Impressions of Medicine in India

Medical education in India—in poor health

TESSA RICHARDS

Talk to any pillar of the medical establishment in Britain and the chances are he will shake his greying head, deplore current standards of medical education, and remind you that in his day students really knew the meaning of hard work and, what is more, were shining examples of Renaissance man; well educated, cultivated, and kind to patients. But talking to similar pillars in the medical schools that I visited in India I was struck by their air of hopeless resignation. It was depression of a different order of magnitude, and their open admission that standards of medical education in India have declined appreciably over the last couple of decades was worrying.

Awareness of the ailing state of medical education is not confined to the inner sanctum of deans' offices. A recent editorial from the *Indian Express* (5 January) stated: "The continued lack of concern about the unhealthy state of medical education in India is shocking. The various authorities who could do something about it are either unwilling or simply powerless to do so . . . there are states, universities and colleges where medical education has been reduced to utter farce. Cases have come to light of deliberate dilution, often abandonment, of the requisite standards of teaching, inadequacy of laboratory and hospital facilities, minimum requirements for admission and gross corruption in examinations and results. . . ." Strong stuff, but even if you allow a margin for journalistic licence and appreciate that standards between states and individual colleges vary appreciably these allegations need to be taken seriously.

One dean I talked to suggested that falling educational standards were primarily due to a change in students' attitude (although he did add that a too rapid increase in their numbers was another factor). He pointed to the students' lack of dedication, their tendency to be diverted by the "distractions" of town, and their unhealthy interest in politics. But if any one explanation for falling standards deserves to be thrown out surely it is that one. Competition for medical seats is intense, entrants to medical school are usually of a high academic standard, and their application (at least with respect to passing exams) is often exemplary. The dean's second explanation holds more water for there is little doubt that the rise in student numbers without a concomitant increase of facilities or staff has been a problem for some state run medical schools. Clinical staff certainly have vast service commitments as many hospitals are overflowing with patients. Nonetheless, a system which allows full time staff (in most state hospitals) to leave the hospital at 1 or 1.30 pm to do private practice does not suggest that teaching students is seen as a priority. That something happens or rather does not happen between the time the student enters and the time he leaves is implicit in the comment that was made to me by a professor at one of the most prestigious medical colleges, "We accept racehorses" he said, "and turn out asses."

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TESSA RICHARDS, MRCP, MRCGP, assistant editor

Medical schools

At the time of independence there were 19 medical schools with an output of 1200 doctors. There are now officially 106 colleges (the actual number is nearer 114) which last year enrolled 13 600 students. (Britain has 30 colleges with an intake of a little over 4000). Most of the medical colleges are run by the state governments or municipal corporations and are affiliated to major universities. These colleges may lack the hallowed (some might say overhallowed) reputation of a St Thomas's or Guy's, but many are proud of their traditions—something of which I was gently reminded when I visited Madras Medical College. Not only was it celebrating its 150th anniversary, but it had also had the foresight, in 1875, to open its doors to Mary Sherleif (one of Britain's first lady doctors), who had been refused admission by the more reactionary heads of medical schools in England.

State colleges are usually large, admitting 150-200 students a year. Others, for example, the All India Institute of Medical Science, Benharis Hindu University, and Pondicherry, which are funded by central government are open to students from all over India. This means that competition is very stiff, enabling them to admit "the cream" for their coveted 50-60 seats. Competition is also high for the similarly small numbers of seats in the three Christian medical colleges at Vellore, Ludiana, and St John's Bangalore. These schools are funded privately but are affiliated to state universities and thus do not have the same degree of autonomy as the centrally administered colleges.

By far the most controversial of the minority groups of medical colleges are the capitation colleges. Entry to these colleges (of which there are, apparently, nine) is competitive, with the proviso that parents can afford the entrance fee. This may be 250 000 rupees (about £17 500) with an additional 150 000 r under the counter—no mean sum in a country where the annual income of a full time senior doctor (working solely in state government service) may be less than £3000. Entry is not restricted to students in India, and in the most established of these colleges, Kasturba College in the state of Karnataka, nearly two thirds of the students come from overseas including the United States. This college was set up in 1953 and its degrees have long been recognised by the Indian Medical Council. The council's stance on the other eight seems to be ambivalent, but I was told that it has responded to pressure and recognised four of them. Concern about the standards of education in these schools is widespread, and especially about the three new ones in Maharashta state which amidst much opposition (including a two month doctors' strike) have only recently opened their doors to students.

Selection for medical school

The basic entry requirement for medicine is an aggregate of 50% in the predegree 10+2 examination (12th standard) in biology, physics, and chemistry, and students must be 17 by the 31st of the first December of the academic year. Some medical schools, mostly those run privately or by central government, hold their own entrance exams, as do the Christian colleges, which in addition have

certain religious requirements to fulfil. In Vellore, for example, 45 of the 60 seats are reserved for students who have been sponsored by different churches in India. These students must undertake to return to their own state and work in a mission hospital for two years before continuing with their chosen career.

Mention of reservation of seats pinpoints one fundamental difference between the selection of students in India and that of those in Britain: the reservation of seats—and relaxation of entry requirements—for students belonging to scheduled castes, tribes, or backward communities. In most medical schools the reservation for members of scheduled castes or tribes is 18%. The reservation for students from the so called "educationally backward communities" seems to vary from 20-40% in state run colleges. It is much less or even non-existent in the independent colleges. Further reservations are usually made for BSc candidates, with a few extra ones for children of political prisoners, widows, refugees, the disabled—the list is long.

This system of special reservation results in a considerable limitation of the number of seats available for "open merit" candidates. On paper open merit candidates should achieve an aggregate of 50% in their predegree exam. By contrast, in the words of the 1983 prospectus of Trivandrum Medical School a "relaxation of 10% is allowed for candidates belonging to scheduled castes/tribes and 5% to candidates belonging to socially and educationally backward communities." In practice these entry requirements may be even slacker since disproportionate numbers of able students compete for the open and reserved seats. The reality is probably pictured by estimated figures that I was quoted in Madras; in 1983 members of scheduled castes/tribes averaged 45% in their predegree exams, members of the backward communities 84%, and open merit candidates 92%.

Coming from a culture which teaches (if it does not practise) the philosophy that all men are created equal, I found I needed to make a conceptual leap to come to terms with the gross inequalities of Indian society, and to appreciate the still deep rooted divisions of caste and the unenviable position of the casteless (formerly the untouchables) or Harijans. Nor was it easy to appreciate what constitutes a "backward community". There is no quick definition as there are 200 or so subgroups included in this category and these vary from state to state.

The idea behind the policy of reservation—which was introduced 37 years ago and applies to all places in higher education and to jobs in government service—is to reverse the wrongs of hundreds of years by active legislation to ensure that those who traditionally have been socially, economically, and educationally deprived get a fair opportunity. Some doctors I spoke to believed this form of positive discrimination to be right and proper, and pointed out that the poor performance of some members of scheduled castes/tribes and backward communities in entry exams might be more a function of indifferent schooling than ability since some caught up and were indistinguishable from the open merit students well before they qualified. Nevertheless, the majority opinion seemed to be that not more than 50% of medical school seats should be subject to any form of special reservation—and while assistance may be fair at the undergraduate level continued reservations after graduation may not be a good thing. Indeed, several senior staff I talked to complained bitterly about reverse discrimination against merit candidates, especially in the higher echelons of the state hospital services.

Students who apply for a reserved seat must (to quote this time from the St John's Medical College, Bangalore) "furnish evidence of their entitlement to be classified in this way." This entails producing a social status certificate signed by the appropriate civil authority. Officially I was reassured that this system is foolproof, but informally several people mentioned that a little influence (or money) may secure a seat for the high caste boy or girl who fails to make the grade in open competition. Furthermore some ostensibly privileged people may be eligible to claim a reserved seat because historically their families belong to a scheduled caste. Other anomalies abound, for example, in some states a Christian might be regarded as a member of a backward community.

FIG 1—The traditional architectural elegance of Banaras Hindu University Hospital.

The need for change

The need to change the undergraduate curriculum has long been recognised in Indian medical circles. To abandon the old British model with its ivory tower approach (now out of vogue even here) in favour of less autocratic methods of teaching and a more practically orientated course. To give the students a better appreciation of the prevalent diseases and health care problems in India and give them a realistic idea of how these may best be managed with limited resources. In some states and independent colleges the medical schools have achieved a shift of emphasis, although some would argue not enough, while I was told that others have "failed completely", largely because of resistance from the established departments, who may not only be resistant to demands from the traditionally weak departments of community medicine but also to the recommendations of the Indian Medical Council, the body that is responsible for the undergraduate curriculum.

The undergraduate curriculum

Medical school training is similar to the British system: one and a half years' preclinical and three years' clinical teaching, after which the final MB BS is awarded. Registration is obtained on completion of one year's compulsory rotating internship. The course is very orientated towards examinations, and many students learn by rote, committing endless pages of text to memory. Most students use a mixture of standard Western texts and various Indian textbooks. At the preclinical level the Indian texts are not widely used and I was told that they tend to be of the dense lecture notes expanded for the exam variety. Gray's remains the anatomy bible, although I was amused to hear from the professor of anatomy at the Christian Medical College at Vellore (arguably one of the top 10 medical schools) that she had banned Gray's from her department

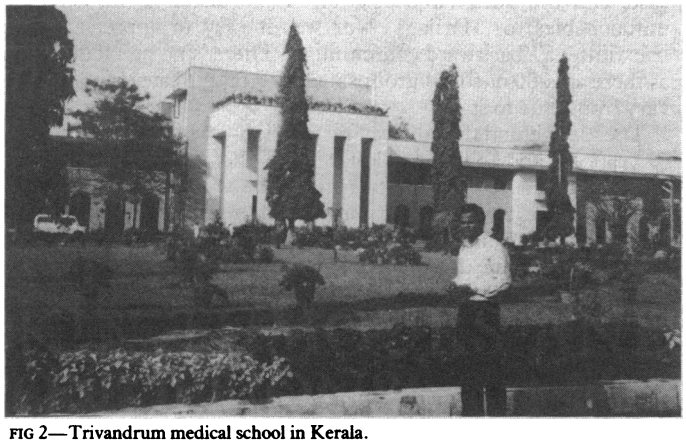

FIG 2—Trivandrum medical school in Kerala.

and advocates Last or Grant. She went on to express her frustration at not being allowed to make any changes in the course, which is laid down by Madras University, for she would like to introduce more functionally orientated teaching. The professor of physiology expressed similar discontent for the systems orientated approach that he had to follow, which left the student, in his opinion, with a poor grasp of the subject as a whole. He was even more frank about the total lack of freedom to make changes. "It is a disincentive to having original innovative ideas" he said. "Change can come only from the centre and those who have the authority to implement it fail to do so." This comment was one which I was to hear repeatedly at every medical school I visited. Sadly no one feels in a position to challenge the higher authorities. Such action is deemed impossible, and my innocent suggestions were met with knowing looks. My political naivety knew no bounds. No one wants to lose their job.

After passing the 1st MB (several attempts are permitted), students embark on the clinical course. This is punctuated by the 2nd MB BS, which is usually held in two parts: part I, which may be taken after one year, includes pharmacology with or without general microbiology and pathology and allied subjects, and part II, taken after 18 months, covers more detailed systemic pathology, microbiology, virology, etc. As in the preclinical course, a good deal of detailed knowledge is required, especially in pharmacology, and students must pass a rigorous practical exam. The final MB BS, which is also in two parts, covers the major clinical specialties, forensic medicine, and toxicology, and social and preventive medicine. How relevant the clinical teaching is to the major health care problems and common diseases in India seems questionable. Many senior staff I talked to said that students do not learn enough about the common infectious diseases or problems of child and maternal health. One went so far as to say that few would know how to recognise common disorders such as leprosy and tuberculosis, although they might blind anyone with facts about systemic lupus. But who could blame them? This must to a certain extent reflect the teaching that they receive and the sort of questions that come up in the exams.

In many medical schools 2nd and 3rd MB may be taken a seemingly limitless number of times—there are apocryphal tales of 26 attempts at finals. Nevertheless, weaker candidates are almost invariably eased through and (I was told) sooner rather than later. In some states job applications forms have space for the candidate to admit how many attempts he or she had had at each exam—a sobering thought for those of us who must admit to the occasional failure.

Language problems

Teaching is in English in all medical schools in India—as are most of the textbooks. This may be a problem at first for although some students come from elitist feepaying English medium schools many more have attended state schools, where lessons are conducted in the local language and English is taught as a foreign language. Bright students soon get over this problem, but I was interested to hear an English student on her elective describe two sorts of students: those who were bright, keen, and fluent in English and those who were very retiring and rarely said anything at all. Students who go to medical schools outside their own states may have additional difficulties because they do not speak the same language as their patients.

Central government initiatives to promote regional languages have not been an unqualified success. In Gujerat for example, amidst a fair amount of opposition from the medical establishment, an attempt was made to conduct the medical course in Gujerati. It failed not only because of the establishment's heart was not in it but also because of the sheer logistics and expense of changing the system and translating textbooks.

Feedback from the students

"Some of the junior medical students call me Sir" said a jaunty final year student, who in one sentence illustrated the rank consciousness which pervades not just the medical system but the whole of Indian society. More correctly this is a respect for age, which usually correlates with rank since promotion, certainly with respect to ascent up the medical ladder, is based on seniority rather than merit. Students tend to live at home for the duration of their undergraduate studies and often many years beyond. This is said however, not to create friction for having been brought up to equate age with wisdom they seldom question their parents' (or their teachers') authority. Their horizons tend to be limited, for few have had the opportunity or perhaps the inclination to experience life outside their home environment (travel abroad is prohibitively expensive for all but the very rich). This makes them seem years younger than their counterparts in Britain.

Students seem very aware of the competition for entry into limited postgraduate places, and since all seek such places (selection usually takes exam results into consideration) they study incredibly hard, which often results in clinical experience taking a back seat. Book work also tends to take precedence over extracurricular activities and fraternisation between male and female students is usually minimal. Classes are often literally divided down the middle and it would be a brave girl who risked her reputation to sit in the boys' side of the lecture theatre. Girls protect their reputations and concentrate on their studies happy to wait for the suitor of their parents' choice—as, indeed do most boys, for few young people find fault with the system of arranged marriages. It is a deep rooted cultural tradition and it works very well.

Obviously there are plenty of exceptions to this simplistic generalisation, and many of these are found in the independent medical schools. These harbour some of the brightest students from all over India, most of whom are living away from home. To me they seemed appreciably more articulate and confident and were less slow to put forward their views. Several I spoke to were far from sanguine about their course, and complaints included too many didactic lectures, too much detail in the preclinical and paraclinical subjects, too few small group tutorials, and too few small group clinical teaching sessions. One student, this time from a state run college, complained bitterly that the subjects were taught in an illogical order and said that many of his tutorials and practical sessions were a farce. "The teacher in charge may be so junior that he can't tell you what you are supposed to be looking at, I stare down the microscope and leave one hour later no better off." It is also, I gathered, not uncommon for lecturers to come unprepared or, worse still, fail to turn up at all.

Money problems

There is no such thing as a student grant in India. Students are supported by their parents (unless they win a scholarship) and are very aware of the obligations which this support creates. Nevertheless parents seem to shoulder this financial burden willingly—it is seen as a family duty, and consideration of the family's welfare tends

to come first in every Indian's life. Parents also know that in their turn the offspring will take great care of them in later life, as they did with their own parents. Capitation colleges apart, course and examination fees are not excessive and are waived for students from scheduled castes and tribes. Those few students who live in student hostels must pay for their board and lodging, and since such accommodation is limited most have to share a bedroom with one or two others.

Several of the medical schools I visited, regularly take elective students from Australia, Britain, and other European countries but there is no provision of an elective period in the Indian medical curriculum. I was given the impression that students and staff would welcome one. Nonetheless, the reality is that most parents cannot begin to afford to send their child to the West, and those few who could afford it have the problem of restricted foreign exchange. Thus any plans to introduce a reciprocal scheme for student electives would depend on the countries concerned offering some form of financial help.

Conclusion

There is widespread concern that standards of medical education in India are declining and that the undergraduate curriculum is inappropriate. And although India is, no doubt, still producing good doctors standards vary to an alarming extent. That most young doctors—irrespective of their ability—emerge with a jaundiced view of the integrity of the medical system is probably no bad thing. It prepares them for the future; they have to be politically aware. Being bright and highly motivated is simply not enough.

Needs and Opportunities in Rehabilitation

Occupational rehabilitation and return to work: 1—General services

DAPHNE GLOAG

"It is not well enough understood that disability does not mean inability." This statement appears in one firm's policy for employing disabled people[1]; but many disabled people have dead end jobs below their potential[2]—or none. Yet disabled workers have above average attendance and safety records,[3] and more knowledge of particular disabilities[4] among employers would help to dispel misunderstandings.

Occupational rehabilitation is concerned, firstly, with helping people after illness (or in the course of it) and after injury to get back to their former jobs, or to more suitable jobs with their former employers, and, secondly, with preparing people for work and helping them find jobs or training courses if they are unemployed. Many different individuals, services, and organisations, statutory and voluntary, deal with these aspects, and the manager of one employment rehabilitation centre (ERC) was concerned that they do not use each other enough and may be unaware of each other's roles. Some coordinator or coordinating body, he suggested, is called for.

Policies and practices

A new code of good practice urges employers to develop written policies on the recruitment and career development of disabled people and on help for employees who develop disabilities, distinguishing those whose disability does not affect their working capacity, those who are not limited in their type of work once they have the right aids and other practical help, and those whose options are limited but who are as effective as anyone else in the right job.[5] The legal "quota" of at least 3% of registered disabled people, if available, in a workforce of over 20[6] is seldom met,[1] and often not feasible since so many do not register; but the new code puts more emphasis on wider opportunities for disabled people whether or not they are registered. A recent TUC document gives advice and information about the recruitment, retention, training, and promotion of disabled people.[7]

The Manpower Services Commission (MSC) makes grants for special equipment and for adapting premises to permit a disabled person to be recruited or kept on (leaflet available). Besides aids in general production REMAP can provide one off aids (19 January, p 220). It is enormously important that health professionals and social workers as well as employers should know what aids, grants, and other benefits are available.[8] In addition, some jobs may be restructured in some way to bring them within the scope of a disabled person. Good will is not short among employers and the practices of some who have positive policies regarding disabled people are worth studying.[1] "Opportunities for the Disabled" is an organisation that will inform employers of possible disabled job applicants each month.[5] Local Committees for the Employment of Disabled People are useful in representing many different interests.

Some people with both longstanding and recent disabilities, including temporary ones, are handicapped by psychological and social problems, usually linked to their disabilities or to long periods off work or unemployed. In today's harsh economic climate the problems of these most disadvantaged people may seem intractable, but employment rehabilitation services, special work schemes, and sheltered work attempt to help them. The various facilities and services[9] (see box) may at least help them to the starting line, as an MSC official put it, in the competition for jobs; but often better use could be made of the facilities, and more could be done informally, outside the services.

Role of medical services

"Medical services," said the manager of an employment rehabilitation centre, "are out of touch with the world of work." I have heard the same complaint put very strongly by disablement resettlement officers (DROs) and by a local Committee for the Employment of Disabled People: doctors in general are not

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DAPHNE GLOAG, MA, staff editor