Papers and Originals

Medicine in Transition: The Administrative Setting*

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Brit. med. J., 1966, 2, 1283–1287

As an introduction to this year's series of lectures on the scientific basis of medicine it would not be difficult to say that medicine is in transition, from a stage in which its practice was very largely an empirical art, and a rather ineffective one at that, to a stage in which its efficacy will be immensely increased by the reasoned application of scientific knowledge. I would not, however, go so far as to say that the time is in sight when medicine as a technology will replace medicine as an art. If that day ever comes the words will have taken on different meanings by then, and with the words as we have them now we cannot describe it. Technology does what it finds out how to do, applying scientific knowledge with precision and predictable effect, in situations of its own choice; medicine tries to do what humanity demands of it, in situations presented to it, regardless of how far its knowledge is adequate.

The technologist's achievement stands for all to see and use, in the same situation repeated; the technologist himself can then be dispensed with. He makes the car and we drive it. But the doctor faces situations not of his own choice, and of infinite variety, each of which is a human encounter. In each his action is individual and in some degree new and creative; whatever his achievement he is a part of that achievement himself. That is why medicine remains an art. There is, of course, an original and creative art in technology, at the stage of discovery invention and design, but it is an *ars brevis*, soon to be absorbed into technological production. With medicine the reverse: the scientifically based technology of medicine is absorbed into our *ars longa*. So long as scientific knowledge is imperfect, so long as the existing diversity in genetic inheritance lasts, and so long as doctor and patient both belong to the human species, medicine will remain an art.

I confess I was attracted by this theme as apt for this lecture. But I desisted. I am now too remote from contact with the scientific advances in medicine, and too long out of practice in the art, to venture safely on an assessment of how things stand between them. "The cobbler should not go beyond his last." It will be better that I take a topic of which I have at least some close knowledge, and that must lie these days in the field of administration. So to the title "Medicine in Transition" I am now appending the subtitle "The Administrative Setting." Too often in medical schools and hospitals those who do the real work come to regard their own administrative activities as burdensome distractions, and those of the lay administration as obstructive restrictions. The administrators are "they," to be cursed behind their backs, cajoled to their faces, or as far as possible ignored.

This attitude does not make sense. It is none other than our cherished science that has driven ambitious man into organizing large enterprises. For many men together can accomplish more than many men separate, by the use of technology, including communications. Administration is the art of getting men to work happily and effectively together, and it is one of the major problems of the world today. Our largest enterprises are the nation-states and the embryonic super-states, but they are beyond my scope to discuss. Within the State are enterprises like large industrial concerns, the armed Forces, education, and the health services. Each has an obvious function, in the performance of which hundreds of thousands of people are involved; a vast organization is necessary to engage their activities effectively in that performance. I believe that the pattern or structure of such an organization is extremely important. It has grown far beyond the size at which it can be said that the structure does not matter very much so long as the people in it have intelligence and good will. In any case they do not have intelligence and good will in uniform degree. Where one or other is scanty a different structure—usually a more authoritarian one—is needed. In any set of circumstances a given pattern of organization can be better or worse. A better organization produces more effective results, and—related and equally important—more happiness of its people in their work. So it is worth while to study organizational patterns.

Many people do. Books and books are written about the management of firms, some about the Civil Service, some about local government. I want to attempt short commentaries on two organization patterns in this country, that of the universities and that of the hospitals. They are similar, in that each is a sector of a large enterprise—the universities a sector of higher education and indeed of education as a whole, the hospitals a sector of the health service of the country. They are similar in that each is Government-financed, and closely meshed with government. There are other similarities, and there are differences; comparisons may be useful.

Internal University Organization

The typical university in this country has two governing bodies, a council consisting mostly of lay members but with a minority academic membership, and a senate which is entirely academic. The council is formally superior and legally responsible for all the institution's activities. The senate is *de jure* inferior but *de facto* independent in all matters of academic judgement. The council manages the property, buildings, and business affairs of the university, through its apparatus of subcommittees. The senate manages the academic affairs through faculty boards and other subordinate bodies. These are not, however, separate unrelated spheres, and no one pretends they are. They interlock at many points, and above all in matters of finance. The council is responsible for the proper handling of accounts, and for keeping expenditure within income; where academic decisions involve money it must satisfy itself that the money is there. But it does not determine academic priorities. It sets the limiting financial framework within which the senate

* Opening lecture in the series on "The Scientific Basis of Medicine" given at the Royal Postgraduate Medical School, University of London, on 20 October 1966.

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operates freely. (Universities operate within another limiting framework, both financial and academic, set by the Government, to which I shall return later.) In my view this working relationship between council and senate, based on university constitutions but elaborated through experience, is a phenomenon of great significance. It is the best example I know of an organizational pattern in which legalized power, deriving from the people, is genuinely delegated to a professional group, who alone have the expertise to use that power effectively for the purpose for which it is intended. The linking role of the vice-chancellor, himself without vested power, is said to be useful in making it work.

Academic Management

The academic management of a typical university rests, I have said, in the hands of the senate. This is another remarkable and important phenomenon. The senate is a body of 50, 100, or 150 people. It is the main locus of power in matters academic. The structure of academic power is therefore not pyramidal, with a narrow or a sharp apex, from which directives descend ; it is a broad plateau. This is in striking contrast with the state of affairs in an Army under its general, in a Civil Service department with its one permanent secretary, or in an industrial concern with its managing director. Industry, it is true, is coming to use teams in management, but they are small ones ; a recent writer quotes the 14-member board of directors of Standard Oil as the largest functioning team he has found in business, and he had to turn to one of the world's largest and most complicated businesses to find it. It remains true that the university is quite different.

There is a reason for this. Academics are to a large extent independent and original workers. They are much more so than business executives, and nearer in this respect to artists. Almost by definition original work cannot be done under direction ; the academic must take a great deal of individual responsibility for what he does ; he cannot be forced to work under orders like Army officers. On the other hand, it is obvious that academics cannot be left entirely to their own devices, like a left-bank colony in Paris. Some ordering of their activity is necessary, especially in teaching programmes. This requires some exercise of authority or power, both in arranging the activities of individuals and in the taking of policy decisions. The problem in universities is just where that power and authority should be located. In this country it is usually placed on senates collectively, and individually on heads of departments, who largely compose the membership of senates. In Oxford and Cambridge, as is well known, it is more widely diffused among the whole academic staff, which makes the entry of those universities into the modern world a little difficult ; in London it is concentrated much as elsewhere, but in a more complicated fashion, thanks to the federal structure.

Senates share their power to a limited extent chiefly in their subordinate bodies, with academic staff who are not members of the senate, and one of the current questions is whether that sharing can and should be extended ; it is even being proposed that a student representative should have a seat on the senate. Practice varies a little, but the principle is that academic management is best, and least restrictive, when in the hands of a large comprehensive body of academics, not when exercised by a superior pyramid of authority.

In Canada it is different. In Canadian universities much more power resides in full-time presidents, vice-presidents, and deans with their own administrative apparatus. There has resulted such a degree of tension between the academics and the administration that a commission was set up a year or two ago to inquire into the whole structure of Canadian university government and reform it. It was a two-man commission, an ex-vice-chancellor from the United Kingdom and a political scientist from the United States.

In a word good academic management in a university is designed to co-ordinate but not to control, to align but not to integrate.

Relations of Universities with Government

There are certain parallels between the relation of the academic to the instruments of government within his own university, and the relations of a university to the instrument of national government—that is, the Government. Today, in response to public need and popular pressure, universities are expanding at an unprecedented rate. Their mounting costs, and the aptness or otherwise of their contribution to national life, make them a major concern of Government. But they are autonomous bodies, and there are now 44 of them. They cannot be treated like the local offices of a Government department, or even like the schools under a Ministry of Education (with the local authorities interposed). If they were so treated their academic initiative would be sapped, they would fail in their function of independent forward thinking and become tools for the execution of short-term Government policy. Equally, they cannot be handed millions of money and left to do as they please. Again there is a problem—and this time it is a problem for Government—of how to co-ordinate without imposing control, how to align but not to integrate. It is a new problem, on a new and large scale, and Government has not yet progressed very far in finding a satisfactory organizational answer to it.

Before 1962 the ingenious institution of the University Grants Committee attached to the Treasury met the situation on the whole very well. It certainly evoked the admiration and envy of university people throughout and beyond the Commonwealth. Then, in the middle of an emergency spurt of university expansion, while rows of new universities were being established, the University Grants Committee was transferred to the Department of Education and Science. The consequences of that decision for better for worse are still in the making. The universities were apprehensive at the time and they remain so, as episode after episode points to the growth of control rather than co-ordination.

Control means decisions taken at Government level and handed down as directives. Co-ordination means decisions taken by Government after frank consultation with the universities, and then implemented by both as agreed courses of action.

One recent decision was the Secretary of State's announcement last year of a watertight separation of two sectors of higher education—the autonomous universities on the one hand and the local authority controlled technical and other colleges on the other. This was followed by proposals for developing degree work in technical colleges on a large scale. Although degree work had hitherto been virtually synonymous with university work, no prior consultation took place with the universities, nor even, it is believed, with the University Grants Committee. No clear distinction was drawn between the kind of work appropriate to universities and the kind of work appropriate to technical colleges, at degree level (or levels, since higher degrees are not excluded). The universities fear a consequent restriction of their own useful growth, and a diffusion of resources over technological education in the two sectors that can only mean a dilution.

On a more domestic subject the University Grants Committee has recently reviewed the norms of space and cost for certain kinds of university buildings, in a downward direction, with very little consultation with the universities on the merits of the new figures, and that largely after the event. It also undertook, without adequate prior discussion, an ill-conceived questionary inquiry into separate costs of teaching and research in universities.

Since the publication and overnight acceptance of the Robbins report in 1963 the Government has not discussed with the universities the changing problems of their global expansion, and of the expansion of separate areas of study such as technology and medicine.

These and other examples suggest to the universities that a gradual concentration of power and control over universities is being built up in the Department of Education and Science.

Access for Consultation

Against this suspicion on the universities' part it may well be urged that hitherto anyone, with the best will in the world, wanting to consult "the universities" about something, has been hard put to it to find a point of access for consultation. There is no organized universities' association, corresponding to the senate within a university as an association of faculties and departments; no body that can speak on behalf of the 44 autonomous bodies. The nearest approach is the Committee of Vice-Chancellors and Principals, but that is constitutionally only a meeting of vice-chancellors. It has no authority to be the voice of the universities. Few people seem to know what it does. In fact its dealings up to now have been with administrative arrangements and procedures, rather than with anything approaching academic policy. However, it has called into existence for academic purposes several representative university bodies, like the Universities Central Council for Admissions and the Standing Conference on University Entrance, through which universities are collectively speaking and taking action in specified fields. It is now extending this process more widely, putting itself in a position to facilitate effective consultation on any important topic, and to be equipped with information on it.

That is an encouraging feature of the present situation. Another is that the Secretary of State himself has publicly made a plea for "a constant dialogue within higher education and between the higher education world and the world of public opinion, Parliament and Government," arguing that "it is only from this free discussion amongst people sharing the same objective that the answers will emerge which will satisfy the country."

The present state of our university–Government relations in this country is thus a little bit unstable. Like medicine, it is in transition. The good features of the past are not lost beyond recall. The pattern of the future is not yet clear, but we can still make it a good pattern. The Commission on University Government in Canada has made some useful observations. It commends the recent action of universities in certain provinces, in coming together and setting up in each a Council of Presidents, with a fact-finding staff to serve it; the function of the council, which corresponds with our Vice-Chancellors' Committee, is to consult with the Provincial Government, and to advise—but not to direct—universities. On the Government side the commission recognizes the value of an Advisory Committee on University Matters (which, however, is not predominantly academic in its membership as is our University Grants Committee). And as an overriding principle the commission emphasizes the importance of a *master plan on which all parties have largely agreed.*

In the last resort the Government, representing the sovereign people, is sovereign. It is legally competent to govern; yet in a field of professional expertise and creativity it is not practically competent to dictate. Effective consultation is therefore a condition of wise decisions, as well as a condition of willing and effective professional performance.

Internal Hospital Organization

Hospital work has many characteristics similar to those of universities. Members of the consultant staff, like academics, are independent and often original workers, taking individual responsibility for what they do, and under no clinical orders. Hospital junior staff are in various stages of moving towards the same position. A hospital board or management committee has functions not unlike those of a university council, and in its membership the same majority of lay and minority of professional members. A medical advisory committee is a purely professional body, like a senate, whose word on the management of medical affairs is weighty, if not final.

The work itself that hospital medical staffs do amounts to a series of individual encounters between doctor (or a small team of doctors) and a patient. Each episode, of investigation, diagnosis, and treatment, is complete and stands by itself. It is not an element in a military campaign or an industrial undertaking, significant only in a larger context. This is *the* characteristic of medical work that should, and already largely does, determine hospital organization.

The parallel with university teaching and research is quite close. At its best teaching is a great number of individual encounters between teacher and taught. Try to measure, or even roughly to assess, the sum total of teaching work done by a university. All you can do is stand the graduates up side by side and count them; they are not related to one another in any functional way. Nor can what they have accomplished be described as a coherent whole, let alone be measured or given a money value. It is the same with hospital patients. You can count them up under diagnostic headings, and group them as cured, relieved, or neither, but you cannot describe or assess the hospital's work as a unified accomplishment. In both cases it is the individual item that matters: the total is only arithmetic. By contrast, in the Army campaign, or the business enterprise, it is the total integrated result that matters; the items that built it up have little meaning by themselves. No statement can be made about a hospital or a university to match the Army's report that it has won a campaign or conquered a country, or a company chairman's statement that a certain profit has been made.

I have dwelt upon these characteristics because they are the logical ground for the dispersion of power and responsibility in the management structure of a university or a hospital. They are also the basis of the university claim for academic freedom and the doctor's claim for clinical freedom. To sustain these freedoms power must be entrusted to the academics or the doctors, both collectively and separately in their departments or firms. In neither institution, of course, can it be absolute power. Both university and hospital serve society. Society pays for them. Society's local agent is the lay governing body, which communicates its needs, administers its resources, and along with Government sets the financial framework within which academics or doctors manage their own activities.

Having drawn the parallel I may now be justified in looking for comparisons whereby hospitals may learn something from universities. I do not, of course, rule out the possibility of universities learning from hospitals. But one thing at a time. I have the impression that medical advisory committees do not count for so much in the medical management and especially in the medical policy making of hospitals as do senates in the corresponding activities of universities, though I know they count for a great deal. It might be of advantage if they comprised all the consultant staff of a hospital or a hospital group, if they remodelled their infra-structure of committees, and if they met less frequently but not under pressure of time, thoroughly serviced by a full secretariat. I am told that too often their concern is with the immediate affairs of one hospital or another, too seldom with the strategy of the group, the development of hospital services in the area ten or twenty years ahead. They differ, of course, from senates in that most of their members are less than full-time, and they do not have a permanent chairman. Nevertheless, some reorganization may be desirable that would favour a greater responsibility, both for the co-ordination of the day-to-day medical activities of the

hospital as a whole, and for its relations with the other hospitals in the medical services of an area.

Junior Staff

In another field both hospitals and universities have something to learn from each other's difficulties with so-called junior staff. In universities of the kind I have described, lecturers and senior lecturers play a certain part in academic management through a limited membership of faculty boards and committees and of senate. They sometimes ask for more—that is, for a still greater dispersion of academic power. The advantage would be to give them a greater feeling of involvement; the disadvantage would be a dilution of experience and judgement in the responsible bodies, and an encumbrance of the process of discussion and decision. Their reasonable claims are better met, in my view, by improving the communications throughout the academic staff, so that everyone may at least be aware of the issues of the moment; and by organizing the non-professorial staff sufficiently to enable it to express its collective view to the senate on any matter it wishes, as a matter of right, in advance of senate decisions.

There is greater unrest, today, among hospital junior staffs. Salaries are only a minor part of its cause. Much of it stems from insecurity; in his approach to the haven of consultancy the houseman or registrar scrambles hand-to-mouth through a succession of the best appointments he can get, uncertain over each step, unsure of the final issue, and more afraid to blot his copy-book than even a civil servant. He is worse placed, though not worse paid, than the university lecturer, who after his first two or three years has virtual security. There is force in the plea for a fresh look at the career structure, though the answer is not readily apparent. That, however, must be a national undertaking. Meanwhile, within the hospital, something could be done to give junior staffs both better amenities and a greater involvement in medical management; a junior staff organization, with access of right to the Medical Advisory Committee, and improvement of communications, would be a start.

Another facet of the university problem is the dispersion of power within the staff of a single department. This is usually not formally prescribed. Decision on departmental policy, organization, and distribution of work lies with the head of the department. Heads vary in the extent to which they take their juniors into consultation. There are complaints that some heads are arbitrary and autocratic. I suspect that similar complaints may be heard from junior members of some firms, units, or departments in hospitals. To meet them by the compulsory institution of formal departmental meetings has not, so far as I know, been attempted in universities. They rely on the spread of the tradition that a wise head always consults his staff on questions of departmental policy, while retaining the final responsibility himself. The same would apply in hospitals. While it is true that one administrative structure can usually be better than another in promoting happy working, there are limits beyond which administrative devices cannot create harmony: the atmosphere of a department is created by its head, not by any regulations.

Relations of Hospitals with Government

In England and Wales, hospitals are related to Government, from which virtually all their finance comes, through the boards of governors in the case of teaching hospital groups, and through the 14 regional boards. Regional board hospitals vary greatly in size; they are grouped under management committees, and those in turn under their board. The boards, some of which are very large, are responsible to the Ministry of Health. The Ministry operates a fairly close control over hospital administration and expenditure, considerably more detailed than that hitherto imposed on universities. Ministry circulars shower down. Consultant establishments are tightly regulated. Budgeting is annual. There is nevertheless a considerable invitation to local initiative, both in proposing variations in recurrent expenditure and in recommending the allocation of capital expenditure within global amounts. Yet proposals and recommendations have to have Ministry approval, and the line of communication between a given hospital and the Ministry is a long and bumpy one.

The comparison with universities raises the question of whether in the case of hospitals the central control is too detailed and restrictive. This is not an easy question to answer. It must first be recognized that in the hospital system the size and shape of the task are not in the Government's hands to determine, as is the total size of the university system; the task is to provide hospital treatment for all who need it, and in the places where they live. The distribution of facilities, as well as their adequacy to the need, is therefore a major consideration (which scarcely arises in the case of universities); given the degree of specialization in facilities, which must be matched to the incidence of disease, their distribution must obviously be planned over large areas of population. The regional board is thus a necessary intermediary between the hospital or hospital group and the Ministry. All that can be questioned is whether the largest boards, serving populations of the order of five million people, are unnecessarily large. The boundaries of the existing boards were drawn with an eye to the distribution of population as it was 20 years ago, and with the aim of placing each in geographical relation to a medical school and teaching hospital (in London, to several such). Perhaps those boundaries, and those criteria, are now due for re-examination, with an eye to the distributions both of population and of medical schools as they are likely to be in the more crowded island of 20 years hence.

Central Control

Leaving those considerations aside, however, how does one decide whether, in a well-shaped national hospital system, the central control is too restrictive? Apart from distributional planning, central control serves two purposes: to secure adequate standards of service and to achieve economy of costs. Its methods are to obtain statistical information, and to impose detailed norms and regulations. Its temptation is always to be more thorough. What is quantifiable and what is generally applicable are the determinants. Particular local circumstances, and the quality of individual performance that cannot be measured, are apt to be left out of account. The system inevitably tends to greater uniformity and standardization. Local initiative and experiment become difficult, local knowledge and interest are discounted, and the innovators are discouraged. The optimum point of balance in the distribution of responsibility, between central control and local freedom, is important but difficult to fix. It is inherent in the nature of a Government department to lean towards too much central control; the more it exercises the better it feels it is doing its job of maintaining standards and economizing.

Universities claim that because much of their work is individual, original, and innovating they must have a substantial measure of local freedom. This is ensured by such devices as the five-year block grant, flexibility in the operation of salary scales, and some discretion in the deployment of their establishment. Universities resist an increase of central control, and for an incentive to economy rely on their own interest in getting the best value out of fixed allocations of money. It may be that the point of balance in hospital administration has to lie nearer the side of central control than in the case of universities, but it should be critically watched. It should be remembered that the more central control is exercised the less will able people be attracted to appointments in the regional hospitals

and boards ; that applies to paid administrators and voluntary members, and may even come to affect medical staff. There is here a vicious circle.

Special Case of Teaching Hospitals

Much of what I have been saying applies to teaching hospitals as to regional board hospitals, but they have further problems of their own. The teaching hospital has two functions, of equal importance, and interlocked throughout all its activities. One is service to patients, which it shares with all other hospitals. The other is teaching and research, which it shares with universities and their medical schools. The special, double nature of teaching hospitals was recognized in the administrative structural device of separate boards of governors containing university representatives. These boards, however, come under the Minister of Health, and are financed by him ; he has, it is true, a statutory duty to provide facilities for teaching and research, but the extent of these is not defined.

It is logical that teaching hospitals should come under the Ministry in respect of their service functions, for they are a substantial element in the service provision of a region, which must be rationally planned. Their dissociation from regional boards, however, has in some cases impeded regional planning. Teaching and research call for both a wide range of patients and a degree of selection of patients, in relation to age and nature of disease. In securing these for the teaching hospital, conflict of interest can arise between it and the regional board. The Ministry is not well placed to resolve this, since its primary responsibility is service. But equally, the suggestion sometimes mooted, that teaching hospitals should be placed under regional boards but with university representation on their management committees, offers no better solution. An average regional board, from its constitution and from the nature of its main task, cannot be expected to give due weight to the special requirements of a teaching hospital for teaching and research. Teaching, let it constantly be emphasized, is not just taking students round the wards. In a teaching hospital there must be superior standards of investigation and treatment of patients, a sustained critical intellectual atmosphere, and a community of people in wards, outpatient departments, and laboratories into whose intense co-operative activity the students are assimilated. There must be research that plays a leading part in the advance of medicine. All this costs money, and, equally important, it takes years of devotion on the part of specially gifted people to build it up. Teaching hospitals need the same sort of informed support from Government, in respect of teaching and research, that is necessary for universities.

Another suggestion is that they should become university hospitals, detached from the Health Service, financed and controlled by universities. I can see little practical advantage in that. They would suffer in isolation, and fail in their proper contribution to the Health Service as a whole ; and, in any case, if the university system tried to swallow them they would become impacted in its gullet.

The logical administrative answer is one that will bring two kinds of knowledge, experience, and imagination to bear on the teaching hospitals, in order to sustain their double function ; and with those two kinds of influence two sources of finance. I think the key to it is the recommendation of Sir George Pickering's Committee for the Nottingham teaching hospital. Let boards of governors be reconstituted each to contain equal representation from the regional board and the university, with a due proportion of members of consultant staff. Let them draw finance from the Ministry, through the regional board, to meet their service commitments, at a rate that will maintain standards as good as any in the region. Let them draw further finance, through the university from the University Grants Committee, at a rate that will sustain teaching, research, and the advance of medicine at the highest level the Government judges the country can afford. In advising the Government on this, with one eye on the long-term development of medicine and another on the international scene, the University Grants Committee and its subcommittee of practising leaders in medical education are much better placed than the medical civil servants of the hospitals side of the Ministry of Health. Administrative structures too often proliferate by fission or parthenogenesis ; to give a teaching hospital a pair of equal parents would rejuvenate it with hybrid vigour.

Conclusion

Administration has much less of science in it than has medicine. Its methods grow empirically rather than by design based on knowledge. Changes in administration are best made step by step and gradually, at least in a thing like the Health Service, where we had our revolution less than 20 years ago. Nevertheless some principles can be discerned, by which the likely merit of change can be judged. One of these is that the nature of the task and of the people engaged in it should determine the administrative structure. Where the task is an aggregate of largely independent individual efforts, requiring professional training and imagination, there should be decentralization of control. Within an institution, that means committee management and the dispersion of power, self-government within a framework of limiting conditions. Between an institution and the ultimate authority of Government, it means effective two-way communication, genuine consultation, and working together by agreement. I have attempted to apply this principle to some of the immediate problems of universities and hospitals, and in doing so I have sought to engage your sympathetic interest in administration as a humble but necessary servant of medicine in transition.