Conclusion

Many more practical procedures could be performed in general practice, yet few incentives exist. It is an anomaly that in family practice surgical procedures, which are often time-consuming, remain unremunerated though an item-of-service fee is paid for administering a general anaesthetic. One is often working against a background of political difficulties, threats of closure of GP hospitals, and criticism of GP obstetrics from hospitals. Compulsory vocational training for general practice has implications for practices such as ours, which occasionally chooses to recruit doctors directly from hospital career posts.

We think, however, that specialisation adds to our job satisfaction, stimulates self-reliance, and contributes to our continuing education. The service is appreciated by patients, who are often saved the inconvenience of referral to a district general hospital. We are convinced that it leads to a more efficient use of NHS resources.

I am indebted to Dr Robin Fraser, senior lecturer in general practice, University of Leicester, for his invaluable criticism, to Mr Bruce Williamson for advice on the work of a GP surgeon, and to Dr Darach Corvin for the audit of obstetric work.

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Contributions to the series "Innovations" are welcome for consideration.

Women in General Practice

SARAH BOSWOOD

When at the age of 10 I announced my intention of becoming a doctor my mother's immediate reaction was: "How nice. What a good career for a woman." University, medical school, house jobs, marriage, six years in general practice, and two children later I may begin to argue the point. General practice has turned out to be a good career, and with planning and an element of luck has married well with family commitments to make life fun and fulfilling.

Beware the rhetoric of Ms Capable, extolling the advantages of her way of life—those exhausted evenings getting the shirts ironed, the threatened resignations, the inability to collect the children from the swimming pool conveniently forgotten. But if we are to continue to train the present number of women doctors in general practice I think that we should do so in the reasonable expectation that they will practice. Since training for general practice has become more organised it has helped to form a more settled career structure. The three-year training scheme based in a geographical area has helped the doctor who is tied to one district by her husband's occupation, as well as providing a rounded hospital experience without having to break into another specialist career structure. The schemes are flexible enough to allow transfers from one to another should a move to another district be necessary. This structure will, I believe, attract women into general practice at an early stage in their career, thus allowing them to be fully trained in practice before having a family. The difficulties of fitting a training programme around maternity leave and a family are great—half-time programmes have similar drawbacks to part-time practice. I am an unashamed full-timer. I find part-time practice difficult; general practice does not easily fall into regular sessions, follow-up consultations do not always happen to a preplanned timetable, and domestic arrangements, especially with small children, become more complicated.

I had my first child shortly after completing my trainee year in general practice. I did various locums and part-time fill-ins in the last few months before she was born, an experience so disagreeable as to convince me that I should practice in an organised fashion or not at all. Luck played a large part in my finding a practice. Being tied to one area, I had to wait for an opening to arrive in a reasonable locality; it did—a quarter of a mile away from home and within a few weeks of my daughter's birth. I felt some trepidation in presenting myself at the interview with a six-week-old baby in tow, but there are some advantages accru-

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ing to a practice taking on such an unlikely candidate. I was happy to accept a salary, making the settlement more flexible and giving a longer trial period to see if the idea was feasible. I was already living in the area and, in view of my husband's job, unlikely to be uprooted. In some restricted areas family practitioner committees will consider a "tied" woman partner joining a practice when they may be reluctant to sanction another doctor. So I was committed to a full-time job four and a half days a week, antenatal and infant welfare clinics, and an equal share in a night duty and weekend rota of six doctors.

At this stage the most important person in our lives appeared and that was the nanny. I have had young girls with minimal experience but some training—no starched uniform, but an understanding of the nature of general practice. I am convinced that a stable routine at home, run by an established nanny, has helped the children cope with my inflexible hours and unpredictable life. This has given them reassurance and continuity and me peace of mind at work. It has worked very happily, both when they were small babies and now as they are beginning school, but I predict that the type of home help needed will change as they get older. Such help is, however, expensive. It seems to me necessary even if working part time, and in that case is relatively more expensive and difficult to regulate. There is no tax relief for this help. Wages tax and national insurance, adequate accommodation and board, and the use of a car outside the inner city make peace of mind at home a luxury. But it does mean the children have a predictable home life, and they don't seem to be insecure.

I think that in almost every case the salaried partnership is a short-term arrangement, but even so it should be well covered by a legal agreement. I was offered a full partnership after a short time, however, and happily agreed. Here was work for the lawyers. Another reminder of the importance of a proper partnership agreement may seem *de trop*, but if you are eight months pregnant, your partner is on holiday, and no locum is available it is not the time to be worrying about provisions for maternity leave. Obviously it is difficult to legislate fully for every eventuality concerning maternity leave. The "Red Book" (Statement of Fees and Allowances) provides for maternity leave of 13 weeks. The family practitioner committee will contribute towards hiring a locum to a maximum of £175 a week, provided the remaining members of the partnership will be responsible for at least 3000 patients each. There is a large grey area, however, that may lead to misunderstanding between doctors and that is the question of sick leave at any time during pregnancy or after confinement. I was fortunate and had no problems and my partners were generous towards me in the provisions of my agreement, but self-employed people in a partnership are not bound by any of the current legislation governing maternity leave and so a thorough understanding among them is important. My personal philosophy has been that, provided my legal agreement is reasonable and I am to have a privilege not granted to my partners, I should hold myself responsible for any additional leave that may be necessary connected with pregnancy or confinement. In exceptional circumstances prolonged absence of this nature may be covered by sick leave payments from the family practitioner committee.

Louise is now three years old and is a very good advertisement to encourage others—perhaps even me—to practise and enjoy family life. Covered by my established nanny, my experience with one child, and my partnership agreement, I embarked wholeheartedly on pregnancy and thoroughly enjoyed it. My partners were very supportive, not to say protective, but it was the patients who gave me the most encouragement. Practising as I do in an inner city area the doctor's family is not so much part of the community as I remember it as a child, but my two children, now only seen occasionally as fuzzy snapshots on my desk, have been adopted by many. The children themselves have been a great help to me. They have taught me more practical paediatrics than any DCH course, and this has been of the utmost importance in my relationship with both young mothers and their offspring and made the infant welfare clinic all the more enjoyable.

Yes, general practice is a good career for a woman. It is difficult to think of another job that would allow such advantages. Judicious adaptation of an appointments system has allowed me to fit in four-hourly feeding schedules, and now allows me to participate in school ferrying rotas and to meet my husband in time for the theatre. Swapping a half-day allows me to be at the school panto or birthday party—arrive very late at a surgery muttering "Kids" under my breath and watch stress lines in the waiting room melt into those of sympathy and fellow-feeling. The nicest thing of all I think is having free hours in the early afternoons. I can be at home when the children come out of school, have two hours playing with the baby after lunch, do the shopping, and arrange for the washing machine to be repaired. This leaves the weekends relatively free to enjoy a full family life.

I recognise that I have been lucky and things have gone smoothly. I have not written about my tiredness or foul temper, but I doubt that they would be much different if I was at home. Things do crop up to throw the routine—a partner's illness, a child's stay in hospital; the nanny being called up for jury service was my classic—but I don't consider that my life is self-indulgent or liberated, just busy and fulfilling.

Clinical Curio: a recurring irritation

Another year has gone by with people being upset by reactions to the dyes used to re-tint tangerines and satsumas. Early on Christmas Day I attended an apologetic and unhappy patient with quite severe urticaria, which had kept him awake most of the night. The poor fellow had merely handled two satsumas when putting them into his children's stockings the previous evening. Is prohibition of the application of these azo dyes to fruit not overdue?—P S PERRY, general practitioner, Albrighton.

Tartrazine: a yellow hazard. *Drugs and Therapeutics Bulletin* 1980;18:53-5.

Clinical Curio: delusions of grandeur

W Mitty's father came to see me. His son's medical record envelope was empty, except for the documentation of routine immunisations as a child some 20 years ago. Mr Mitty was anxious about his son's behaviour. The boy was doing very well as a free-lance journalist but some things were not quite right. W wasn't exactly lying, but some of his behaviour was a little abnormal. For example, he had applied to various publishing houses in the hope of getting a novel published. All had returned overenthusiastic replies, with offers of very large sums of money as advances on future sales. When W's father had looked up the address of one of these publishing houses in the telephone directory he could find no record of it. It was all a little odd. W was away and could not be found. Mr Mitty presented me with some of the letters, all typed on elaborately headed stationery. There were also letters from various finance houses regarding somewhat grandiose schemes of financing books and other business ventures, which had been found lying around the house in Jack's absence. I examined the headed note paper, and as I slowly scraped at it with my finger-nail the heading crumbled away. It had been painstakingly applied by Letraset, and all the complexities of the business correspondence before me represented nothing more than W's vivid imagination.

When W turned up a few days later a few minutes of gentle probing soon exposed the delusions, hallucinations, and ideas of reference that had been suppressed over the past few months. He has had his chlorpromazine regularly since being admitted to hospital and now looks back on his rather effective forgeries as a bad dream.—PAUL C MYERS, general practitioner, Romford, Essex.