practitioner. It seems paradoxical that the one postgraduate qualification that is common among general practitioners (a third held the DRCOG or MRCOG) should be so underused. This might be amended by modifying obstetric training, and the following suggestions need serious consideration:

(1) Trainee general practitioners who hold senior house officer appointments on consultant units should be less concerned in the care of "abnormal" pregnancies.

(2) Trainees should participate in more "normal" cases—for example, being made responsible for minor abnormalities in patients being cared for by midwives.

(3) Less "high technology" should be used on low risk patients who are in consultant care.

(4) Trainees should attend deliveries on general practitioner units to observe both overall normal care and the general practitioner's role in providing such care.

(5) Training practices that provide intranatal care should emphasise this role to their trainees.

(6) The DRCOG examination should be orientated more towards general practice, with more general practitioner examiners and more questions about the general practitioner's intranatal role.[12]

(7) More DRCOG courses should be run by general practitioners and by consultants who are sympathetic to general practitioner obstetrics.

(8) The vocational training programme for general practitioners should include more intranatal obstetrics in the half day release sessions.

General practitioner antenatal clinics enable resources to be used more effectively and should be organised so that other members of the health care team may participate. Eighty eight per cent of general practitioners had midwives attached to their practices, and these general practitioners were more likely to arrange for the midwife to substitute or deputise for them in their antenatal clinics. Nevertheless, the level of substitution and deputising by midwives is low and gives the impression that the average general practitioner does not regard the midwife as an independent professional practitioner.[3] Midwives should assert themselves and use their own skills, experience, and professional judgment. General practitioners should treat them as fellow professionals, sharing antenatal routines with them and arranging for them to deputise in their absence. Clearly developing antenatal clinics has been linked with more attachments of midwives, which may encourage substitution and deputising by midwives and more continuity of care.

Our data about general practitioner participation in intranatal care provide evidence of a downward spiral in which the removal of general practitioner facilities led to a decline in the intranatal work that general practitioners do and in their skills, leading to further closures of facilities. Many general practitioners were daunted by the rapid development of obstetric technology. They assumed that the statistics supported the common assertion (now increasingly disputed[7]) that this had been a prime contributor to the improved perinatal mortality rate. This is reflected in the rate at which general practitioners have given up intranatal care, which peaked in the mid to late 1970s. Yet when respondents gave reasons for declining or not using delivery facilities, or for expecting general practitioner intranatal care to fade away, few cited "consultant care as good/better" or low risk intranatal patients. Indeed, there is statistical evidence that the reverse is true.[3]

One fifth of general practitioners without access to delivery facilities would accept it if offered. Consultant units should offer facilities for general practitioner deliveries, including cover if the general practitioner is unavailable; they should write to all non-participating doctors in their area and offer this. Again, this is the policy of the Royal College of Obstetricians and Gynaecologists. When only one general practitioner in a practice provides antenatal care, which is unusual, the consultant unit should offer cover if the general practitioner is unavailable.

There were revealing statistics about the use of different types of units. Despite the college's preference for integrated general practitioner facilities, isolated units were used by a much higher proportion of general practitioners with access to them. This suggests higher levels of confidence and independence among these general practitioners as well as pressure from patients to have access to local, convenient, and familiar facilities. This agrees with recent findings on the use of isolated units, which also gave evidence of their good safety record and essential role in rural areas.[13] General practitioner obstetric units that are alongside consultant units offer the possibility of combining some of the advantages of isolated units with the back up of specialists who are immediately available. We believe that the closure of isolated units should be halted and that they should be retained even when a large district general hospital has been opened.

Conclusion

The figures relating to antenatal care in the Northern region—that is, numbers of cases, attachment of midwives, and organisation of clinics—are encouraging. On the other hand, the overall picture of general practitioner intranatal care is a bleak one. Yet it seems that there is a cadre of enthusiasts who demonstrate what is possible, a high level of underused skill, and relatively easy methods of revivifying general practitioner participation. The Royal College of Obstetricians and Gynaecologists, supported by the Royal College of General Practitioners, needs to implement many of the recommendations arising from our data to halt the steady slide to specialist care of low risk pregnancies.

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100 YEARS AGO

The report, for 1884, of Mr. Ernest Batt, the veterinary officer of the Brown Institution, shows that the work of the hospital has been efficiently carried on, and highly appreciated by the owners of animals. 222 in-patients and 3,269 out-patients were treated during the year; the majority were horses and dogs. The fact of most general importance was the occurrence of a series of cases of rabies during a short period towards the end of the year; the outbreak has, however, apparently subsided. Dr. Burdon Sanderson, when professor-superintendent, suggested that the leading symptoms of rabies should be printed on the back of dog-licences; some permanent official in the Inland Revenue Department probably resisted this innovation. The suggestion, if brought to the notice of the present enlightened President of the Local Government Board, will, it may be hoped, meet with a better fate; the cost of carrying it out ought not to exceed a few shillings a year. A great deal of ignorance undoubtedly exists with regard to the symptoms of rabies, of the "dumb" form especially, yet the recognition of the disease in its early stage, before the dog has become ferocious or helpless, is of the greatest importance. If the first cases were recognised in their earliest stages, it would be comparatively easy to stamp out a commencing epidemic. *British Medical Journal* 1885;i:498.

Extending general practitioners' skills

If this arrangement is acceptable the stage might be set for the radical reconstruction of general practice. Experience in Canada,[10] together with the trials now underway in Britain,[11 12] suggests that nurse practitioners could relieve general practitioners of at least two thirds of their work, leaving them free for other duties. (In Britain, where the range of general practitioner care is narrower than in Canada, the proportion of work that a nurse practitioner can handle is probably higher than two thirds. In 1980 a Reading practice employed an American physician's assistant for eight weeks and he handled 75-80%, of the work.[13]). In what direction should general practitioners move? There is no easy answer to this question, and in attempts to deal with it all dogmatism should be dropped. Some doctors may wish to develop their skills along preventive lines, others may prefer to do minor surgery. Some may wish to deal more adequately with the home care of chronically sick patients; others may prefer to participate in the hospital treatment of acutely ill patients. A full flowering of general practitioner skills should be encouraged, with suitable financial incentives to stimulate the effort. General practitioners might evolve into consultants in primary care, gradually restricting their care to those who cannot be treated by nurse practitioners or other members of the practice team.

One general principle only might be applied to this development: whatever work a general practitioner does it should require a medical qualification. It does not make economic sense to have general practitioners do work that nurses and other members of the primary care team can handle. This is likely to be felt most keenly with regard to prevention. Though the scope for growth here is wide, many functions may be handled by ancillary workers. There may also be limits on minor surgery because in some areas it might be safer and more economical to let junior hospital doctors do the work rather than general practitioners, who are paid more.

The widest scope for general practitioner participation is likely to be in treating priority groups—particularly the mentally ill and the aged—and suitable training schemes can be devised to equip general practitioners for the work. The need is urgent because, as mental hospitals empty and a sharp increase in the number of people over 75 is expected, outreach programmes are poised for expansion. General practitioners must bridge the gap with the hospital and ease the pressure on services. General practice is in danger of being caught in a pincer movement with inroads on care being made both from the hospital and from members of the primary care team. To be secure general practitioners must move in a direction that others cannot follow and find tasks that hospital doctors and nurse practitioners cannot do as efficiently or as well.

Quality of care

I have deliberately said nothing about the quality of care because the most pressing problem in general practice today is to find a way of extending skills. Once that is accomplished I suspect that the problem of quality of care will largely solve itself. In any case the profession appears reluctant to tackle it. Despite repeated exhortations from leaders of the Royal College of General Practitioners, no real progress has been made with medical audit—or performance review, as the profession prefers to call it. After a decade of dithering by the college, the present chairman of its council, Donald Irvine, thought that it was time something was done and launched a quality initiative in 1983.[14] To stimulate a favourable response council members displayed an admirable willingness to expose their own work to review, but 10 months later the college journal had to admit that "the overall impression so far is one of continuing complacency, even among those of us who do already practise self audit."[15 14]

This failure has dire implications for the future of general practice because ever since the link was broken in 1977 between seniority pay and attendance at postgraduate courses college leaders have pinned their hopes on audit becoming the means of continuing education.[16] Thus general practitioners may educate each other rather than be taught by hospital consultants. But, in fact, many general practitioners are being educated by no one. According to David Pendleton, only about 10% of general practitioners are now in continuing education.[17] Yet a recent study published by the Royal College of General Practitioners cast serious doubt over how general practitioners treat seven common conditions, showing surprising gaps in clinical knowledge.[18]

Vocational training has been compulsory since 1981 and much has been claimed on its behalf, but no one—not even the leaders of the college—seems anxious to find out if it is worth the substantial sum it costs.[19] The BMA finally called for an investigation, but medical leaders had good reason to hesitate because the study that dealt with the manner in which general practitioners treat seven common conditions revealed only minor differences in the gaps of knowledge displayed by trainers compared with other general practitioners.

But even if vocational training proves to be effective there is still the problem of making sure general practitioners keep up to date once their training is completed. In the United States family doctors who are board certified are retested every six years. In Britain there was recently a call to drop the examination required for membership of the college, and not from an envious "outsider," but from the college's former dean of studies, Jack Norell, endorsed by the chairman of the college's education division, Marshall Marinker.[20]

Physical premises

Some progress has probably been made over the past decade in improving surgery premises, though we cannot be sure until all surgeries are inspected. To anyone who is concerned with public health it must be startling to discover that general practitioner surgeries have not been inspected properly since the panel system began in 1913. Local medical committees went through the motions in the 1950s (in response to the Collings report), and family practitioner committees made some effort with new premises. But out of the 30 000 general practitioners in Britain only the 10% who are concerned in vocational training have had their premises rigorously examined.[21] Yet some surgeries of appalling standard may still be found,[22] despite the liberal terms on which loans and improvement grants are made. Indeed, money is advanced with such generosity that we may soon approach the point where the sale of practices—or should I say, sale of premises—returns, but without the financial burden once imposed. Through liberal loans and arrangements for sale and leaseback, together with rate and rent reimbursements, the state may supply all or nearly all the funds that a young doctor needs to buy or use the premises owned by an older partner, who is thus able to retire not only with superannuation benefits intact, but with a capital payment that could far exceed anything he or she was able to realise from savings. Nevertheless, that seems insufficient to persuade the profession to accept a compulsory retirement age.

List size

One direct attempt to tackle quality of care has come from the BMA, which wants to increase the number of general practitioners so that the number of patients on a list can be cut from an average of 2200 to 1700.[23] This would permit more time for each patient and enable British general practitioners to break free from the six minute consultation—which John Horder calls a "disgrace" as it seems to be the shortest, on average, in the developed world.[24 25] With signs of a surplus of doctors appearing, the moment could be ripe for change.

Reflections on Practice

Reconstruction of general practice: the way forward

F HONIGSBAUM

In my first article I analysed the strengths and weaknesses of general practice. What can be done to foster the development of primary care in a climate so adverse to additional expenditure? In policy making circles a new realisation may soon dawn. The erosion of clinical skills in general practice has gone so far that some may wonder whether an expensively trained doctor is needed to provide primary care, or at least most of it. Moreover, this realisation might come when, owing to mandatory vocational training, the cost of educating a general practitioner has risen sharply to £60 000 or more. The overall costs of the National Health Service are still low by world standards, and for that general practice may still take much credit. But a nation that is beset by economic problems cannot afford to waste any money on health care. If someone less costly can provide some primary care then the Chancellor of the Exchequer would be shirking his duty if he did not insist on the substitution being made. And he might not have far to look because studies that are now underway in Birmingham and Aberdeen suggest that a nurse trained as a practitioner can relieve the general practitioner of much of his job. Where home visits are concerned this already happens.[1] If nurses can act on their own outside the surgery then why not inside, where the general practitioner is close at hand? Furthermore, a nurse can be trained at only one fourth the cost of training a general practitioner and her income would be set at the same one quarter level.[2]

This is not to suggest that general practitioners could or should ever be completely displaced. Someone with medical training will always be needed to make diagnostic sense of the confusing array of signs and symptoms that make up so much of the work of primary care. But it is now clear, not only from the nurse practitioner trial but from long standing experience with primary care teams, that much of the work may be safely delegated. Practice nurses, health visitors, midwives, and social workers already relieve general practitioners of many duties, and it seems but a short step from there to developing a larger role for nurses who are trained as practitioners. It is possible to foresee a pattern of primary care emerging with fewer general practitioners working but with a growing corps of ancillary aides.

Should the profession resist this movement and let general practitioners act like medical Luddites? As medical unemployment appears to be increasing this may seem like sound trade union tactics, but the risks of such a strategy may be as great as those facing coal miners. Junior hospital doctors, rather than general practitioner trainees, suffer most from unemployment, largely because the development of vocational training has made it difficult for them to find temporary work in general practice. The barriers between general practice and hospital medicine are now more rigid than before. Furthermore, the hospital service as a whole has suffered more than general practice from the financial cutbacks, and this has led consultants, and everyone else in hospital, to look askance at the costs of general practice. They do not see why hospital practice should have cash limits while general practitioners are left free, overlooking, perhaps, that demand on general practice is open ended. This has led them to shift drug costs for outpatients to general practice and, more ominously for the future of general practice, has prompted some to restrict the direct access that they had freely granted to general practitioners.[3]

If diagnostic facilities were withdrawn completely we would be "going back to the middle ages of primary care," as Arnold Elliott so graphically put it in 1979.[3] General practitioners could hardly function effectively under such conditions. It might make more sense to extend the hospital's outreach programme so that it covered larger portions of primary care. In inner city areas it might be desirable to create home care teams in accident and emergency departments with nurses (or nurse practitioners) supervised by hospital medical staff. With job prospects shrinking, junior hospital doctors might welcome this—and so might patients who have difficulty contacting general practitioners.

Whether this danger arose or not it would be irresponsible of general practitioners to resist a movement with such promising savings in costs as that employing nurse practitioners presents. It would also be short sighted to do so because, like other forms of "technological" change, this presents general practitioners with a magnificent opportunity of freeing themselves from the routine work that has been so demoralising. Instead of resisting the employment of nurse practitioners general practitioners should welcome them and use the opportunity to extend their own duties in a direction that is more satisfying.[4] (The BMA now opposes nurse practitioners, but the idea was supported in a leading article in the *BMJ* in 1977.[4])

It may be argued that the public will never accept such an innovation: a patient entering a surgery wants to see someone with a medical qualification. This may have been true 20 years ago, but there are signs of a change in public attitudes, and for this the profession itself is largely responsible. Not only do some general practitioners let nurses do home visits, but they have condoned similar practices in the surgery.[5] Also, by putting receptionists between themselves and the public general practitioners have conditioned many patients to tolerate diagnosis by lay personnel. It would be surprising if a nurse practitioner was not more acceptable. She may be trained to follow strict protocols, and with a general practitioner close by a working relation may undoubtedly be developed that offers no risk to the patients. And to protect patients they may be given the right to see a doctor, no matter what the condition, when they insist.

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If this reform resulted in longer consultation time then there is much that might be said for it. Compared with practitioners elsewhere British general practitioners seem to make hasty diagnoses, not devoting enough time to physical examination. Even training practices, it seems, fail to record blood pressure often enough to monitor hypertension.[6] With fewer patients, however, doctors might take more care and accelerate the process of recovery.

There is no guarantee that this would actually happen because there is a long chain of causal connections here, none of which are certain. Even the first link in the chain—an increase in consultation time—may not be forthcoming. John Butler's pioneering study of the subject suggests that the time devoted to each patient is not affected by list size,[6] and this has been reinforced by the work of Wilkin and Metcalfe.[7] Perhaps the six minute consultation is so deeply rooted in British general practice that general practitioners cannot break free from the habit.

There is no indication that vocational training has altered the situation. In the early 1970s Donald Irvine conducted a survey of training practices and found that nearly a third consulted at the rate of 12 patients or more an hour.[8] Of even greater concern was a report issued in 1973 by the Scottish Home and Health Department, indicating that trainees were picking up the six minute habit from their trainers.[9] To my knowledge, no further information has been published on the subject: the results of a study by the college in 1982, which attempted to assess the influence of trainers on trainees, did not mention the length of consultation.[10] If this still applies then it suggests that vocational training has become—at least in this one vital respect—a vehicle for transmitting undesirable clinical practices from one generation of doctors to the next.

One additional point that no Chancellor of the Exchequer could ignore is that the cost of reducing list size would be enormous: the addition of some 8000 doctors and a cost of over £300m.[11] No government would want to spend that amount of money without an assurance that it would receive something in return. This, however, might not be possible without an arrangement that would produce an unacceptable infringement on clinical freedom. If such large amounts of money are spent on general practice it may be better to concentrate them at points where the benefits may be clearly seen.

Thus a programme aimed at extending the range of care looks attractive. If it is carried out in the way that I have suggested then the consultation time may be lengthened too. For the custom of the six minute consultation seems to be rooted largely in habits acquired while treating routine ailments. If patients who present such symptoms could be assigned elsewhere general practitioners, like hospital doctors, could begin every consultation expecting that the patients they see may need more attention. The screening by nurse practitioners may be the means of not only extending the range of care but of raising its quality as well.

Dependence on drug industry

The time is long overdue for a reappraisal of the profession's relationship with the pharmaceutical industry. Doctors are so dependent on financial help from drug companies that it is difficult for their leaders to give disinterested advice. This applies particularly to general practice, and nowhere did it appear more clearly than in the intemperate reaction of general practitioner spokesmen to the restrictions proposed on prescription drugs. Undoubtedly, some legitimate exceptions may be taken, but how can the public accept medical criticisms at face value when so many of the profession's institutions—including the Royal College of General Practitioners—depend on help from pharmaceutical companies?[12 13] Until doctors free themselves from this financial bond they will find it difficult to avoid the label "the captive profession."

Conclusion

Many general practitioners are demoralised. They do not feel that general practice offers the opportunity to exercise skills that were laboriously acquired over nine years of study. They need relief from routine work that may be handled adequately by others. Nurse practitioners seem to be ideally suited for this task. If they were employed on primary care teams the way would be open for the most substantial improvement in general practice that has occurred in this century. The public would benefit enormously from the change. It is hoped that the profession will welcome the idea.

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