

Medicine and Society

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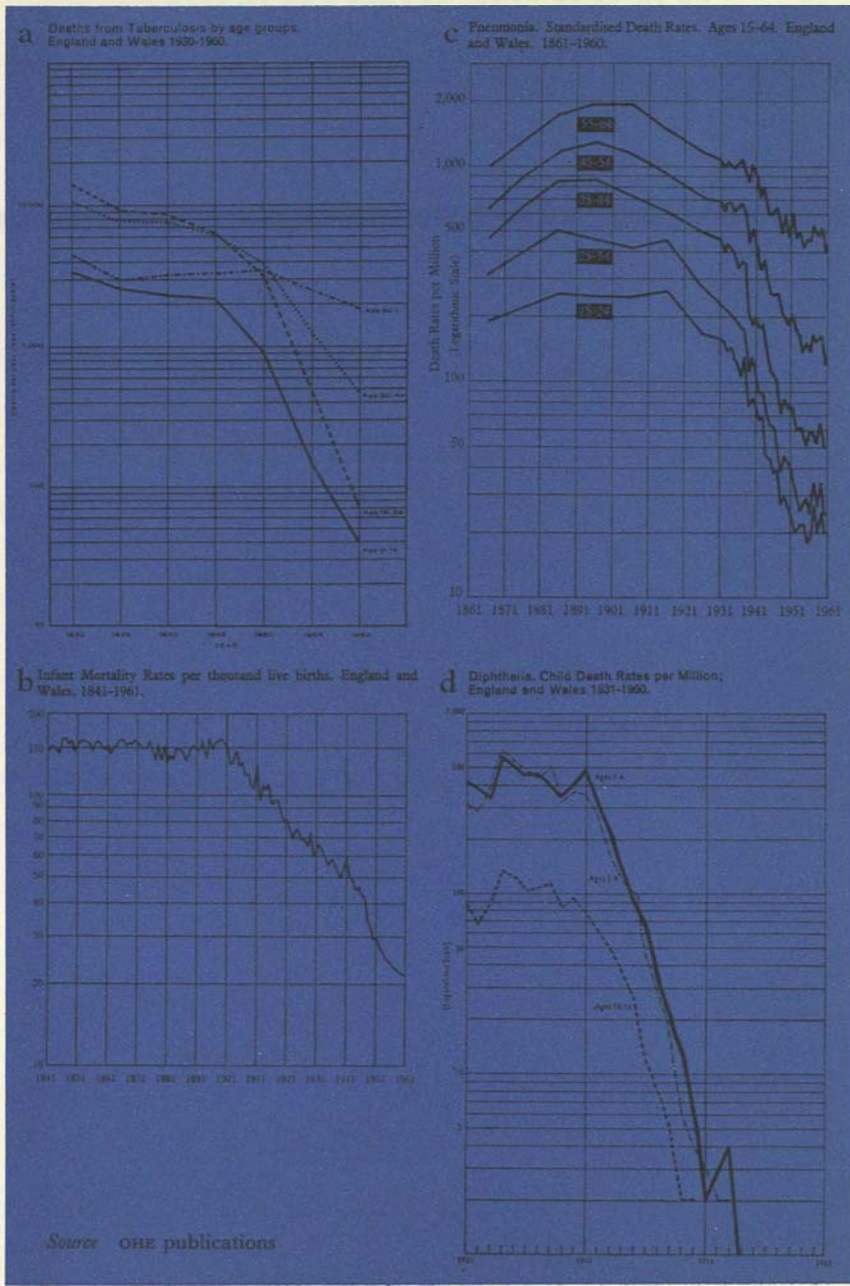
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Medicine and Society:

the changing demands for medical care



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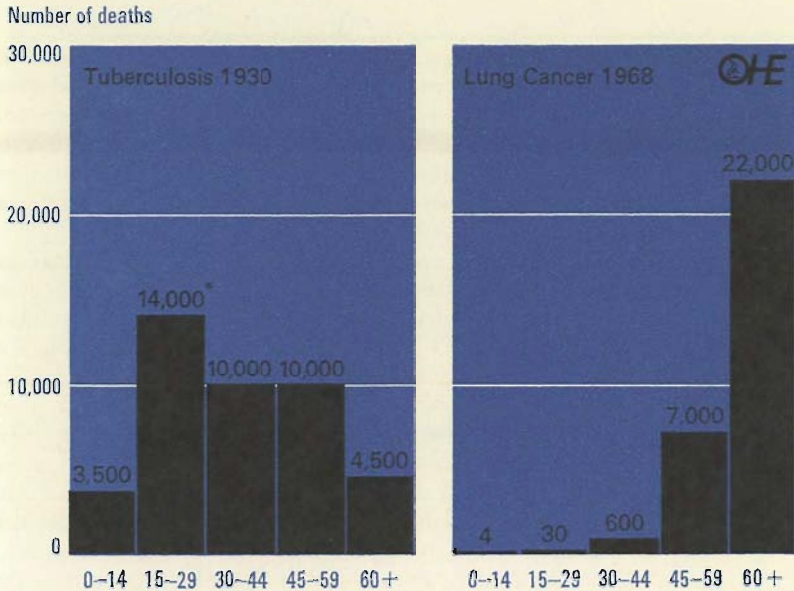
Introduction

The control of the major health problems of the early part of the twentieth century represents a triumph for medical progress in the past twenty-five years. Developments in pharmacology and in medical technology, and their widespread availability free or at nominal cost to the patient under the National Health Service, have transformed the pattern of sickness and mortality in Great Britain.

Figure 1 reproduces four graphs from earlier ONE publications which recall some of the medical triumphs of the last three decades. The already declining death rates from tuberculosis and in infants started to fall more sharply. Common causes of death in childhood, such as diphtheria, were eliminated. Deaths from pneumonia in young adults fell sharply. Apart from accidents, and to a lesser extent the cancers and suicides, there are now no significant causes of death before middle-age. Even those causes which do occur in youth do so infrequently. Mortality now rarely occurs before the age of 45 and the incidence of death is largely concentrated in old age. Figure 2 shows the contrast in the age pattern of mortality due to tuberculosis in 1930 and to lung cancer in the later 1960s. Although it is often pointed out that the number of deaths due to tuberculosis in the 1930s is now matched by the number of deaths due to lung cancer, the significance of the figures is totally different. The latter occur mainly around the biblical span of three score years and ten, whereas the former frequently occurred in children and young adults. Deaths due to other cancers, heart disease, cerebrovascular disease, pneumonia and bronchitis – all the principal causes of death in the 1970s – also occur mainly at the older ages. Again, by contrast, the infectious diseases often caused death in children or young adults in the 1930s.

The prevention or control of serious morbidity has been almost as dramatic as the prevention of early death. Effective treatments now exist, for example, for pernicious anaemia and for most cases of high blood pressure, juvenile diabetes and the rheumatic diseases. Much progress has also been made in the alleviation of less serious diseases, such as allergic and respiratory conditions. Mental illness is now often treatable whereas it received little more than custodial care in the 1930s, and the number of psychiatric patients in hospital has fallen steadily (Figure 3). The surgical repair of a hernia or a prolapsed womb, for example, is now a simple routine, with little risk. Because surgery has

Figure 2 Age breakdown in number of deaths: Tuberculosis 1930; Lung cancer 1968; England and Wales

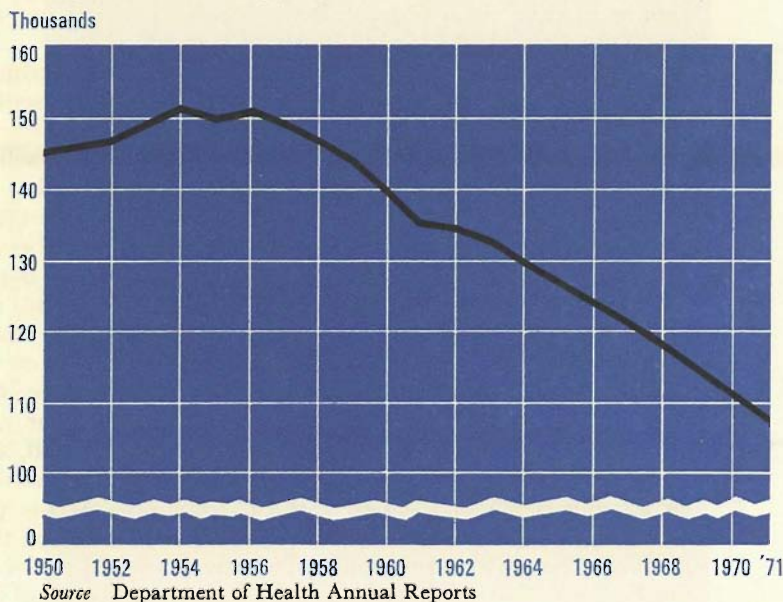


*In 1970; deaths from tuberculosis in this age group totalled 37.

Source Registrar General

become so much safer and because it is available without cost, it is often performed at much earlier stages than would have been considered justified in the past. The result is that many severe complications such as ulceration of varicose veins which were common in the 1930s are now avoided by earlier surgical intervention. In addition, the scope for surgery as a whole has extended enormously. Congenital heart disorders can now be repaired. Brain surgery has been introduced. There have been remarkable advances in the surgical repairs which are possible after accidents. Finally, blindness due to ophthalmia neonatorum, crippling from undetected congenital dislocation of the hip and 'general paralysis of the insane' due to syphilis are examples of disorders which are now more part of medical history than contemporary practice. All these represent only a selection of the many dramatic ways in which serious disabilities which were taken for granted in the 1930s can now often be prevented or alleviated. They illustrate the extent of progress in medical care since the second world war, which is not always appreciated.

Figure 3 *Mental illness: Average number of occupied hospital beds; England and Wales 1950-71*



However, these spectacular triumphs of medical care have also had other unexpected consequences. Now that the probability of early death has been so greatly reduced, and now that many of the more serious and disabling illnesses have been brought under control, individuals have apparently started to regard more seriously their minor diseases and discomforts. They perceive and act on symptoms which previously they would have ignored. Discomforts which they would have considered irrelevant in the days when premature death and crippling disability from serious disease were commonplace are now thought to justify medical treatment. The resulting paradox is that while the population in absolute terms has clearly become healthier, it is nevertheless seeking and receiving very much more medical treatment. In addition, absence from work is more frequently attributed to sickness. Figure 4 shows, for example, the steady rise in numbers of referrals to hospital; the even larger rise in numbers of hospital admissions; the still faster increases in numbers of pathological investigations and X-ray examinations and, finally, the rise in numbers of prescriptions and in sickness absence rates. Measured in these terms, improvements in health appear illusory. As a result, Beveridge's original

expectation that more generally available medical care would be accompanied by corresponding economic benefits for the community has, in the words of Powell (1962), proved to be a 'miscalculation of sublime proportions'.

For many years, the juxtaposition of better medical treatment but an apparently less healthy population has proved puzzling, and was even taken as evidence of the failure of medical science (Dubos 1960). Recent studies, however, have done much to explain the underlying factors. It is now clear that there has not merely been a quantitative change in the types of morbidity presented for medical treatment. There has instead been a qualitative change. A completely new type of morbidity is now being brought to doctors, and to tackle these new demands it is now realised that a whole new strategy is needed in the health services. First, very much more emphasis is being put on the growing social and psychological content of medical care. It is realised that much more understanding is needed of the non-medical factors affecting demands for treatment. Second, it is now realised that the outcome of medical intervention – particularly using much of the new medical technology of the past two decades – needs to be much more critically evaluated than has been the practice previously. There is at present no formal machinery within the health service for assessing the social and economic consequences of different patterns of medical care. The consequent lack of evaluation together with the failure to appreciate the importance of social and psychological factors in illness has led to a serious misuse of scarce medical resources which has only recently been recognised.

The social content of illhealth

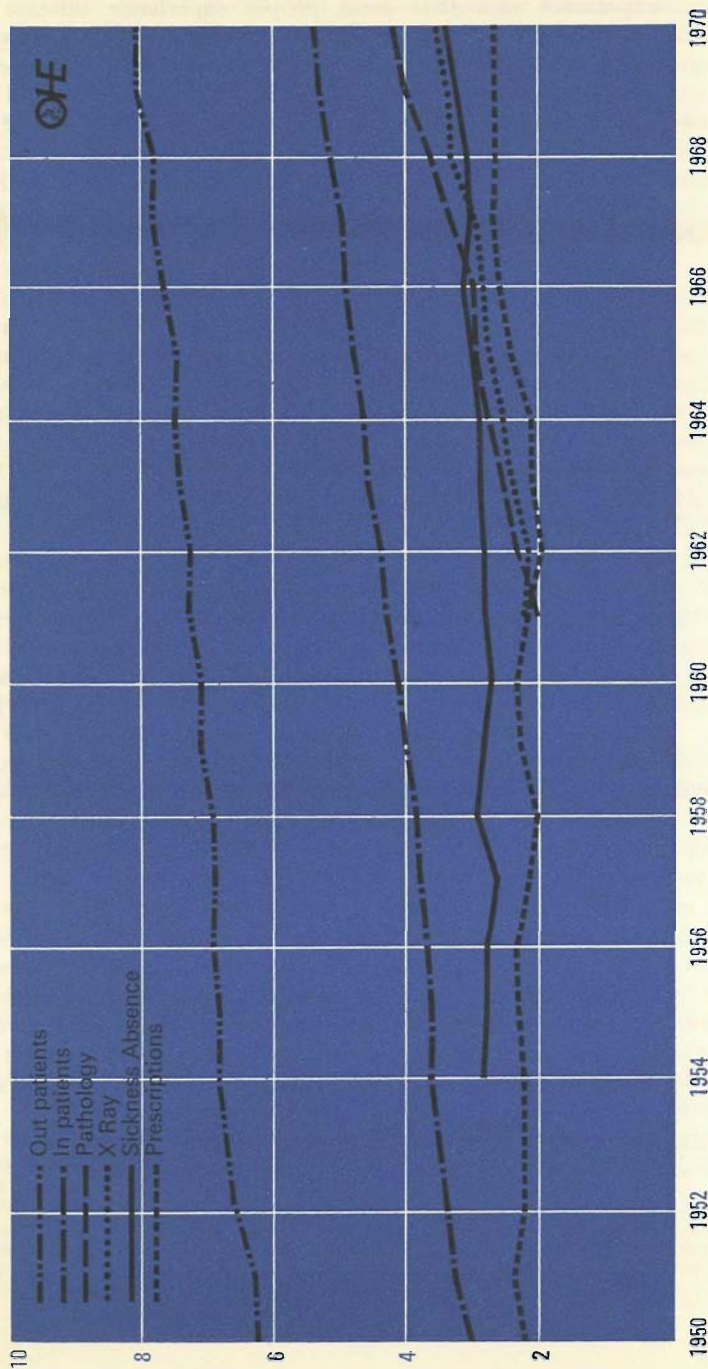
Traditionally it was assumed that if the barrier of price were removed from the provision of medical care, all those in need of treatment would visit their doctor. No one questioned whether an individual would be able to know whether he needed medical attention or not. The process of 'becoming ill' was thought to be a clearcut situation. The majority of people were expected to perceive that they were obviously and normally healthy; a minority were assumed to be equally aware that they were 'ill', because they could perceive their symptoms and appreciate their significance.

It is this naive assumption which has been shown to be no longer valid. It is now known that feeling unwell is a normal

Figure 4 *Increases in National Health Service activity and sickness absence; 1950-70*

Legend:

Out patients; millions, England and Wales. In-patients; discharges and deaths, millions, England and Wales.
 X-ray; units of treatment, tens of millions, England and Wales. Sickness absence; days lost, hundreds of millions, Great Britain.
 Prescriptions; items prescribed, hundreds of millions, England and Wales. Pathology; individual requests, tens of millions, England and Wales.



Note: earlier figures not available for X-ray, pathology and sickness absence.

experience and that most people experience dis-ease fairly frequently. The community survey by Wadsworth *et al* (1971) in Bermondsey, London, for example, revealed that 95 per cent of those questioned had experienced some symptoms of ill-health during the previous two weeks. Most of these had either been ignored or treated from the family medicine chest. Only 20 per cent had consulted a doctor or dentist during the two weeks. Thus less than a quarter of those who had felt unwell had considered that they needed professional attention. A study in Rochester, New York, in which families kept a health diary for a twenty eight day period supports this picture. Adults covered by the survey recorded at least one complaint on 21.8 per cent of all days. On 93.2 per cent of these days they relied only on medication or other home remedies. On only 6.0 per cent of the days on which they reported a complaint did they consult their doctor (Roghmann and Haggerty 1972).¹ The same picture is confirmed again in a study shortly to be published by Dunnell and Cartwright (in press). In a survey covering Great Britain, nine-tenths of the adults interviewed had symptoms to report from the previous two weeks - on average 3.9 symptoms per person. Although four-fifths of adults had taken some medicine to relieve their symptoms, in only half these cases had they been prescribed by a doctor.

The important point arising from these studies is that the distinction between those symptoms which had been judged serious enough to consult the doctor and the many others which had been judged too trivial for a consultation had been made subjectively by the sufferers themselves. At the point of first contact with the health services, it is the patient and not the doctor who has decided that the symptoms justify professional treatment.

Furthermore, studies such as those of Shuval (1972) in Israel and Robinson (1971) in Swansea have shown that this decision is often determined more by cultural, social or psychological factors than by purely medical ones. There is a strong probability that many of those who need medical treatment may not seek it, while others who do go to their doctor are expressing social or psychological needs rather than medical ones. Shuval's study

1 The differences in figures for the Bermondsey and Rochester studies do not necessarily imply a different proportion of medical visits. The former relate to action taken over a period of a fortnight while the latter relate to action on a particular day. The Rochester figures would therefore be expected to show a substantially lower proportion of doctor consultations. The individuals would still be under medical treatment on many days when they did not actually visit their doctor.

in Israel examined different groups of people who had either a high or low tendency to define themselves as ill. It showed highly significant differences between these groups. For example, those born locally in Palestine showed a much lower tendency to define themselves as ill than did those who had emigrated from North Africa. Recent immigrants were more likely to define themselves as ill than those who had lived in Israel for many years. Shuval concluded that the higher probability of medical consultation resulted from feelings of insecurity and lack of integration into the local social structure.

Robinson's study, like the one in Rochester, involved mothers keeping a diary of health events. One example from it illustrates how irrational the decision, in this case not to go to the doctor, can be. The father of the family had twisted his leg playing football on a Saturday. He did not go to his doctor on the Monday, because he had started a new job that day. He would have gone, said his wife, in order to get a sickness absence certificate had he still been with his previous employers. However, he would not have gone to the doctor, she explained, in his week's holiday between the two jobs because he would not have needed 'authorisation' to be away from work. Thus, in the opinion of himself and his wife, he would have needed to go to the doctor – had he not started a new job – only in order to get a sickness absence certificate rather than to get treatment. In fact, the ligaments in the knee were badly damaged and the man was eventually off work for two months.

The work of Taylor (1968) in the field of industrial health has also indicated a substantial variation between different individual's subjective judgment as to whether or not their symptoms justify medical treatment (and absence from work). He identified a group of 'frequently sick' employees whose sickness absence rate was three times that of a control group in the same oil refinery. He could find no medical explanation for such large differences in absence rates; the health record of the two groups seemed much the same and very similar diagnoses accounted for the absence in the two groups. The differences between them which he could identify, however, were in job satisfaction, family background and personality. Thus, it appears that, without disadvantage to themselves, the stable and contented employees could avoid two-thirds of the medical consultations which their less happy colleagues felt justified.² Once again, this picture is

² This assumes that the higher absence rates were associated with correspondingly higher consultation rates. This assumption would need to be verified, but *prima facie* it appears reasonable.

Table I *New symptoms presented per 1,000 patients in one general practice over a period of one year*

<i>Symptoms</i>	<i>Rates per 1,000 patients at risk</i>	
	<i>Males</i>	<i>Females</i>
Cough	113	122
Rashes	60	70
Pain in throat	59	69
Abdominal pain	45	43
Disturbance of bowel function	43	39
Chest pain	39	36
Back pain	38	38
Spots, sores and ulcers	37	44
Headache	33	33
Joint pain	31	32
Disturbance of gastric function	29	34
Disturbance of breathing	14	12
Change in balance	10	18
Changes in energy	7	18

Source Derived from Table II in Symptom Interpretation in General Practice; Morrell D C (1972) *Journal of Royal College of General Practitioners* 22; 297.

supported by a study of a general practice by Kessel and Shepherd (1965). In this they compared those patients who had never consulted their general practitioner over a ten year period and those with an average attendance. There was no obvious medical explanation for their differences in behaviour.

Apart from these studies of people's reasons for deciding to visit their doctor, there have also been recent studies of the symptoms for which they consult. Table I shows the range of new symptoms for which patients consulted their doctor in one practice over a twelve month period (Morrell 1972). The commonest were cough, rash and pain in the throat. The reported symptoms, however, represent an enormously diverse workload for the general practitioner, in terms of severity of morbidity. This stretches at one end from the severely hypertensive patient or one with advanced diabetes or carcinoma (who should have first consulted months or years earlier), through those with real but relatively trivial disorders, such as sprains and influenza, to - at the other extreme - patients whose symptoms are purely an expression of discontent or anxiety at work or in the home. All these patients of course need help - if only reassurance. However, those with social or psychological problems need something very different from the treatment they are likely to receive from general practitioners if their symptoms are taken at face value. If the doctor fails to diagnose their underlying problems, he will merely treat their

symptoms instead. The difficulty is that at present there is no objective evidence either on what proportion of patients consulting fall in this category or about how likely it is that their real problems will be identified by the general practitioner.

The response in general practice

In this situation, the general practitioner faces three difficulties. First, it is in many cases extraordinarily hard to distinguish between symptoms caused by a genuinely physical and perhaps serious illness and the same symptoms primarily caused by or at least perceived as a result of social and psychological factors. Second, under the influence of traditional medical attitudes the scales are tipped heavily in favour of a physical diagnosis rather than a psychiatric one. Third, the patients themselves often prefer a physical diagnosis.

The difficulty in diagnosis is illustrated by a recent study from Leeds University. This was concerned with the diagnosis of the cause of acute abdominal pain. In the study, the most senior doctors (normally the surgical registrar) who saw the cases at admission missed, on first diagnosis, ten out of the eighty five cases subsequently confirmed as acute appendicitis. They also incorrectly ascribed that diagnosis to another thirty one patients out of the total series of 304. Most of these thirty one were eventually shown to have pain of non-specific origin (de Dombal *et al* 1972). It seems likely that there is at least the same degree of difficulty in making an accurate physical diagnosis in general practice, and probably also for many other symptoms apart from acute abdominal pain.

However, under the present medical attitudes general practitioners probably tend to err on the side of making too many physical diagnoses rather than too few, partly for medicolegal reasons. If a case of dyspepsia, for example, does eventually develop into a perforated ulcer or if the cause of a backache is revealed as a cracked vertebra the general practitioner who believed in all good faith that the symptoms were psychosomatic may face a legal action for having refused to agree to an X-ray or consultant opinion. On the other hand, there will be no recriminations if a backache of purely psychiatric origin is referred for orthopaedic advice. This will be true even if subsequently the surgeon undertakes quite unnecessary spinal surgery, provided he does so in good faith. Indeed in a recent case a girl was saved from exactly this experience solely because her general

practitioner was attending the Balint seminars at the time. The backache for which an operation had been planned turned out to be caused by the anxieties associated with her impending marriage and emigration, and entirely disappeared after the doctor and patient had been able to face up to a discussion of those anxieties (Pasmore 1972).

Unnecessary surgery or investigations – even if they have a fatal outcome – attract no criticism in the way that reluctance to perform necessary procedures invariably will. Thus the present climate of opinion is still implicitly based on the principle that ‘more is better’ in medical care, even though there is growing evidence that this may not always be the case. One example is a study from Hanover. This suggested that German surgeons’ enthusiasm for advising and undertaking appendectomies (a large proportion of which appeared to be unnecessary) was the main factor responsible for the fact that the death rate from appendicitis is about three times as high as in other countries. In a follow-up of 959 cases in which the appendix was removed only one in four was confirmed as acute appendicitis by pathological examination (Lichtner and Pflanz 1971).

‘The appendix was healthy but the patient is dead’ is a sad epitaph. Yet the study from Leeds suggests that even in Britain there may be many more patients on whom an unnecessary operation is performed than there are patients for which a genuine case of acute appendicitis is left alone. Admittedly, for children especially, an exploratory operation for acute abdominal pain may often be justified in cases of uncertainty; but for older people it would be desirable to know much more about the risks associated with unnecessary surgery as compared with those of what in the event proves to be an unjustifiably conservative approach.

The third difficulty facing the general practitioner is that under his NHS terms of service he is required to provide all necessary treatment for his patients, including when appropriate referral to hospital. Hence there is a contractual background to the patient’s right to treatment from his general practitioner (in a way that does not apply, for example, once in hospital) and the patient may, therefore, bring pressure to bear on the general practitioner if he feels that he should be referred to hospital for further physical examination.³ This may be

3 A general practitioner’s failure or refusal to refer cases for a consultant opinion is one of the complaints received from the public by Executive Councils. These complaints have to be referred to the Medical Service Committee for investigation, if there is *prima facie* evidence of a breach of the general practitioner’s terms of service.

particularly likely to happen because the patient often resents the suggestion that the cause of his symptoms is trivial in physical terms, and that they reflect instead social or psychological problems. This attitude on the part of patients reinforces the medicolegal pressures and the traditional inclination for doctors to refer doubtful cases for further investigation in hospital. There is also, of course, the situation in which the original social or psychological problem may have produced a genuine physical disorder, such as peptic ulcer, in which case referral to hospital for a psychosomatic condition may be entirely rational. Additionally and ironically, there appears sometimes to be an actual clinical benefit from the hospital referral itself. This is illustrated by one of the cases reported by Robinson in Swansea. In this, over a period of several days a mother was reporting symptoms for every member of the family in the diary she kept as part of the investigation. The one significant illness was diarrhoea in an infant, over which the mother refused to accept the general practitioner's reassurances. It was only after several days that her doctor finally agreed that she should take the infant to hospital. As soon as he had done so the reported symptoms for the whole family abruptly disappeared from the diary. It therefore seems that the referral to a consultant relieved the mother's anxiety, which in turn had been causing stress in the family as a whole. The act of referral (not the consultation itself) in this case seems to have provided a form of psychotherapy. If it led to only a single visit to the outpatient department, it was probably good value for money. All too often, however, the first consultation leads on to much more costly follow up.

An excellent example is provided by one of the case histories in the recent study by Loudon (1970) of patients in the Radcliffe Infirmary, Oxford. A middle-aged woman was referred as an outpatient on a Friday with high blood pressure, palpitations, headaches and anxiety. She was admitted by the consultant, partly because he knew he had an empty bed in his ward and partly because he could have an intravenous pyelogram (IVP) done on her within four days as an in-patient against a wait of three weeks as an out-patient. The patient remained undisturbed in the ward over the weekend (during which time the bed was needed for an emergency case which had to be transferred elsewhere). The decision to carry out an IVP was confirmed on the Monday and the procedure was undertaken on the Thursday. A negative result from it was reported two days later. The following Monday an arteriogram was ordered and this was carried out on the Wednesday, the twelfth day after admission. This too

was normal, and it was then discovered by accident that the patient's symptoms were caused by treating herself for depression with ephedrine. She was seen by a psychiatrist on the Friday, two weeks after her first admission, and was transferred for further investigation in the psychiatric wards on the following Monday.

The patient in this case probably derived little if any benefit except for the disclosure of her misuse of ephedrine – but she had occupied a bed in an acute ward for sixteen nights, at an average cost of about £10 a night. There is evidence in Loudon's book to suggest that the sort of chain of events set in train by her original referral to hospital may not be unusual. Certainly the number of referrals to out-patients under the National Health Service has risen by about 30 per cent in the past twenty years, and the annual number of hospital admissions has almost doubled since the start of the National Health Service (see Figure 4). As there is no evidence of an increase in serious morbidity over the same period, this inevitably suggests that less serious conditions are now more likely to occupy hospital beds and that physical causes may often be unnecessarily being sought for essentially social and psychological problems. There is a particular danger of this happening because of the increasingly technological orientation of hospital medicine in which social and psychological factors tend to be ignored.

There is even more cause for concern in the variation of referral rates between general practices. In a study in Edinburgh, for example, the proportion of patients in different practices referred to hospital during a year varied from a maximum of 25.8 per cent for one practice to a minimum of 0.6 per cent for another (Scott and Gilmore 1966). There can be little doubt that in the former case many relatively trivial cases must have been referred. Another disturbing observation comes from a study in Exeter in which it was found that those practices with high referral rates as out-patients also had a larger proportion of patients admitted as in-patients (Ashford and Pearson 1970). This suggests that the degree of triviality in the original referral may not always affect the consultant's judgment of the patient's medical needs.

It appears from this that there is a need for better relationships and closer contact between general practitioners and consultants. At present there is usually too little scope for the general practitioner to convey to the consultant the full social and psychological factors underlying some referrals. A letter is necessarily inadequate for this purpose, because even when non-medical factors are mentioned they cannot be described and discussed to the depth that would be desirable. In addition, the consultants may

be inhibited from telling general practitioners that they feel that a particular case was referred to them unnecessarily. For example, they may suspect – often correctly – that the general practitioner knew this already and had referred the patient only as a form of reassurance. In other cases, the consultant may be unwilling to risk offending the general practitioner by rebuking him for an unnecessary referral. Either way, there is no opportunity for the face-to-face contact such as occurs between the patient and doctor in general practice, which allows the general practitioner tactfully to tell his patients which consultations were necessary and which were not.⁴ In the absence of personal contact between the general practitioner and the consultant, the former may take the fact that X-rays or other investigations have been ordered in hospital as being confirmation of the need for the original referral. However, instead they may have been carried out not because the consultant thought they were necessary, but because he felt that they were expected of him. The consultant may have ordered the investigations almost out of politeness, as it were.

If this picture is correct, it seems an overwhelming argument in favour of at least some consultations taking place in general practice premises rather than in out-patient departments. In addition, it underlines the scope for facilities such as those of The Family Doctor Diagnostic Centre which has been set up in Edinburgh with Nuffield Provincial Trust money – provided they are properly used by general practitioners. This Centre provides a wide range of diagnostic services for use by general practitioners themselves, which include barium meals, cholecystograms, intravenous pyelograms, ECG, urinalysis, haematology some bacteriology and biochemistry, cervical smears and respiratory function tests. Scott (1964) has specifically described one of the Centre's functions as being to exclude the presence of organic disease in cases where most of the signs and symptoms point to a diagnosis in the psychiatric field. It has enabled general practitioners to retain control of patients who would otherwise need to have been referred to hospital.

Another response by general practitioners to their changing workload is their increased prescribing of psychotropic medicines. Figure 5 shows the way in which numbers of prescriptions for tranquillisers, antidepressants and non-barbiturate sedatives have all risen steadily since they first became available. (The use

⁴ There is some evidence that, perhaps partly because of this educational process in general practice, there has been no increase in numbers of patients' visits to the general practitioner to correspond to the increase in hospital referrals and admissions (Royal College of General Practitioners 1970).

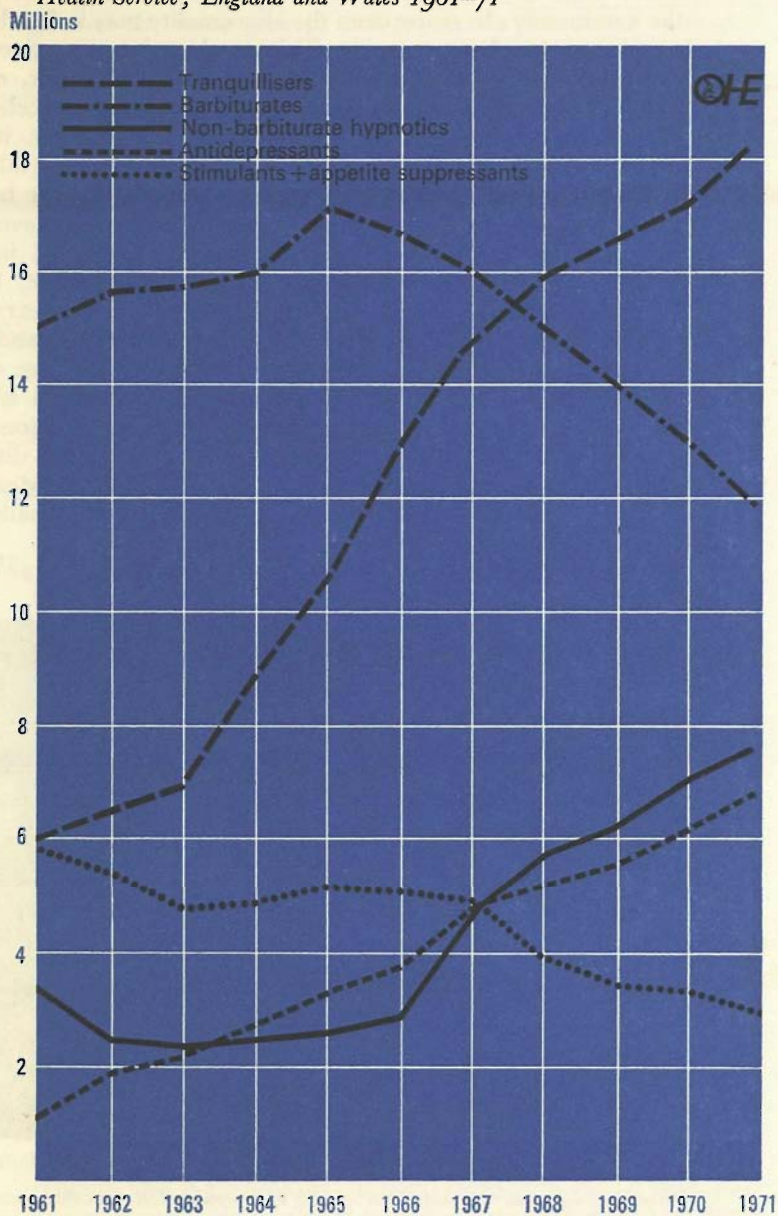
of barbiturates and amphetamines, on the other hand, has fallen.) It has been argued that this should be a cause for concern. However, the use of psychotropic medicines is at least more rational than the search for a physical diagnosis if the patient's problems are psychological. In addition, in medical terms, there is evidence that the use of psychotropic medicines does bring effective relief for 'physical' symptoms such as backache, headache, and gastro-intestinal disturbances and their use in some cases for these indications is now advocated by their manufacturers. Unfortunately there has been little systematic and controlled evaluation of their effects in such cases, but at least one randomised controlled trial has indicated that these medicines do not merely have a placebo effect but can have a specific pharmacological action, perhaps partly by relaxing tensed muscles (Voegtlin 1964). If in fact an increasing proportion of the workload in general practice concerns social and psychological problems rather than physical ones, it becomes more of a moral issue than medical one whether the use of effective psychotropic medicines is justified. This will be discussed in the final section on the underlying social changes which appear to be responsible for the changing pattern of demand for medical care.

The role of modern medical technology

Problems associated with the apparently increasing psychological and social content of medical consultations are compounded by the advance in medical technology itself. As more elaborate biochemical and physical examinations become available, there is greater likelihood that some parameter which would not previously have been measured will show a substantial deviation from the statistical average for the population as a whole, which is conventionally taken as the healthy norm. As has been discussed in a previous paper, the medical significance of these 'abnormalities' may be in considerable doubt (OHE 1971 a).⁵ There may nevertheless be a tendency particularly in hospital practice to believe that these abnormalities may be associated with the patient's reported symptoms. Hence an attempt may be

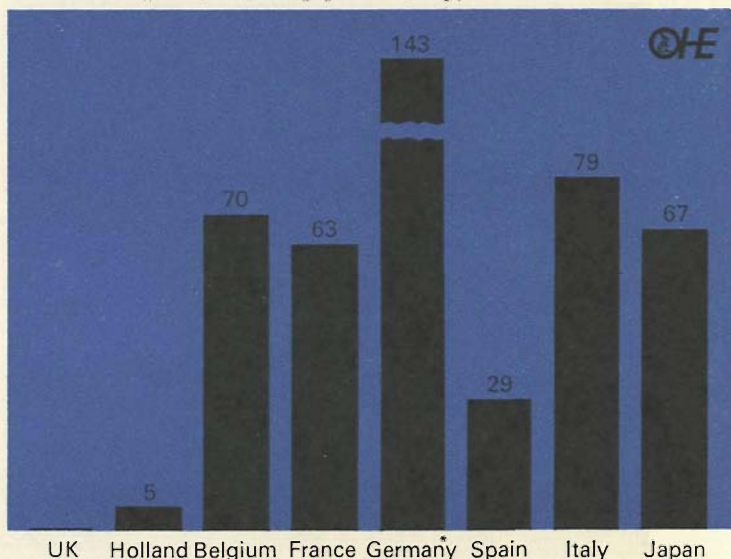
5 A dramatic example of such an 'abnormality' was reported recently in an apparently outstandingly fit and healthy football player, who was diagnosed on routine examination as having a 'serious' congenital heart disorder. It was subsequently agreed that the 'disorder' was unlikely ever to have a practical effect on his health.

Figure 5 Prescriptions for psychotropic medicines under the National Health Service; England and Wales 1961-71



made to 'correct' them, by taking measures to bring the parameter more closely into line with the average measurement for the community. In many cases the abnormality may in fact have no relevance to the symptoms, which may have been perceived in response to social dissatisfaction or insecurity. However, even in these cases the treatment may act as an effective placebo in bringing relief to the patient. If the treatment is simple, inexpensive and harmless – such as a course of iron or vitamin tablets or injections with vitamin B₁₂, for example – little or no harm may be done. If on the other hand the treatment involves elaborate surgery or prolonged or potentially harmful interference with body chemistry, it is highly undesirable. One example from the continent illustrates the possibility of harmful physical treatment for vague minor symptoms. In Britain and the United States it is accepted on the basis of life insurance data that expectation of life diminishes steadily with raised blood pressure (OHE 1971 b). Consequently the previously fashionable diagnosis of 'low blood pressure' has fallen into virtual disuse. Figure 6, which is based on data from Intercontinental Medical Statistics Ltd, indicates that this diagnosis is still widely made on

Figure 6 Consultation rates for hypotension (ICD No 458.0). Consultations per 1,000,000 population; 1971



*For Germany, only consultations leading to a prescription; for other countries, all consultations.

Source Intercontinental Medical Statistics Ltd.

the continent, especially in Germany. Doctors treating minor symptoms by raising the blood pressure (in many ways analogous to the more general and innocuous practice of raising of haemoglobin levels for the treatment of tiredness or headaches) may achieve short-term benefits from the placebo effect; but if the treatment achieves its primary objective it will also in the long run reduce the patient's life expectancy. In any case, apart from any harm caused, it would at least on theoretical grounds appear preferable to identify and tackle the true underlying social or psychological problem rather than merely to provide an irrationally effective physical treatment.

A more fundamental difficulty arising from the advance of medical technology, however, concerns its irrational applications in more serious illnesses when not even a placebo effect can be expected. The recent applications of the principle of the randomised controlled trial to aspects of medical practice apart from pharmacology – where it has been routine for at least a decade in Britain – has produced several examples. Surgery for small-celled carcinoma of the bronchus, for example, was shown in an MRC controlled clinical trial to reduce survival rates marginally, compared with radiotherapy alone (Medical Research Council 1966). In another controlled trial in Britain intensive care for coronary heart disease in hospital resulted in slightly lower survival rates than bedrest at home (Mather *et al* 1971). Many more randomised controlled trials of this sort are needed for other aspects of medical care in order that genuinely ineffective treatments can be identified and eliminated from medical practice.

Advanced medical technology is perhaps most likely of all to be misapplied when death is approaching. This is partly because of social attitudes resulting from the changed age pattern of mortality. Because death before maturity has become an exceptional event rather than a commonplace, its dramatic significance has been greatly enhanced. And because so much premature mortality has been prevented, there is an increasing expectation that all such deaths should be avoidable. Indeed, this attitude may even have spilled over into deaths well beyond the age of retirement, so that the inevitability of eventual death may be forgotten. Even with an unavoidably fatal illness late in life the patient or his relatives may not always be willing to rely only on the opinion of their general practitioner, and may seek referral to a consultant. Such requests cannot ethically be refused, and the consultant in turn, faced with such a case, may be understandably reluctant to admit that nothing can be done. He may advise surgery or dramatic medical intervention merely

because any activity appears preferable to none in such situations. The patients and their family may enthusiastically agree to even the most hazardous and unpleasant procedures although they may realise that in objective terms there is no scientific evidence that the prognosis can be improved. In such cases, the surgery is being undertaken more as an act of faith than as a scientific activity. When medical technology was less advanced and when the influence of the church was stronger, it was recognised that in any fatal illness there was a moment when it became rational to abandon further attempts at scientific therapy, and to turn instead to the priest in the hope of either a miracle or spiritual solace. The difficulty is that now, when medical technology in general can be seen to have so much more to offer, patients and their families may tend to make increasingly determined efforts to encourage further irrational medical intervention even in cases where science can make no further contribution. This has been happening, for example, when hopeless cancer cases are conveyed at great personal expense to private clinics where there is no scientific evidence of benefits from treatment.

The desire on the part of the medical profession to try to help an incurable patient is understandable. However, these efforts by their nature often tend to consume very substantial resources in terms of money and manpower. If indeed there is evidence that they are likely to be ineffective, their application needs to be reconsidered. If surgery or other drastic procedures have an equal chance of doing either good or harm, it is more rational and humane to avoid both the discomfort and the use of resources which the procedures involve and to allow nature to take its course. Similarly, if a less extensive and less mutilating operation has the same chance of success as a more drastic procedure – as for example in surgery for cancer of the breast – the former is obviously to be preferred. In other cases where controlled trials have shown that procedures are on balance even marginally more likely to do harm than good – as in the case of surgery for small-celled carcinoma of the bronchus – there are ethical as well as personal and economic arguments against performing them. In such situations, the health service should be confined to providing care and support rather than allowing predictably fruitless attempts to cure an inevitably fatal illness. The resources now often used on unsuccessful curative services could be much better used in improving the quality of life before death inevitably intervenes. The combined medical and social responsibilities of the Department of Health and Social Security should facilitate this shift in emphasis.

Another problem arising from the progress of medical technology concerns the quality of life of those able to survive as a result of it. This has perhaps been typified most poignantly in the case of spina bifida. Many infants who would inevitably have died even ten years ago can now be saved. The most serious cases, however, will suffer what appears to many to be an almost intolerable existence. A similar situation occurs with severe brain damage, most frequently following vehicle accidents. People who would certainly have died following the accident twenty years ago can now be resuscitated; but they may survive in little more than a vegetative state or with gross mental subnormality. Yet another problem arises in old age. There is now sometimes the possibility of greatly prolonging the lives of those in miserably advanced senility, if necessary with occasional resuscitation from cardiac arrest. The ethical problems in deciding the appropriate medical policy in all of these cases are already the subject of much debate.

The underlying social attitudes

It is clear from the analysis so far that the changing reasons for people going to their doctor, together with the growth of medical technology, have provided scope for substantial misuse of health service resources. This has arisen inadvertently because the new situation was not foreseen. It appears that significantly more fruitful use of existing health service resources could now be achieved if the underlying factors were fully understood by all those concerned – including the general public – and if more systematic efforts were made to assess the outcome of existing medical procedures in social and economic terms, where appropriate using the the principle of the randomised controlled trial. However, the problem goes deeper than this. The present pattern of demand for medical care and public expectation of what it should achieve are interrelated with the whole pattern of social attitudes and with all the present-day problems of society. The needs which people are expressing when they consult their doctor as a reaction to their social situation are very real, even if they are not medical in the traditional sense. To help to understand these needs, it is necessary to consider the way in which experience and attitudes have changed during the twentieth century.

The first factor appears to be the elimination of premature death, whose effect on attitudes and expectations has already

been discussed. Secondly, the advance in medical technology, which has caused this reduction in mortality and which has controlled so many serious diseases, has increased the public's faith in the benefits of medicine, so that again much more is now expected of it in minor illness as well as in serious disorders. Thirdly, the Victorian ethic of self-sufficiency and acceptance of suffering has fallen into decline. As a result, people no longer display the same reluctance to admit disease and to seek treatment for it as they did in the past. This former reluctance, together with the lack of effective medical science in most cases, encouraged people to seek reassurance within their extended family and to rely on 'Granny's remedies' in circumstances when they would now consult their National Health Service general practitioner.

Fourthly, there may have been a genuine increase in the amount of stress to which individuals are subject in society today. This is partly because of the more sophisticated and technologically complex environment in which man now lives. Noise, for example, and the need in a highly organised society to make decisions so far in advance of events have both been described as causes of stress. In addition, the increase in job mobility which has occurred during this century is itself likely to have caused an increase in stress. On top of this, the conflicts of society, which are in themselves by no means new, are more openly acknowledged and also more widely discussed in the mass media. Hence they too impinge more strongly on society and bring home to the individual the insecurity of the world in which he lives.

Finally, as a result of changing attitudes many of the former functions of the church appear to have devolved onto the health services. The church in the past provided widespread reassurance and comfort to the ailing and the inadequate. It provided an opportunity for confession. This probably brought considerable therapeutic benefits, as is now acknowledged in the practice of psychotherapy. Comfort (1972) has already suggested that the modern doctor is fulfilling the role of both shaman and oracle. The church also instilled faith, so that when no effective medical treatment was available the patient and his relatives could turn to God to seek either divine intervention or reassurance that the illness and its outcome were his will. Now people more often place their faith in medicine than in God. When people might formerly have gone to Lourdes they may now seek quasi-scientific treatment at a private clinic instead. At the end, the church gave comfort to the bereaved which now in a less religious society can often come only from the doctor instead.

Thus it appears that the departure from the ethic of self-sufficiency may have coincided with exposure to new and greater stresses and anxieties. At the same time, the weakening of the stable and supportive family environment and the declining authority of the church has left only the medical profession to tackle the consequences which seem to be expressed increasingly in symptomatic terms. This raises the question of how far the medical profession is equipped for this new role. It also raises the far more fundamental question of what the overall objectives of society should be.

On the first question, it has already been pointed out that some inappropriate, costly and dangerous physical treatments are still being undertaken in cases when the need is essentially social or psychological. Clearly medical education needs to encompass the new situation which this paper has described, so that this misuse of medical care can be avoided. If the social and psychological problems now presented to the medical profession by patients are accepted as legitimate demands on the health service, general medical education would need to be even further broadened into the fields of psychiatry and sociology. It has also been pointed out that the use of palliative psychotropic medicines is at least more rational than physical treatment, and that the new pattern of medical consultations probably explains the increasing use of tranquillisers and antidepressants.

The present growth in psychotropic medicine is not the first time that the medical services have had to deal with the disturbance caused by a change in man's environment. One can draw a parallel with the conditions in the industrial revolution, with the rapid urbanisation of a previously agricultural society. In that case the health hazard was more obvious because of the physical nature of the mainly infectious diseases which resulted. Had the modern antibiotics first been available at that time, one would have seen similar increases in their use to those which have occurred with psychotropic medicines in the past decade.

The prescribing of the psychotropic medicines touches also on the second issue – the moral question of what the objectives of society should be. When the tranquillisers and antidepressants can be used effectively to treat severe mental illness there is, of course, no argument about their benefits. Indeed the control of prolonged and incapacitating attacks of depression, for example, is one of the outstanding triumphs of modern medicine. However, there is in some quarters vociferous opposition to the use of psychotropic medicines for less serious mental illness. The issue centres on whether it is right to alleviate the symptoms of such illness, or whether one should attempt to tackle its underlying

causes. On the one hand, it can reasonably be argued that when patients seek treatment from their doctor for depression or anxiety (even if it has been expressed through physical symptoms) doctors should meet these expressed needs of their patients. The situation is the same as that when a new and successful treatment becomes available for any other previously untreatable illness. On the other side of the argument, however, it has been claimed that the present-day use of psychotropic medicines should be seen as a danger equivalent to the mass availability and use of opium. It has been argued that in the past opium itself and, more generally, 'the opiates of the people' delayed social progress by suppressing justifiable discontents and hence quelling unrest in the community. By analogy, it is argued that people now need mild tranquillisers, antidepressants and sedatives because the present structure and attitudes of society cause them to live unfulfilled lives. It has been claimed that by prescribing these medicines in increasing quantities doctors may be simply allowing people to escape from their discontents. Hence desirable forces for social change may once again be being inhibited (Elmes P C 1972).

In many ways, however, this is too Utopian an approach. It is asking the medical profession and their patients to face up to and tackle all the discontents of society, which are expressed as conflicts between the generations, as industrial disputes and as national self-criticism as well as in demands for medical care. In the best of all possible worlds it would indeed be desirable to deal with the underlying social causes. In practice, however, the doctor often has to face immediate and very personal problems which have presented as physical symptoms. What should he do, for example, when faced with the problem typified by a wife who is disappointed in an unsuccessful husband, who is himself suffering frustration through his own inability to cope with his work situation? How should the doctor deal with the trivial but recurrent symptoms through which the couple may have expressed this problem? Can he advise the couple to set out to change social attitudes to matrimony or to the expectation of achievement in a competitive industrial society as the only fundamental solution? Should he instead persuade the husband and wife to reconcile themselves to their unsatisfactory existence, just as the church formerly reassured 'the poor man at the gate' that despite his circumstances he had good grounds to be cheerful through his faith in God? Should he argue for a return to the Victorian ethic? Or should the doctor, as at present, provide palliative treatment with a prescription for a psychotropic medicine? Certainly this last alternative seems preferable

to the other approach, of allowing the husband a diagnostic tag such as 'peptic ulcer' or 'slipped disc' to help him excuse his own inadequacy both to himself and to his wife. The broad scope of these alternatives indicates the complexity of the fundamental issues facing the medical profession in re-defining their appropriate role in tackling the new pattern of morbidity with which they are faced.

To some extent, these issues reflect the difference in attitudes of those concerned with overall health policies as opposed to those directly in contact with patients. The former can postulate ideal objectives and, like Beveridge, they may still tend to hope that perfect health can be achieved by rational medical care policies. The practicing doctor, on the other hand, sees individual human beings each with their personal problems and each suffering from all the imperfections which characterise our lives. His task is to deal with these problems and the discomforts they cause in the way that he believes most effective. Understanding the limitations and risks of the medicines he prescribes, he must attempt to relieve the individual patient's symptoms as they are presented to him. He cannot be expected to mould his patients in to an ideal stereotype simply to improve the statistics of the nation's health. As this paper has described, in society as it exists today it is normal for people to experience symptoms and it is reasonable for them to expect relief, whatever the cause of these symptoms may be.

Clearly in these matters there is an interface between the medical and social services. Troubles which have an essentially social background are being presented for medical treatment. The importance of these social factors in general practice was first clearly recognised by Balint (1957) as long as fifteen years ago. Since then they have been more systematically studied and it is encouraging that medical sociology is now fully recognised as a discipline. This has begun to reveal the full extent of the problems which have been referred to in this paper. General practitioners must become more aware of the findings now beginning to emerge as a result of medico-sociological studies and in the light of these findings they must continue to modify their practise of medicine.

Conclusion

What conclusion can be drawn from this review? Certainly, there is now only a relatively limited field of medical care in which expenditure can provide benefits in economic terms. In the early years of the National Health Service the general availability of the first products of the therapeutic revolution brought enormous personal, social and economic benefits. However, this experience has not, in general, been shared with later therapeutic developments. The expectations of Beveridge that health problems would be reduced by a free and effective health service are far from being realised. Modern medical technology has a virtually unlimited capacity to consume economic resources, but for the reasons discussed it now often yields little further corresponding economic benefits.

In terms of human wellbeing, also, it is increasingly doubtful whether applying medical technology more widely on the present pattern will generally bring benefits. Much medical care is now concerned with symptoms which appear to be of essentially social or psychological origin and another large sector concerns cases where there is no scientific evidence that the prognosis can be improved. In these areas, devoting increasing economic resources to the application of medical technology may actually diminish wellbeing rather than the reverse. An unknown proportion of the present expenditure on health is probably not only unnecessary but may even be undesirable. In the absence of positive evidence of benefits from treatment it may often be better to assume that 'nature knows best' and certainly to eschew the principle that 'more is better' in medical care.

Resources for the provision of medical care will always be limited. Hence there is an urgent need for more evaluation of existing services, using randomised controlled trials whenever appropriate. When these show procedures to be ineffective or inefficient, the procedures should be dropped and the resources consequently released should be used to extend the availability of others, such as renal dialysis, which are unquestionably effective. The freed resources should also be used to improve the caring services – as opposed to the curing services – especially for the elderly and the handicapped.

It is clear that the new social and psychological problems with which the general practitioner is now faced involve great difficulties, which cannot easily be resolved. Moreover, it is not yet possible to define specifically the role of the health services in

handling these problems. Nevertheless general practitioners must clearly continue to adapt their pattern of practice in response to the new pattern of demand for medical care. The Royal College of General Practitioners and the new Faculty of Community Medicine of the Royal College of Physicians should continue to foster a better understanding of the need for this adaptation. The medical schools must in the future also concentrate more on teaching general practitioners about human behaviour, rather than merely extending their technical medical knowledge. Most important of all, general practitioners as individuals are in a central position both to recognise the developing state of affairs and to educate the public and the consultants about the true character of much present-day morbidity. It is only if they grasp this opportunity that the health services will be in a position to provide more rational treatment than in the past.

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