Papers and Originals

The Doctor in a Changing World*

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We are constantly told in these days that we are living in a changing world. This is undoubtedly true, but there is nothing new about change—it has characterized the whole history of mankind and will doubtless continue to do so. The only new thing is the rate of change. When one looks back over the centuries one sees continual change in social attitudes and social values in human societies brought about by technological advances (that is, by the application of discovery or invention to practical ends—military, agricultural, medical, industrial, or administrative). Every technological advance widens horizons in some degree and extends the range of choices that are open to man; this compels in turn changes in social values and attitudes, some of which may be temporarily unpleasant for at least some sections of the community. But perhaps because technological progress depended in the past on chance invention or discovery, and because it took a long time for a new advance to come into general use, society managed to absorb it for many centuries without too much disturbance. Man seeks stability in his lifetime, and so long as change occurred slowly enough not to disturb matters too radically within the space of one man's life it could be absorbed by society without too much upheaval.

Industrial Revolution

The first serious jolt to the system came with the so-called Industrial Revolution, which began about the end of the eighteenth century. This revolution was in type no different from what had gone before; it depended on several chance inventions and the presence of suitable entrepreneurs to develop them. But because one of these inventions—the steam engine—put into the hands of man almost unlimited mechanical power, the effect was both large and immediate and society was thrown into a turmoil aggravated by a steep rise in population, the emergence of a new industrial class, and the rise of the middle class as a force in society. Yet the problems were not insoluble and the way ahead was reasonably foreseeable, so that by the middle of the nineteenth century a pattern was beginning to emerge which apparently had an acceptable degree of stability within the lifetime of an individual. All might have worked out as the political and social theorists were predicting had the world not been overtaken in the second half of the last century by the second industrial revolution—a revolution which is still in full swing. Here was something new in world history, for it based itself not on the exploitation of chance invention but on the application of science and the results of scientific research to the solution of practical problems—that is, to technology. It is this that has brought about the fantastic changes in our material existence and environment, especially in this century, and the rate of change has been continually accelerating.

I shall not enlarge on the efforts, as yet unsuccessful, of society to come to terms with this rate of change, but in many respects we are hampered by our tendency to cling to now outmoded attitudes, largely because we have not yet accepted the fact that we should be seeking to adjust ourselves to a life of continuous change rather than seeking to adapt ourselves to the effect of any particular change. Nowhere is this more clearly seen than in the field of education. By tradition education seeks to impart to the young an acquaintance with the culture and accumulated knowledge of the society in which they live and a set of skills which will enable them to play their part in society throughout the rest of their working lives. With the loss of stability consequent on the second industrial revolution it is clear that this traditional attitude is sorely in need of revision and that a far more flexible approach to education is necessary.

Changes in Medicine

I have spoken so far about society in general, but the same pattern is clearly to be seen in one of its components, medicine, with which we are here particularly concerned. After a period of many centuries during which advances in medicine were few and science but little applied, the nineteenth century brought great changes. One can recall the Apothecaries Act of 1815, which for the first time created a body of well-trained practitioners and incidentally disturbed seriously the traditional structure of the profession; the later conflicts between the Royal Colleges and the universities; the Medical Act of 1858 and the establishment of a pattern of training aiming to produce a general medical practitioner capable of covering the whole field at the end of his training period of five or six years. Scientific medicine really began to get under way, like the second industrial revolution I have already mentioned (and for the same reason) in the second half of the nineteenth century. It was in this period that the rise of the specialties occurred and caused in due course a widening of the gulf between the general practitioner and the hospital physician or surgeon, and a third separate element began to emerge through the interest of Government in the general field of public health. I shall not attempt to trace the tremendous developments in medicine during this century, nor the evolution of our medical services, but broadly speaking the patterns in education and professional structure have not changed materially, and it is, I think, universally recognized that they are not in tune with present-day requirements.

This then was the situation which I and my colleagues faced when we first met as the Royal Commission on Medical Education in 1965. To me, a layman so far as medicine is concerned, the talks ahead looked somewhat daunting, and I owe a great debt of gratitude not only to my colleagues on the Commission but to many other members of the medical profession, for the generous and patient help they gave in introducing me to the fascinating complexities of modern medicine and its profession. Our Report has been published (Cmd. 3569. H.M.S.O., 1968),

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and in this address I would like only to make some personal observations on those aspects of it which are relevant to my main theme.

From what I have said earlier you will not be surprised to hear that any reform of medical education should, in my view, be aimed at preparing a doctor to live with change—and rapid change at that. So far, so good; but it would clearly be a help if one could have some inkling of the type of changes which are likely to occur during the next generation or so. Man has not the gift of prophecy, and crystal-ball-gazing is not a very profitable occupation outside booths at a country fair. But a not unreasonable picture of what is likely to happen can be obtained by judicious extrapolation of current trends visible not just in this country but in others, and it is on this basis that I venture to look ahead.

Family Doctor

It seems to me that the general practitioner must continue as the cornerstone of our medical services in the future, and this for several reasons. In the first place, although there has been a move in some countries to replace the general practitioner by a specialist I do not really see how the latter can be an effective “doctor of first contact” unless by “specialist” one means simply a highly qualified and experienced general physician. Secondly, I believe the concept of the “family doctor” is a sound one and that a “family doctor” is perhaps more needed now than in the past. Because of the social stresses caused by rapid material change psychological disturbances are probably commoner now than they were, and contact with, and knowledge of, family backgrounds is of great importance and can enable a practitioner to deal promptly and effectively with many ills which could otherwise become serious.

It is undoubtedly true that with the general decline in religious observance the doctor has in some measure taken on the role of confidant formerly exercised by the priest, but this can be fully effective only if he is in fact a “family doctor” who is trusted and respected by his patients. We are all aware of the frustration felt by many of those in general practice today—frustration born not simply of overwork but of an increasingly hopeless battle to keep pace with modern advances in medicine and a lack of proper equipment and assistance to allow an effective and satisfying application of their skills. This latter point is, I think, the decisive one which will lead to great changes in the pattern of general practice in the future. Advances in medicine have led to an enormous growth in the sophistication of its tools, both diagnostic and therapeutic, and the entry of the computer into medical practice which has even now begun will accentuate the problem. On economic grounds alone the satisfactory operation of general practice has passed beyond the reach of the single-handed practitioner working as a private entrepreneur, and is even getting beyond the small partnership. It must be remembered, too, that the public is now much more informed on health matters than in the past, and that the respect in which a practitioner is held and his status in the community are becoming more and more dependent on his technical skill and less and less on the simple fact that he is a medical man and therefore in some way superior to his fellows.

These facts and many others seem to me to point already to a future in which practitioners will operate in large groups based on fully equipped health centres or clinics with adequate ancillary staff, including nurses, psychiatric social workers, etc. Each such centre will be associated with a large district hospital where the main specialist skills will reside, but where the practitioner need not completely lose track of his patients and where he may hold some form of part-time appointment. Under such a scheme one would expect that individual doctors in the group at a health centre might develop special interests of their own, thereby adding materially to the skills available

within the group. This picture is, of course, rather like the Eastern European polyclinic and (except for the physically separated district hospital) the system of the Kaiser Health Plan in California.

It is sometimes said that the idea of a family doctor would be incompatible with such a system. This I cannot really understand. There seems to me to be no reason at all why an individual family should not choose one doctor in the group to be its doctor of first contact in every case. In this way he would fulfil the role of family doctor, and fulfil it the better by having available to him for consultation and advice his colleagues with special interests in a variety of directions. Under such circumstances I believe that most of the present frustrations of general practice would be removed, and that it would regain the popularity it deserves as a truly satisfying career. For example, work-loads could be reduced and adequate opportunity given for regular participation in the further training courses which will be necessary for all doctors during their professional lives. Organized in this way, with the type of training which I shall discuss later and proper interplay with the district hospital and its staff, we could be in a fair way to ending the rather absurd hierarchical difference between the hospital doctor and the practitioner which has bedevilled the profession for so long, and which is still too much in evidence. It should perhaps be mentioned here that I also expect to see the boundaries of responsibility between general practice and local authority services alter with time, and that the latter will in all probability function as part of the same health centre complex.

Future Medical Services

The proposal for health centres is not, of course, new, although what I am predicting is something very different in scope and scale from the health centres currently in existence in this country. But I believe we should consciously strive to move along the lines we have suggested in the Commission's Report; for time is short if we are to avoid a virtual breakdown in general practice in this country. I have not touched on methods of remuneration in general practice, but under a fully developed National Health Service it would seem that the practitioner should logically be paid on a salary basis just as is his counterpart in the hospital services today. If working on a salaried basis has not proved disastrous for the consultant I find it hard to believe that it would be so for the general practitioner; furthermore, I do not believe the premises and equipment necessary for good general practice in the future could possibly be financed privately.

It is clear that the picture I have given of medical services in the future entails complex organization, and unless doctors are trained to cope with organizational problems and to work effectively in teams there will be a danger that the system could become bureaucratic and impersonal. If this danger is to be avoided it will be essential not just to alter the outlook of many practitioners but to ensure that all doctors are properly trained for the type of work they will undertake; for the system will work only if we recognize that all doctors are in fact specialists in a particular type of medicine and educate them accordingly. How is this to be done? It will require a complete recasting of medical education, both undergraduate and postgraduate.

Medical Education

It has for long been evident that it is quite impossible to produce a finished doctor by giving a young man a five- or six-year university course, even if it includes a preregistration year of hospital experience. Yet this is in practice the aim of present medical undergraduate courses which derive essentially from the pattern laid down more than a century ago, when, perhaps, it was not unreasonable. In essence the medical course

is vocational, as witnessed by the heavy emphasis on such subjects as anatomy and the large clinical element. Over the years, as new subjects and specialties arose, they were simply added to the existing undergraduate course, which thereby became more and more compressed and indigestible and educationally less and less satisfactory. In recent years we have seen a variety of experiments on course modification in various medical schools, but in this country, at least, they have been rather limited in scope and have not really come to grips with the main problem—to make the course primarily educational so as to produce graduates equipped to cope with a professional life characterized by continual change, and to leave strictly vocational training to the postgraduate stage, where it properly belongs. I say make the course primarily educational, although there must be some vocational element in the choice of subjects; this need not diminish the educational aspect of the course—properly treated any subject can contribute to education as distinct from craft training.

While it is true that most if not all students who enter on a medical course are impelled to do so by a desire to alleviate human suffering, they differ widely in the ways in which they picture themselves doing it—through scientific or clinical research, specialist or general practice, and so on. This difference of interest both can and should be recognized, and with that recognition the possibility of giving it proper expression in the undergraduate course. There is, naturally, a certain necessary “core” in any course one can envisage—it is hardly possible to conceive of a student doing serious clinical work without some acquaintance with anatomy and physiology, nor is it reasonable nowadays for any student to remain ignorant of the behavioural sciences, whatever his future career is going to be. But a wide range of optional subjects should be available. It is on this general basis that the Royal Commission has suggested a “unit” type of course within whose framework wide variation is possible. The Commission also recommends a reduction in the compulsory clinical section of the course in accordance with its view that there is no need for the student at this stage to become familiar (even if that were possible) with all aspects of clinical medicine; a range of optional clinical courses should, however, also be available. Under the general scheme we propose it will, of course, be possible for a medical school to experiment at will with the so-called “integration” of the curriculum, and the new scheme will, we hope, break down the traditional division of medical studies into two wholly distinct parts—the preclinical and the clinical.

Postgraduate Education

Having completed this new type of undergraduate course in probably five years, the young doctor will do a further year of hospital training before registration. This year, we believe, should be under close university supervision and have its emphasis on training and experience rather than service. At this stage the young doctor will not be competent to take up independent practice, and his registration should not in our view permit him to do so. Postgraduate or professional training and experience will be necessary under supervision. To a large extent this is already recognized not only for prospective consultants but also for general practitioners, most of whom today undertake a shorter or longer period of hospital work before

entering general practice; currently, however, the postgraduate training received is not necessarily very suitable for the prospective general practitioner, and even for the would-be consultant it is, in general, extraordinarily haphazard and ill-defined. If we are to achieve the level of medical service which the nation should have, and which will give satisfaction to the profession, organized in-service professional training as registrar for a period of three years will be essential for all doctors.

To ensure that appropriate courses of general professional training are available for all types of specialist—including general practitioners, who are in my view as much specialist as any other group—the Commission proposes that this phase of a doctor's education should be supervised by a Council representative of the various professional colleges, the universities, and the National Health Service. With the successful completion of his general professional training the young doctor would enter the career grade of junior specialist in hospital work or assistant in general practice. In this grade he would have further experience and training for a period of perhaps two to four years, depending on the specialty and intensity of training, after which he would receive vocational registration giving him independent clinical responsibility and enter the grade of principal in general practice or hospital specialist in the other specialties. Under this scheme consultants would in practice be hospital specialists holding senior posts with special responsibilities, and promotion to this grade would be from the ranks of the hospital specialists. This does, of course, imply a change in the career structure of the medical profession, but it will give a structure which will provide more satisfaction for the doctor and replace with advantage the present one (which, viewed from outside the profession, is really quite extraordinary).

Period of Training

This is hardly the occasion to discuss in detail all aspects of the Commission's proposals, but there is one which I must mention. I have both read and heard stated in public by certain people that our proposals, if accepted, mean that the period of training of a medical student will be about 11 years, and that this makes them impracticable. I simply do not understand this kind of comment, and certainly do not accept it as valid. Under the scheme proposed the young doctor will be occupying paid appointments throughout his professional training. Moreover, with vocational registration he will enter on a career grade in which he will be able to exercise independent clinical responsibility; under the present system how many would-be consultants achieve that position in this time and how many become principals in general practice?

At the outset of this address I spoke of the effect of rapid technological change on society, and the tendency of man to seek for and to cling to stability. I do not underestimate the natural resistance of any profession to rather radical changes such as the Commission has proposed. They will involve effort, time, and money, and will certainly disturb the status quo. But I believe they are realizable and indeed necessary if, in this changing world, we are to have the quality of medical services which the nation needs, and if the doctor is to find in his calling the stimulus and the satisfaction which are his due.