Role of research in development of organisation and structure of general practice

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The introduction of a new contract for general practitioners in April 1990 has led many to question its necessity and whether or not the changes were consequent on research in general practice.

Four decades of general practice

With the inception of the NHS in 1948, the profession was unable at first to define the role of general practitioners. Primary medical care became free at the time of demand to the entire population. General practitioners, many of whom had previously held part time specialist appointments in hospital, were then excluded from the hospital services. With the advent of the health service, private practice quickly declined and general practitioners' income depended on capitation payments. Most were financially less well off than the specialists, and some felt that they were regarded professionally as "second class citizens." Over 40% of them were singlehanded; many practised from their own homes and had no ancillary help. Competition for patients was intense, and doctors were disinclined to develop rota services for out of hours care for fear of losing patients. Many doctors were attempting to provide care for lists of more than 3000 patients.

By the mid-1950s morale in general practice was low and emigration to Australia, Canada, and the United States was common; some emigrants are still bitter about their conditions of service in Britain then.¹ It was a time not only of great social change in the profession but also of major advances in medical care: antibiotics had revolutionised the management of acute infection, effective drugs were introduced for treating tuberculosis, and oral diuretics, hypotensive agents, antidepressants, and new and better insulins and corticosteroids were appearing. General practitioners, trained entirely in hospitals, were confused about their role as primary care physicians. Excessive demands were commonly made of them, and they had little understanding of the factors influencing demand for primary medical care which did not fit a biomedical diagnostic model. **They had few resources** to meet the nursing and social needs of their patients; many had inadequate premises from which to work, and they spent much time on home visits, which accounted for 20-30% of all consultations.

Fortunately, some individual practitioners were prepared to meet the challenges and joined forces to establish the College of General Practitioners. Simple descriptive research was carried out to identify the content of general practice, which clarified the knowledge, skills, and resources needed and allowed vocational training to be developed.²⁻⁷

In the early 1960s the research began to focus on the relation between resources and workload.⁹⁻¹¹ Pat Byrne anticipated by 30 years the current debate in his paper on the business manager in general practice.¹² When, in the mid-1960s, a major crisis developed in general

practice the results of the research carried out in the preceding decade were available to contribute to the debate. A subcommittee of the standing medical advisory committee of the Central Health Services Council was established in 1961 to examine the problems of general practice, and its report (the Gillie report)¹³ made several recommendations which reflected many of the problems identified by research in general practice and showed the increasing influence of the College of General Practitioners. The report drew attention to the problems of a system of remuneration dependent entirely on capitation payments and to the need for properly trained receptionists and secretaries in general practice and for establishing primary care teams in which nurses and health visitors were attached to general practitioners. It recognised these changes would not be possible until general practitioners had adequate premises from which to deliver care. Finally, it emphasised the need for both undergraduate teaching in general practice and proper vocational training.

Subsequently, a working party under the chairmanship of Sir Bruce Fraser, a permanent secretary to the minister of health, studied the terms of service of general practitioners and reported to the Department of Health and Social Security in 1964.¹⁴ This led to negotiations in 1965 between the Minister for Health, Kenneth Robinson; the chief medical officer, Sir George Godber; and the profession.^{15 16} General practitioners were united and determined to achieve changes, and the result of the negotiations was the Charter for General Practice, which dealt with many of the problems identified by the Gillie report.

In the '70s and '80s, under the charter, purpose built premises for general practice mushroomed as private landlords and local councils developed property for doctors, confident that rent and rates would be met by family practitioner committees, and the building of health centres flourished. General practitioners employed secretaries and receptionists, delegated administrative tasks, and developed appointment systems and special clinics. Partnerships and group practices developed, and with them primary care teams with attached nurses and health visitors. Vocational training became more appropriate and more sophisticated with the development of three year vocational training schemes. By the end of the '70s general practice was beginning to attract some of the ablest graduates; by the mid-1980s it could convincingly claim to provide the best system of primary care world wide. One important reason for this was that the primary care team which had been established was able to identify needs in response to demands for care and to use appropriately the much more expensive secondary care or hospital services.

General practice in the 1990s

Why then was it necessary to introduce a new contract? Undoubtedly, ideological factors played

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A mountain of paperwork is needed to link remuneration to performance when rates have to be derived from unreliable denominators

a part, with the belief that market forces were as relevant in general practice as in marketing groceries or household goods. Other, more cogent, factors were concerned with the inequality of care provided. Undoubtedly, some general practitioners were providing inadequate care from inadequate premises and yet receiving the same financial rewards as those who provided a superior service. There was also some evidence that general practice had tended to be focused on care led by demand, with a lack of concern for prevention and health education. Both problems might have been solved with a much less radical contract.¹⁷ They had largely arisen from the previous failure of family practitioner committees to fulfil their statutory duties to ensure that general practitioners provided adequate access to care and appropriate premises and facilities.

The 1990 contract

In contrast to the 1966 charter, the 1990 contract seems to ignore much of the research in general practice in the past four decades, probably reflecting the different relationship which exists today between the Department of Health and ministers.

MARKET FORCES

A major belief underpinning the new contract is that exposing general practice to market forces will improve the quality of medical care. There is no evidence for this. Firstly, there was the experience of general practice in Britain in the 1950s. Secondly, it has not been the experience in the United States, where doctors cannot now believe that general practice in Britain is moving towards a pattern of care from which they have been trying to escape for 40 years. Thirdly, time seems to be one of the most precious resources in general practice, and more time is unlikely to be available to individual patients when doctors are competing for patients. In almost every study of patient opinion, such as that of Cartwright,¹⁸ the doctor's ability to provide time to listen to the patient has been given a high priority. In a large study of 199 general practitioners Wilkin and Metcalfe showed that list size was negatively correlated with consultation rates and time spent with each patient, although the relation was complex, particularly for doctors with small lists.¹⁹ A study by Butler and Calnan, in which doctors answered a questionnaire about the use of time, also concluded that smaller lists might result in longer consultation times and higher consultation rates.²⁰

Roland *et al* tested several hypotheses concerning the content of the consultation if more time was made available: consultations booked at different intervals of time were audiotaped and the content of the consultation analysed. More time in the consultation did not influence the numbers of patients examined or referred to hospital or for whom prescriptions were written, contrary to the views of many who condemned the short consultation time in general practice, but did influence the communication between patient and doctor, the preventive services provided, and advice on management and health education. The study was criticised for taking place in an academic practice in central London. However, the findings were subsequently replicated by a study in the London stockbroker belt.²² Hull and Hull also showed that the duration of the consultation is related to patient satisfaction.²³ This seems to be relevant to a new contract in which consumerism is given a high profile. In addition, studies designed to identify the factors which determine how patients choose their doctors do not confirm the importance of market forces in determining the choice of general practitioner.²⁴

The increase in list sizes, which is the big attraction of a system of care dependent on market forces, seems unlikely to contribute to improved quality of care measured in terms of patient satisfaction, better communications, prevention, or health education—all objectives of the new contract. It may be argued that prevention and health education may be separated from the demand led care in general practice by setting up special clinics. Tudor Hart, however, argued that comprehensive prevention and health education may be achieved only by integration with demand led care, which requires more time in the consultation.²⁵ This view is supported by Pill *et al*, who showed that those who attend for health checks are those who least require them.

SCREENING HEALTHY ADULTS

The new contract emphasises the value of screening healthy adults. The department of community medicine at St Thomas's Hospital carried out a major study of multiphasic screening in general practice, subsequently known as the south east London screening survey (1968-75).²⁷ Over 6000 patients aged 40-64 in two general practices were randomly allocated to screening or normal care. The screening group were rescreened at three years, and both groups were screened at five years. No differences in mortality, morbidity, loss of time from work, hospital referrals, or prescribing were shown between the two groups. Of the abnormalities detected by screening, half were already known to the general practitioner and 95% were regarded as minor abnormalities. In particular, almost every patient with appreciably raised blood pressure on screening had seen the doctor in the preceding three years. As a result of this study Sackett and Holland promoted the concept of opportunistic case finding in general practice as opposed to screening as being appropriate to a system of care which provides open access to the entire population.²⁸ Subsequently, Barber *et al*²⁹ confirmed the value of this approach in identifying patients in general practice with hypertension.

At about the same time, a similar randomised controlled study providing annual medical examinations over 16 years was carried out by the Kaiser Permanente Group in the United States, with similar results.³⁰ For 20 years, as a result of this research, multiphasic screening of healthy adults in the NHS was not recommended.

Screening adults who have not consulted a general practitioner in the past three years has now become a contractual responsibility. At the same time, however,

new work has questioned whether screening can be positively harmful. In Canada Haynes *et al* showed that finding that patients have minimally raised blood pressure results in deterioration in wellbeing and increased sickness absence from work.³¹ Stoa showed a rise in general health questionnaire scores in patients who had been screened compared with controls,³² and Marteau summarised many psychological problems resulting from screening healthy adults.³³ In 1971 Cochrane and Holland wrote: "We believe there is an ethical difference between everyday medical practice and screening. If a patient asks a medical practitioner for help, the doctor does the best he can. He is not responsible for defects in medical knowledge. If however the practitioner initiates screening procedures he is in a very different situation. He should in our view have conclusive evidence that screening can alter the natural history of the disease in a significant proportion of those screened."³⁴ Holland subsequently wrote: "Thirty years on we would contend that screening by itself can provide no answer to anything. Only if it is carried out efficiently and humanely, leads to an improved outcome in those concerned, and is properly monitored and evaluated should it be contemplated."³⁵

SETTING TARGETS

The new contract is concerned with achieving target rates for certain preventive procedures. Many would agree with the objectives; calculating rates, however, depends on having a reliable denominator. The denominator in this case is the age-sex register held by the family health services authority. In 1981 Fraser and Clayton compared the accuracy of age-sex registers held by practices and family practitioner committees in five teaching practices in Leicester.³⁶ Such practices might be expected to show optimal results. In terms of name and sex the discrepancy between the family practitioner committee's registers and the patients contacted in the practice was in the region of 2%, in terms of date of birth it rose to 7%, and in terms of current address to 17%. Comparing their results with those of other studies in Britain, where discrepancies varied from 12% to 30%, they showed that discrepancies were most common in patients aged 21-40, and thus practices with large numbers of patients in this age group would be likely to have the most unrepresentative age-sex registers. More recently, Sharp identified a mismatch of 30% in an inner city population between registers held by the family health services authority used to recall patients for mammography and patients' recorded address (D Sharp, personal communication). Had anyone looked at the information available from research in general practice, they would not have seriously put forward a proposal linking remuneration to performance based on the calculation of rates derived from unreliable denominators. It results in a mountain of paperwork, it is manifestly unfair because those practices with the most mobile populations are least likely to reach their targets, it is more complex than item of service payments, and it will not attain its objectives. Full immunisations of preschool children may be achieved, as in France or the United States, by simply refusing admission to primary schools of unimmunised children or cutting off child benefit. The government seems to so wish to medicalise society that doctors have to take on the responsibility which politicians do not have the courage to adopt.

MEDICAL EXAMINATION AT REGISTRATION

The new contract specifies a financial reward for a medical examination carried out when a new patient is registered, and this must include measurements of height, weight, and blood pressure and urine testing. These measures should be applied to all patients aged over 6 years registering with a new practice. Fat

people know they are fat; they know the risks and hate themselves for being fat, and it is difficult to see how a demonstration of this at the time of registering with a new doctor will be conducive to a happy doctor-patient relationship, upon which early diagnosis and compliance depend. There is no evidence that measurement of blood pressure under the age of 35 is of any value. Mant and Fowler, who studied screening and case finding in detail, stated that routine urine testing in patients aged under 65 cannot be justified according to cost-benefit analysis.³⁷ The research evidence for the benefits of this exercise is not available. A simple history of past illness and family illness may be obtained by a short questionnaire. Only the measurement of blood pressure in patients aged over 35 might be supported by research.

AUDITING MEDICAL CARE

Under the new contract audit commissioners will evaluate the quality of general practitioner care delivered to patients. The Department of Health and health ministers have given much emphasis to the variation in referral rates to hospital by general practitioners. Clearly this is a major target for medical audit by the Family Health Services Authority, and it is part of the contract that general practitioners should record their hospital referral rates in their annual reports. Moore and Roland showed that referral rates to hospital are normally distributed around a mean and that random variation may account for a large proportion of the variance.³⁸ They also showed that referrals to individual specialists in hospital are uncommon events, that confidence limits are wide, and that meaningful conclusions about referral behaviour to many of the smaller specialties would require several years' data. According to Roland *et al* the Department of Health's preferred method of calculating referral rates, by using the number of referrals as a numerator and the number of patients registered with the doctor as a denominator, will, in terms of individual doctors, produce meaningless results in all but singlehanded practices.³⁹ It is a sad but undoubted fact that research has so far been unable to show whether high referral rates to hospital are bad and low referral rates are good; it is not even known if low referral rates save money in the long run. The major difficulty is in identifying patients who need hospital care but are not referred to hospital. The emphasis of the department on referral rates as a method of medical audit suggests a concern with costs rather than quality of care and ignorance of the complexity of this issue.

Crisis in general practice

General practice faced a crisis in the 1960s, the solution to which depended heavily on research and consultation. It is entering a new period of crisis, which may threaten the integrity of general practitioners. A situation is developing in which they may be tempted to follow a pattern of behaviour dictated by a contract and financial rewards rather than that determined by the results of research or the needs of their patients—a pattern of behaviour which in some instances may be unethical. There is some anecdotal evidence that doctors are already becoming so committed to establishing special clinics, reaching targets, and carrying out unnecessary examinations that some of their patients not covered by these regulations may suffer. It is vitally important, therefore, for general practitioners to carry out research on this aspect of their work. In developing such research it is important to be sure that in measuring the benefits which accrue to one section of the population the effect on the rest of the population is also measured.

General practitioners provide care for defined

populations of patients. They have limited resources. They need to know the costs and benefits of providing special clinics, screening, and health education to those who receive them in terms of the outcome of care, measured in physical, psychological, and social variables. They also need to know the effect of this use of resources on the provision of demand led care, compassionate care, terminal care, and care of disadvantaged groups in their practices.

The new contract demands that doctors look more critically at the services they provide by producing annual reports and by medical audit. This must be beneficial. At the same time the contract demands standards of care, the benefits of which are unproved by research, but which attract financial rewards. Above all it provides a bureaucracy, demanding paper returns for services provided which are totally irrelevant to the needs of most patients for whom general practitioners provide primary and continuing care. This is in danger of suffocating the individuality and initiative so characteristic of general practice in Britain, which has evolved over the past four decades to provide high quality primary medical care.

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MIRROR OF MEDICINE

In the first six months of 1948 the *Journal* played its most important part in the protracted debate over the NHS. Throughout the "struggle" it had been an opinion former, disseminator of information, and forum for discussion. It continued to be all of these, but in a far more sustained and forceful manner. Its leaders, almost all of which were written by Hugh Clegg, became more hard-hitting, persuasive, and, ultimately, decisive in influencing grass roots opinion and thereby determining BMA policy. The rest of its pages became ever more dominated by health service business. Correspondence on the subject, only a small proportion of which could be published, came flooding in at a rate of some 30 000 words a week. In the early weeks of the year the *Journal* concentrated on raising the morale of the troops: "We believe . . . that the plebiscite . . . will show that the majority of the medical men and women of this country will refuse to take service under the Act in its present form." If this were to happen Bevan would be forced to amend the Act or "put the health services of this country into jeopardy, embitter the relationship between the doctor and the State, and sow among doctors themselves discords that will echo for years to come."

Plebiscite forms were sent out to all medical practitioners on 31 January. They asked three questions: do you approve or disapprove of the NHS Act; do you favour or oppose acceptance of service under the Act in its present form; and will you abide by the decision of the majority if it is against accepting service? The result was an overwhelming rejection of the Act and service under it. O C Carter, chairman of the Journal Committee, judged that "the quality of argument advanced in the *Journal* . . . played a large part in enabling the members of the profession to

come to a decision on how they should vote in the [second] plebiscite."

The *Journal* regarded the outcome, along with the bellicose reaction of the Representative Body and other BMA groups, as a clear message that the government had to make concessions. A similar conclusion was evidently drawn by Bevan, for on 7 April, on the advice of the President of the Royal College of Physicians, Lord Moran, he undertook to make it statutorily clear that he did not intend introducing full time salaried service. He also offered to modify the proposals on remuneration so that, after a fixed element of salary for three years, payment would be entirely by capitation fee.

It later became a matter of dispute among BMA members as to whether these concessions were significant. Clegg believed that they were. In two letters to Lord Moran he wrote with relief of the "deadlock" being broken and of the termination of "a fight which, if continued to the end, would have been disastrous." Bevan's concessions, he wrote, "represent a great 'victory' for the Plebiscite." By influencing the Minister, Clegg felt, Moran had "done a very great service to the medical profession . . . when the shouting has died down medical men will recognise this." His one regret was that it had not been the BMA who had made the first move.

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