# MEDICAL PRACTICE

## Contemporary Themes

## Medical manpower: I-how much can ancillaries take over?

On 28-29 November the BMJ held a three-part conference in Canterbury to consider medical manpower—how much ancillary workers could do; the special problems of women in medicine; and questions of distribution and migration of doctors and future policy. By invitation a few participants prepared working papers which were circulated beforehand; the one used for the first session is printed below, together with an edited version of the discussion. Each session was chaired by a member of the BMJ editorial staff, the first being taken by Dr Stephen Lock, Editor.

Reports of the other two sessions on the special problems of women, and on distribution, migration, and future policies, will appear in subsequent issues of the BMJ.

## Working paper

### The tale of two committees or the perils of prediction

RUDOLF KLEIN

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Where Willink went wrong

In any discussion of the perils of long-term planning, the name of the ill-fated Willink Committee is bound to crop up sooner or later. Its 1957 report,<sup>1</sup> recommending a cut in the number of medical students, has become part of the folklore of predictions about the future which didn't come off. In the museum of planning mistakes, it is exhibited alongside the 1964 National Plan and various (invariably soon to be changed) pronouncements about Britain's fuel needs. Its conclusion that an annual output of about 1600 medical practitioners would be sufficient for Britain's needs by the early 'seventies was disproved by events and reversed by the 1968 report of the Royal Commission on Medical Education,<sup>2</sup> which proposed a figure of roughly double this size—a target which, however, has still to be achieved.<sup>3</sup>

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But, in discussing future manpower needs, it is more helpful to try to understand why Willink went wrong than to poke fun at its recommendations (which is to assume that the 1968 report was right: an assumption which, surely, should not be made automatically). The Willink report, in fact, correctly identified the factors that have to be taken into account when planning for the future. Firstly, there is population size-and linked with that, population structure (in particular the numbers of elderly and other heavy consumers of medical care). Secondly, there is economic growth-and political decisions about the allocation of resources to the health service. Thirdly, and linked to resource allocation, are policy decisions about what are the desirable patterns of medical care and the consequent doctor/population ratios. Fourthly, there are assumptions about the likely sources of wastage (death, retirement, emigration) and recruitment (women returning to work, immigration).

Willink failed to anticipate future developments for a variety of reasons. The report cautiously refused to make any assumptions about the likely increase in the proportion of the country's resources likely to be devoted to the NHS, on the grounds that this was unpredictable. It was also very conservative in its assumptions about the need for extra doctors in order to improve the quality of the Service and to meet the requirements of a growing population: it suggested a target of only 280 extra doctors a year after 1965. Above all, it assumed that the "steady rise in the number of doctors and the expansion of the medical training facilities overseas will reduce the opportunities for employment for doctors from Great Britain."

#### **Todd's conclusions**

The Todd Commission made very different assumptions and came to very different conclusions. But it is worth examining the way it came to its conclusions in some detail, for it is by no means self-evident that its proposals may not seem as wrong by 1978 as Willink appeared 10 years after the publication of its report. In the first place, Todd differed from Willink in assuming -on the basis of a sophisticated statistical analysis of international trends-that the doctor/population ratio would improve with increasing economic growth. It therefore concluded that more doctors would be needed simply to meet the demands of a richer society: a piece of economic determinism-based on the extrapolation of past trends-which currently looks less convincing than at the time it was made. At the same time, the 1968 report estimated that the outward emigration of British doctors would be something like 430 a year: so reversing the Willink assumptions-although, as it turned out, the net loss of British doctors was only 280 a year on an average between 1967-8 and 1973-4. Given, in addition, changes in the estimates about Britain's future total population (estimates which are currently, in turn, being revised downward) and it is not difficult to see why Willink and Todd came to such very different conclusions.

In retrospect, though, it is the shared weaknesses of the two reports which are most striking. Both assume, in effect, that the future will be much like the past—that is, they do not expect any fundamental change in the organisation and delivery of medical care. The idea that soaring costs (or declining economic growth) might force a fundamental reappraisal of existing policies does not occur in either report. Following on from this conservative approach, both reports make specific recommendations reflecting this central assumption, rather than examining the range of policy possibilities—and the consequently different manpower requirements—that might follow various assumptions about the likely course of future events.

#### Striking omissions

There is another striking omission in both the reports. Both are exclusively concerned with medical manpower planning, as distinct from health service manpower planning (a weakness which perhaps ought to be blamed on the government policy makers at the centre, who provided the terms of reference, rather than on the committees of inquiry themselves). That is, they discuss the need for more doctors as though they had never heard of the substitution of labour, the possibility, in other words, either of substituting other forms of labour—for example, a nurse-for doctors or of making doctors more productive by providing them with more backup help (secretaries, technicians, etc). Even now, although this issue has attracted great attention and a vast literature in the United States,<sup>4</sup> there has been hardly any discussion of it in Britain; far less has there been any attempt to follow the example of the US in training physicianassistants to take over some of the work done by doctors. In practice, it may well be that some British nurses already perform the same role as American physician-assistants; if so, there ought surely to be a drive to encourage and systematise this trend.

For it ought to be self-evident that it is impossible to discuss the *size* of the NHS's labour force without also taking into account its *composition*. As the table shows (using extremely crude figures, which do not allow for the changing mix within each occupational category), there were in fact some changes in the relative numbers of different skills in the hospital service between 1949 and 1971: although the expansion in doctor and nursing numbers has remained in step, there has—predictably —been a much larger increase in the number of professional and technical workers. Should these trends be extrapolated into the future? Would it make sense to assume that, as medicine becomes more technical, so more of the work could be taken over by nonmedical scientists? After all, it cannot be taken as axiomatic that once particular tasks have been performed by doctors, they should become the monopoly of the medical profession for all time. These are the sorts of issues which require discussion, surely, in any debate about future medical manpower requirements.

Changes in hospital manpower 1949-71 (England and Wales)\*

	1949	1971	o increase
Medical staff	11 735	23 806	+103
Nursing staff	137 636	288 000	+109
Professional and technical	13 940	36 817	+164
Ancillary staff	157 112	239 770	+89
Administrative and clerical staff	23 797	47 690	+100

\*Source: Health and Personal Social Services Statistics for England, (DHSS table 3.2. London, HMSO, 1974.)

#### Total manpower and distribution

There is another issue which is massively neglected in both reports. This is the question of the relation between total medical manpower resources and their distribution. As everyone knows, the deficit of doctors is not equally spread throughout the country. But, what no one knows, is whether it is necessary to have a *national* surplus (or, more bluntly, a reservoir of unemployed doctors) in order to persuade practitioners to seek jobs in the socially less attractive parts of the country. To what extent is there a trade-off between spending money on training more doctors and increasing incentives to move into the underdoctored areas?

It is easy enough to make fun of both the reports on medical manpower. It is quite another matter to try to improve them. And this, perhaps, is the real moral to be drawn from an analysis of these two attempts at prediction: that *any* prediction is bound to be wrong—and that the best any planning exercise can do is to try to identify a range of possible future outcomes and to point to the indicators that can be used to measure progress and changes in the situation. But if that is indeed accepted as the conclusion to be drawn, then another implication follows: that the emphasis in planning the future of medical manpower training ought to be on flexibility and on the ability of the training institutions to adapt quickly to changes in the external situation.

Perhaps we ought to be less anxious about trying to look into the crystal ball and more concerned, in the NHS and every other sphere of activity, about improving our capacity to run crash training programmes if our guesses prove too low—for example, turning redundant social workers into needed psychiatric consultants; or how to run early retirement programmes and retreading courses—for example, turning redundant consultants into social workers—if our guesses turn out too high.

#### References

- <sup>1</sup> Report of the Committee to consider the future number of medical practitioners and the appropriate intake of medical students, Ministry of Health, London, HMSO, 1957.
- <sup>2</sup> Royal Commission on Medical Education, *Report*, Cmnd 3569. London, HMSO, 1968.
- <sup>3</sup> Ellis, J, Proceedings of the Royal Society of Medicine, 1975, 68, 495.
- <sup>4</sup> Hadley, J, in Health Manpower and Productivity, ed J Rafferty. Lexington, Mass, 1974.

#### Discussion

MR RUDOLPH KLEIN(1): The figures in my working paper are extraordinarily crude but illustrate the very considerable change in the relation between the different forms of labour input into the Health Service over the last 20 years. So far as I know, at no stage have these reflected a policy decision by the DHSS, which has said: "Obviously we've got to expand the professional and technical side of the NHS at the expense of the other branches." There's been implicit planning, and I'm arguing that this should be made much more explicit: to look at the best practices in terms of manpower.

So far, manpower utilisation has been the weak side of research. We know, for example, that maternity beds have a low occupancy—but none of the statistics can tell us whether there are beds standing empty (which doesn't matter very much) or whether these also reflect doctors and nurses doing nothing (which does matter). Again, we don't know to what extent nurses are already substituting for doctors. If one looks at international manpower statistics then it looks—in a very rough and ready way—as though countries who have a lot of doctors per head of population have few nurses and vice versa. For example, Italy has a very high number of doctors and very few nurses.

MR J R BUTLER(2): Mr Klein's figures showing very roughly that countries with a high provision of doctors tend to have a low provision of nurses, and vice versa, are further reflected in consultation rates. In one cross-national study,<sup>1</sup> we found that the consultation rates for doctors and nurses separately were rather different in each country, but if you added them together the combined rates were almost identical. So from the patient's point of view it may be more important that he sees somebody than that he necessarily sees a doctor.

#### Ancillaries in general practice

CHAIRMAN: This raises the whole question of how far the doctor's work can be done by others. Dr Weston Smith has a lot of experience of this.

DR J WESTON SMITH(3): We have a practice of four doctors (all with hospital privileges at the local community hospital); two attached district nurses (who do the traditional skills of caring for the patients in their homes); and two attached health visitors. Eight years ago we were confronted by the problem of too many patients to cope with. So we appointed two nurses of our own to use for some first contacts with patients.

We have found that the service is not a substitute for the doctor: the total work load has actually increased. But patients now often choose to see the nurse first rather than the doctor, or to ask her to visit.

MR KLEIN: So the nurses have generated extra work for themselves, and not relieved the doctors at all?

DR WESTON SMITH: We doctors aren't working any less hard, but our work is more meaningful and enjoyable. We don't have to see "trivia"—children with chickenpox or mumps, for example.

DR A J SMITH(4): You've got some data on consultation rates? DR WESTON SMITH: Yes; our consultation rate is the same as the rest of England—about five items of service per patient a year—but this is made up of four given by the doctor and one by the nurse. We now tend to spend longer with each patient we see, so that our work hasn't got any less.

DR BEULAH BEWLEY(5): And patient satisfaction?

DR WESTON SMITH: We went into this in great detail, because it was clearly the vital question. We had a  $70^{\circ}_{0}$  response rate from a questionnaire sent to all patients who had been visited by the nurse<sup>2</sup> of which  $99^{\circ}_{0}$  were favourable. Another survey<sup>3</sup> showed that patients accepted the idea of the nurse doing technical procedures, but they preferred the doctor to undertake the decision-making.

MR BUTLER: Does the nurse generate new work?

DR WESTON SMITH: Yes, particularly investigation, such as blood counts, electrocardiography, and audiometry.

MR KLEIN: If one of your partners was now to resign, could you contemplate replacing him by a nurse?

DR WESTON SMITH: No: we're working to full capacity, doing work that doctors should undertake. Even so, during holiday periods, it's much easier to do an absent doctor's work than an absent nurse's work.

DR GORDON MACPHERSON(6): Why?

DR WESTON SMITH: Because they undertake so much of the primary screening, including the patients who arrive without an appointment. Patients are content to be advised by a *nurse* that it's not necessary for them to see a doctor, but not to get this advice from a receptionist. Similarly, on the telephone, patients will give a clinical history to the nurse, but not to a receptionist, and will say why they want a visit from the doctor.

CHAIRMAN: Would you like to extend this, by adding another nurse, or another type of ancillary—such as a social worker?

DR WESTON SMITH: We've got the right mix: you don't want too large a team.

DR R A A R LAWRENCE(7): I believe that this sort of feldscher system will be accepted in some geographical areas (such as urban ones), but not in others.

DR WESTON SMITH: Our practice area is semirural, with most patients in social classes 2 and 3, owing to a large overspill from Birmingham. Our patients accept the principle of using nurses in this way, and we haven't had a single complaint in the last three years.

DR LAWRENCE: Some of the nurses used in practices will not do certain procedures because they consider that these are outside the regulations laid down by the Royal College of Nursing. I think the legal complications of work done by nurses must also be considered.

DR WESTON SMITH: This is a sore point. Despite all our representations, the nursing authorities have always maintained that a nurse's work should be supervised by another nurse, and that a doctor isn't competent to judge how well a nurse is doing her job.

#### Legal aspects

DR PETER CLARK(8): What about the doctor's overriding legal responsibility for the care of his patient?

DR WESTON SMITH: The Medical Defence Union's attitude was that if you had personally trained and supervised any ancillary, and satisfied yourself that she was competent, then legally this delegation was all right. But everything our nurses do, every visit they make, is written down in a report book . . .

DR LAWRENCE: ... which is read by the doctors?

DR WESTON SMITH: Yes; but not if the patient asks specifically to see the nurse rather than the doctor; then she manages the case.

MR PATRICK MCNALLY(9): Dr Weston Smith, do you have nurses on call?

DR WESTON SMITH: No; at present it would be far too stressing for them—but the principle will come.

DR ANNE SAVAGE(10): When I was working in Africa recently<sup>4</sup> we couldn't persuade patients to see a nurse as the person of first contact: on the other hand, of course, very few patients presented with a trivial complaint. Also when we tried to start such a scheme, to cut down a load which at times was tremendous, the nurses themselves were uneasy and inefficient: they tended to overprescribe, to give a sick baby a double dose of two antibiotics.

CHAIRMAN: But surely the physician's assistant is an accepted figure in many overseas countries?

DR SAVAGE: That's true, and it certainly applies to Africa, but usually he works in isolation in a rural area. I think that it's because a doctor was there that our patients always wanted to see one. However, we did find that such auxilliaries were valuable in the public health field—teaching hygiene and nutrition and running immunisation programmes. They also did all the midwifery and technical procedures such as suturing and putting up drips; illiterate technicians have been trained to do skilled tasks such as lymph-node puncture.

CHAIRMAN: Dr Oakley, in the developed world do we use nurse-technicians enough in general medical fields—for example, in cardiology?

DR CELIA OAKLEY(11): In cardiology we don't use nurses nearly as much as we should. A good nursing team in coronary care is infinitely better than any of the doctors at any level: the SHO hasn't learnt enough; the registrars have to rotate among specialties to fulfil training requirements; and the consultant has long ago become useless at practical procedures. The thoracic centre at Rotterdam is a very good example of where nurses are highly skilled and are allowed a tremendous amount of initiative. They set up all the monitoring catheters in a patients who's had an infarction, often even before he's been seen by a doctor. In diabetic and hypertension clinics, too, there's no need why the experienced nurse shouldn't do the follow-ups and prescribing.

#### Two streams of nurses

MR MCNALLY: Dr Weston Smith, are your practice nurses SRNs or SENs?

dr weston smith: SRNs.

MR MCNALLY: I ask this because I can see two streams of nurses developing: a practical one, doing the traditional duties (the SEN), whose status is being demoted; and the SRN, who is getting much less training in general nursing technique than five years ago. If this is true, you are going to need SENs to be practice nurses in future.

MR F S A DORAN(12): I would agree and personally find the SENs much more helpful than the other type.

DR S BHATE(13): The difficulty has partly arisen because of the new Salmon structure. In the old days a young doctor could learn a lot about medicine from an experienced ward sister. Today they're all Salmon grades 8 and 9 in some remote office doing virtually no medical work at all. I should have thought that this sort of promotion will tempt them more than the idea of working in a general practice.

DR WESTON SMITH: We couldn't employ SENs for the type of work our practice nurses do because they haven't got the theoretical background.

DR KLEIN: But is a new sort of nurse emerging, because she has to cope with a new set of highly technical procedures—haemodialysis and intensive care, for example?

CHAIRMAN: And in psychiatry, as Eysenck<sup>5</sup> has recently suggested.

DR TOM ARIE(14): The issues of using nurse auxilliaries in psychiatry—as nurse therapists,<sup>6</sup> for example—have much in common with the issues which arise in other medical disciplines.

DR BHATE: To come back to substituting doctors by ancillaries, society decides if it wants a high quality of medical care—which can also be obtained, say, from nurse therapists. In that case it will be prepared to pay them as much as doctors. I would much sooner have a good social worker or nursing sister than a jnuior doctor who's taken up psychiatry because he failed the FRCS or is a doctor who can't get any other type of job. Instead of importing immigrant doctors, why not spend some money training carefully chosen nurses as therapists.

DR ARIE: Nobody has yet asked Dr Weston Smith whether his nurses like the work. We've become used to studying "need" on the part of the users of a service, and the efficiency of the service in meeting the need, but we need equally to look at the "staff factor"—at what satisfactions (or dissatisfactions) staff get from doing the work, and from doing it in different ways.

What nurses like doing most—working with old people, administration, or complex technical procedures—may turn out to be quite different from what outsiders think they like, or ought to like; and different nurses are likely to prefer different things. We've been studying the work of nurses in our wards at Goodmayes Hospital, and I think there are three considerations: the structure in which the work takes place; the particular skills of different types of staff; and the part played by individual attitudes and personalities. The last of these may sometimes be the most important determinant of the nature and scope of what a nurse can do (and in particular how far she can do tasks traditionally performed by doctors).

There is a sense in which the doctor may be the most available person in the hospital set-up-for it is quite often the doctor that substitutes for other people, rather than vice versa. Most other professions work fixed hours; until recently doctors never thought of such a thing. Time and again the only person available for a particular task-which may require no highpowered medical skills, but which may, for example, need to be done at some awkward hour, or somewhere outside the hospital -is the consultant. The nurse who knows all about the patient has gone off duty; the registrar does not expect to be around after 5.00 pm; post Seebohn the social worker has often vanished, and might take weeks to be found. The simplest thing then is for the consultant to get on and deal with the matter-perhaps arrange the wheelchair, or interview the neighbours. Of course we may be about to lose this because alas consultants are likely to become as rigid as anyone else.

#### No hierarchy

DR WESTON SMITH: We've abandoned any rigid hierarchical structure: we're all on Christian name terms during group meetings, and the result has been that we can interchange our roles quite easily.

CHAIRMAN: But if a child has chickenpox at 7 pm, the doctor has to go and see her?

DR WESTON SMITH: Yes.

DR BHATE: One of the questions we haven't asked yet is whether British doctors work hard enough. Many of my friends, of all nationalities, who've been to Canada have come back to Britain, and said: "If you want an easy life, stay in Britain. But if you want to earn a lot of money in Canada, you will have to work very hard." After five years in this country, I've come to believe that I work very hard: am I under an illusion, which is reinforced by one's colleagues, who work similarly "hard"? I've worked in a number of hospitals, and at least half of the consultants haven't worked longer than a 40-hour week—and I and other assistants did much of their work.

DR ARIE: Have you been working in teaching hospitals?

DR BHATE: Yes, mostly, but I didn't notice much difference between the amount of clinical work done at teaching and peripheral hospitals.

DR ARIE: I've worked for years in both, and the disparities are enormous: in a non-teaching hospital you quickly find you have never worked so hard in your life, for it's much harder to get good quality, or perhaps any, junior staff.

DR SMITH: But, looking at hard work, I think that many people working long hours are doing jobs that could easily be done by somebody with lesser skills. Surely almost all professional men working full time at really challenging work can't do more than 40 hours a week?

DR CLARK: We also have to remember that the real control of some hospital ancillary departments has passed to the technologists. Some technologists—for example, the senior chief laboratory technicians—are now cast in a managerial role. Many hospital biochemistry departments are in the charge of professional biochemists without medical qualifications. At the same time the younger patholgoist is doing very little routine bench work while his technicians are becoming more and more involved with elaborate new equipment and techniques. I am personally not worried by this change of status nor by the fact that much of the non-medical work of the pathologist can be done, perhaps better, by a suitable technologist. What's more, their salaries are rapidly catching up with those paid to doctors.

CHAIRMAN: So this could lead to a surplus of pathologists with no work to do, which brings us to Rudolf Klein's point about the need for flexibility and retraining. Could you become a psychiatrist or a community physician, Dr Clark? DR CLARK: Perhaps any decent doctor can become a community physician! Seriously, though, it's not impossible to change one's specialty provided the impetus is there. With the recent unpleasantness in the hospital service, I really thought of going into general practice. I still think even in my early 40s that it would be possible to retrain for this. Unfortunately, the increasing rigidity of medical postgraduate training is putting doctors into tighter and tighter compartments.

DR SMITH: But if I'm going to have a particular operation I'd sooner have it done by a surgeon who did 200 a year rather than 20.

MR KLEIN: When does he start getting inefficient through sheer boredom?

DR SAVAGE: I've made these changes in my professional life. I was in general practice and then my surgeon husband (who's due to retire before long) and I wondered about working abroad. So I left practice and got a part-time supernumerary hospital job in anaesthetics. The first three months were very difficult; but I then got some skills and began to enjoy my work; and I'm now going to go on and learn a little paediatric anaesthesia.

To change you have to be motivated and to realise that you are going to go back to a very junior status.

#### Why do we want ancillaries anyway?

MR DORAN: Is the aim of substituting ancillaries for doctors to save money or manpower? If the former I think it won't work: once the unions realise that their members are doing doctors' work they'll demand the same rates of pay.

MR KLEIN: I agree, and in fact this was the case put by the nurses' representatives to the Halsbury commission on nurses' pay:<sup>7</sup> the RCN argued that since many nurses were doing a doctor's job they should get higher pay—and in fact they got  $30^{\circ}_{.0}$  above the inflation rate.

DR BEWLEY: When it comes to the crunch the doctor has to take the final decision and shoulder the legal responsibility. If this is to continue, there is a case for a higher salary for doctors. If health policy is to switch to a greater emphasis on prevention rather than cure other workers will have a more important role as well as doctors.

DR OAKLEY: The whole idea of superspecialist nurses or technologists, with a very narrow range of know-how but great expertise, is a valuable one. Such people are not doctor substitutes since they make executive decisions only within an agreed restricted area, and I cannot agree with Mr Klein. The weightier responsibility which would devolve on fewer doctors from the supervision of increased numbers of specialised auxiliaries should properly lead to better financial compensations for those doctors. In no way could a trained auxiliary doing skilled tasks of limited scope be considered to be doing "doctors' work."

MR MCNALLY: The SRNs are now being trained to this level for instance, they are invaluable in the haemodialysis unit. Market forces are bound to reduce the number of doctors.

DR SMITH: The use of doctor substitutes is one of the few realistic ways of ending the imbalance between the number of junior doctors and the number of available consultant posts. Then you can have realistic training programmes and end the country's reliance on immigrant doctors.

DR OAKLEY: There's a purpose-trained technologist for a whole range of jobs in the USA: in coronary artery surgery there, for example, there are technologists who have been trained to excise the long saphenous vein for grafting by the surgeon. I can foresee the day when we shall have young people with good eyesight actually doing the anastomoses under the surgeon's direction. So the doctor would be primarily concerned with training technologists' and supervising their work.

DR ARIE: Doctors are more expensive to train than ancillaries even if both are paid the same salaries. But in many cases there is no substitute for doctors and they do have a tremendous flexibility—in a real emergency, for example, any of us here could do a caesarean section.

Half of what doctors do is for socially assigned reasons: they

act as legitimisers of the sick role. To be sick is because the doctor has said you are. Patients throw this back at us constantly: they say, "but I'm under the doctor." Can society allow somebody else to say this instead? If it will allow the nurse or the social worker to do this, then they often can substitute for the doctor. But only a doctor could remove a glioma.

DR WESTON SMITH: Ten years ago all our local GPs got fed up with signing private sick notes, and so stopped this. The biggest outcry came from the employers, but within three months our society had stopped demanding these notes.

MR MCNALLY: Because of the fall in the birthrate we have a steadily decreasing pool of manpower for a society which is making ever-increasing demands for skilled people. Increasingly medicine is going to have to compete for a diminishing labour pool.

#### **Problems of inflexibility**

MR BUTLER: This emphasises the problem of planning for a profession whose training takes so long. It resembles one of those super-tankers which takes six miles to stop or to change direction. You have to be thinking a long way ahead. So increasing our flexibility is vital, and identifying lesser-trained people who can substitute for some of the doctor's traditional tasks is essential. It may not always be cheaper, but it can increase flexibility.

DR ARIE: There's also the problem of distribution within the medical profession. Take the case of geriatrics: nearly half of all hospital beds are occupied by old people, who also have the highest consultation rates in general practice; and yet few doctors choose to work chiefly with the elderly. Those who do discover that this can be as fruitful—in intellectual and, indeed, any other professional terms—as any other medical work. In part it's a matter of the attitudes which are fostered during the undergraduate period, and there is often not a place in the "shop window" of medical education for good work with the elderly. The creation of more chairs of geriatrics will not in itself necessarily change this, but the establishment of strong university departments will at least guraantee a place in that "shop window," enabling students to consider the medical care of the elderly among their career options.

DR SMITH: I question all this. To take anaesthetics, this is practised at a very high level in all our medical schools, and yet it's still a shortage specialty . . .

CHAIRMAN: . . . and this year at least two distinguished professors have emigrated.

DR SAVAGE: But as a young doctor I'd be very unhappy at the thought of doing nothing but anaesthetics in the same hospital for the next 40 years. He should have the prospect of changing his job.

CHAIRMAN: Of course, throughout much of Europe and the USA nurses give most of the anaesthetics. So why do we have a specialty of anaesthesia at all?

DR CLARK: The present demand for British anaesthetists in these countries shows that the nurse-anaesthetist isn't entirely satisfactory.

MR DORAN: One solution is to have, say, six nurse-anaesthetists supervised by one consultant anaesthetist.

MR ARIE: I daresay anaesthetics can be as exciting as anything else, but students need someone to whip up their enthusiasm. To go back to geriatrics, less than five years ago in all the medical schools in England and Wales there were only 43 beds for geriatrics.<sup>8</sup> I don't mean beds in an old workhouse up the road that's affiliated to the teaching hospital: I mean beds in the main teaching hospital itself. At that time (1971) one-third of all undergraduate schools had no geriatric unit at all. Things have improved a little, but not all that much. I'm not saying that there aren't very real inherent problems in the care of the elderly, which may make it unattractive to many (every specialty has its particular pros and cons). Looking after demented incontinent old people with multiple infirmities is not necessarily everyone's cup of tea, but this is what the Health Service Ψ

is in large measure about and what society needs from nurses and doctors. And it's a fact that it is not so much that traditional medical education does not inculcate positive attitudes towards the elderly: the attitudes are often there in first-year students, but gradually become eradicated.

#### Shaping attitudes

MR KLEIN: You're a professional attitude shaper—but supposing you're unsuccessful in persuading people to like geriatrics. Unpleasant people like myself might argue that redundant doctors (in pathology and obstetrics, for example) should be forced into practising geriatrics. The universities are faced with exactly the same problem: far too many theologians and sociologists. Why should a large amount of public money go to keep such people in tenure when the need for them has long since passed? Should we guarantee people a *particular* job for life, as distinct from a job? Is a press-ganged geriatrician who loathes his work better than no geriatrician at all?

DR ARIE: We have constantly to make decisions on priorities. Filling some specialties means denuding others. Should we deflect nurses away from cardiology into geriatrics and psychiatry? And even within a specialty priorities are a problem: at Goodmayes Hospital we have a splendid community nursing unit, for which there is no shortage of good applicants. Excellent nurses apply for vacancies in that unit, but they come from our total pool of manpower and every appointment made means one less good nurse in the wards. In a finite system, every decision has consequences for other parts of the system.

#### Appointments of speakers

- (1) Mr Rudolf Klein, MA, senior fellow, Centre for Studies in Social Policy, London
- (2) Mr J R Butler, MA, assistant director, Health Services Research Unit, University of Kent

# Hospital Topics

- (3) Dr J Weston Smith, MB, CHB, general practitioner, Tamworth
- (4) Dr A J Smith, BM, BCH, assistant editor, British Medical Journal
- (5) Dr Beulah Bewley, MD, MSC, senior research fellow, Department of Community Medicine, St Thomas's Hospital Medical School, London
- (6) Dr Gordon Macpherson, MB, BS, assistant editor, British Medical Journal
- (7) Dr R A A R Lawrence, MB, CHB, general practitioner, Derby
- (8) Dr Peter A Clark, MB, MRCP, consultant pathologist, Barnet General Hospital
- (9) Mr P McNally, MB, FRCS, surgical registrar, Royal Infirmary, Glasgow
- (10) Dr Anne Savage, MB, BS, general practitioner, London
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Tuberculosis infection in a paediatric department

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#### Summary

Sputum-positive tuberculosis was diagnosed in a member of the medical staff of a paediatric department. Four children were infected, all suffering from debilitating diseases. Three of them had evidence of pulmonary tuberculosis. Eighty-two infants in the baby care unit during the eight weeks before the diagnosis of the index case were given insurance isoniazid treatment. None developed tuberculosis. Whereas nearly all the non-medical adult contacts were traced and examined, fewer than half the medical contacts attended for chest radiography.

All babies in the pre-allergic phase of contact, and all children whose natural immunity is likely to be depressed, should receive antituberculosis insurance chemotherapy.

#### Introduction

An unrecognised source of tuberculous infection in a paediatric or maternity unit may have serious consequences if any of the infants or children are infected. The morbidity after infection of infants is great<sup>1</sup> and would be even greater in children suffering from other debilitating infections or diseases likely to further depress the immunological response.

It is remarkable that such outbreaks have not been reported more frequently. Only one similar incident has been reported in the past 20 years.<sup>2</sup>

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