MEDICAL PRACTICE

Impressions of Medicine in India

Provision of medical care: varied and variable

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"Don't take anyone's view for granted; no one person can give you any idea of what's happening in India." This timely warning from an Indian acquaintance was probably the best advice I could have had before setting off late last year on a project which had the transatlantic smack of "doing" medicine in India in three and a half weeks. Admittedly, my brief—medical education—was a little less ambitious; but I was, and remain, acutely aware that in a country two thirds the size of Europe and almost as diverse it was unrealistic to aspire to a comprehensive survey. So what follows, in this and four subsequent articles, is more by way of an impression (based on visiting several different hospitals, health centres, and medical schools) of the provision of health services, and a more detailed look at the pattern, orientation, and opportunities for undergraduate and postgraduate training.

During my visit I also tried to answer a question posed to the *BMJ* last year by a visiting professor from Delhi. "Why is it," he said, "that Indian doctors still go abroad in such large numbers?" (Doubtless those who seek to lower the portcullis on foreign graduates coming to Britain often ask themselves the same question.) At the time I thought that his reply—"I don't think that it is just a matter of money or a quest for knowledge, it's a deep dissatisfaction with the medical system"—was the sort of comment that might be heard in any hospital mess if a senior colleague was in misanthropic mood, but now I am not so sure. My brief visit to India opened my eyes to the wealth of problems with which Indian doctors must contend—problems which, in my view dwarf those that cause so much gloom and despondency here.

First impressions

India has survived a succession of invasions by foreign powers who came, conquered, and left their mark on a culture whose

ancient roots spread to accommodate and absorb them all. The imprint of Britain, the most recent and deeply entrenched of the lot, remains much in evidence. Few spheres of life escaped the imperial hand: it is there in the common language and fine system of railways, on the cricket field, and in the peeling plaster of old colonial houses, and behind the façades vast administrative networks and a stultifying bureaucracy are recognisably British. So too is much of the structure of the health services; while both the pattern and orientation of the medical training are models of the old British system.

Bombay on Christmas eve was a mixture of the predictable—people, dust, noise, and confusion—and the barely imagined poverty and overcrowding in sprawling urban slums. Roadside hoardings displayed a curious mixture of film stars and idealised romance and the harsher profiles of politicians, hearts set on votes—votes that were being cast by patient queues of people who were to give the Congress party its huge mandate. It was a stark reminder that 1984 was a troubled year for India, and, to quote the *India Express* (30 December), it was probably "the most fateful and traumatic twelvemonth in the country's history after Independence."

A few statistics

Every seventh person in the world is Indian; a recent Unicef report sets the population at a staggering 685 million or more.¹ Of these, 64% are illiterate and 48% live below the poverty line. These harsh statistics make the obvious point that India is divided into two—the haves and the have nots—and despite Gandhi's doctrines the social hierarchy is such that most of the haves belong to the high castes and the have nots tend to be low caste or casteless (Harijans).

Over three quarters of the population live in rural areas, where poverty is the rule and access to Western medicine is limited. Though the tourist may delight in the mediaeval pace of life, many struggle to make a living off the land. Diseases such as tuberculosis, leprosy, polio, and nutritional blindness are common, and each year five million children die from diarrhoea, prematurity,

birth injuries, tetanus, measles, pneumonia, and typhoid. Illness in a poor family may precipitate a financial crisis which puts the family in debt for decades.

Such burdens are often met with remarkable stoicism and a resignation that is alien to the West. Those who do receive medical treatment—effective or not—are usually enormously grateful. Religious belief may be a source of strength for some, for Hinduism, which is practised by about 80% of the population, teaches that people go through a series of rebirths (or reincarnations) which eventually lead to spiritual salvation. People accept their Karma, essentially a law of cause and effect which suggests that suffering and the performance of good actions in this life hold promise for reincarnation on a higher spiritual level.

Life expectancy in India is low, 52.6 years for men and even less (51.55) for women. This reflects the burden of child bearing and the relatively low social status of women. At first it came as a surprise to me to find myself, a visitor to India, seated at table with the men of the household and waited on by a smiling, but unobtrusive hostess who would not dream of eating anything until I had had my fill. But translated into village life this may mean that if food is scarce the woman goes short. In the rural areas the lower status of women is also reflected in their position as cheap agricultural labour. Toiling away in the fields at backbreaking jobs is women's work (not least because it would probably cost more to employ a man) and a glance at any building site or road works will show a strong representation of women incongruously elegant in their colourful saris.

Interpreting health statistics is not easy. For example, the infant mortality rate is 127 per 1000 but this hides a vast difference between urban and rural areas (74 v 137), and within the comparatively good figures in the urban areas lie poor indices for those living in the urban slums. Furthermore, there is a disparity between the figures from the 31 states and union territories. To take two extremes infant mortality is 42 per 1000 in Kerala and 177 per 1000 in Uttar Pradesh.²

Health resources

Public health expenditure per head has increased from 9.44 rupees (£=14 rupees) in 1974-5 to 17.29 rupees in 1978-9. This figure represents about 1.9% of total government expenditure and, although the per capita allocation for 1980-5 has been increased, the percentage expenditure will be much the same (corresponding figures for Britain are £303 per head with 12.4% of total public expenditure allocated to the National Health Service). Increasing expenditure on health has been matched by a growth in medical staff and 1981 figures show a total of 661 868 registered medical practitioners, although of these only about two fifths are allopathic (conventionally trained Western style doctors) with qualifications that are recognised by the Indian Medical Council. The remaining three fifths are registered practitioners of Indian systems of medicine (predominantly Ayurveda) and homoeopathic doctors. Besides these there are many other "healers," who may or may not choose to call themselves doctors, many practising skills that have been handed down from one generation to another.

Thus much of the medical care in India is provided by practitioners of indigenous systems of medicine, and it was remarkable—at least it was to me—to find that most of the allopathic doctors I talked to showed little or no interest in traditional systems of practice. One obvious criticism was that the medicines that are used have not been subjected to any form of clinical trial and some practitioners have a tendency to add western medicine (especially steroids and antibiotics) to their remedies. Several doctors I spoke to said that most Ayurvedic doctors are frustrated allopaths (having failed to get good enough marks to get into conventional medical school). This seemed a partisan view but in whatever light traditional Indian medicine and its exponents are regarded, it is worth remembering that many people depend on it, especially in the rural areas. Furthermore, the government has expressed a desire to foster indigenous forms of medicine and research into traditional remedies is being encouraged.

FIG 1—The main thrust of primary health care.

Taking medicine to the people

To exclude, for the present, practitioners of Indian systems of medicine and homoeopathy, the doctor patient ratio is about 1:3600 (1980 figures), although this varies from one state to another—the comparable figure in UK is 1:675. Most are private practitioners, who live in the urban areas and concentrate on making a living from the urban rich. Concern about the inappropriate urban orientation of medical care was evident as long ago as 1946, and the Bohre report clearly defined the need to set up a rural health care system to serve the majority of the population.³ To this end a number of primary health centres were established, but the impact of these on the health of the community was disappointing, and in 1980 a report of the Indian Council for Social Science Research together with the Indian Council of Medical Research concluded that the health system was failing because it was overcentralised, overbureaucratised, orientated towards urban areas, and curative rather than preventive and promotive.⁴ Three years later the Indian National Health Policy emphasised the same points and the need to provide "a network of comprehensive primary health care services . . . which takes into account the fact that a large majority of health functions can be effectively handled and resolved by the people themselves, with the organised support of volunteers, auxiliaries, paramedics, and adequately trained multipurpose workers."⁵

The health care infrastructure in the rural areas has now grown considerably and there are many primary health centres (5739 in March 1982) and subcentres (59 511) and a vast army of paramedics including multipurpose workers, village health guides, and traditional birth attendants. Each health centre is staffed by two or three doctors and up to 40 auxiliary workers, and although most have a few beds the centre is orientated towards prevention rather than cure. Unfortunately these services have had a "less than optimal impact on the health status of the people" according to the 1984 Unicef report, and this view was shared by many doctors I talked to. The reasons for this are legion but are said to include poor leadership (by the doctors), poor supervision of paramedical workers, little accountability, and an intermittent supply of medicines, vaccines, etc. There is also an element of consumer resistance due to a mixture of inaccessibility, cost (although the service is ostensibly free), and lack of trust.

Looking at these factors in a little more detail, it is clear that whatever the official party line on health, the hearts and minds of the medical profession have not been won over to the idea that community and preventive medicine should take priority. Most are unashamedly uninterested and hold little respect for their colleagues in community medicine. "I don't expect many

doctors even know what ROME stands for," was one rueful comment.

The ROME programme

ROME stands for reorientation of medical education, a national programme set up in 1979 to try to shift the emphasis of medical training away from ivory tower Western orientated medicine towards community health and preventive services. This was to be achieved by changing the undergraduate curriculum (to include more on community medicine), by arranging weekly visits, and by senior medical staff and students conducting outpatients in an outlying rural health centre and thus fostering "awareness" and promoting communication on both sides. The scheme was funded by a one off grant to each medical school and a generous if ill conceived gift from the British. The latter took the form of massive white Bedford lorries (three for each of the then 106 medical schools) that were beautifully equipped as mobile medical clinics. They were to travel to the rural areas and be the focus of the hospital teams' activities. Unfortunately, they turned out to be a dismal failure: firstly the customs duty was heavy; secondly, they could not negotiate the narrow dirt roads; and, thirdly, those few that did were soon stripped of their possessions for no one had made financial provision for a garage and there was no way to stop pilferage. Finally, they had no air conditioning and were too hot to work in in many areas. These lorries, affectionately referred to as white elephants, are not extinct—many are used for family planning clinics—but they do appear to have been a classic example of inappropriate technology.

"Conceptually ROME was—and is—fine but we need to make it work," said one doctor, and clearly there have been problems. Established medical staff and the students have been against changing the curriculum and making the required visits, and the primary health centre staff have not been enthusiastic either. Among them they have, in many areas, effectively blocked implementation of the scheme and the Indian Medical Council appears to have been unable to persuade recalcitrant medical colleges to toe the line. State government health officials appear to have shown little sign that they are concerned whether ROME works or not. The main problem is that the medical colleges are not an integrated part of the health care services in their area and come under the director of medical education, who may have little if any communication with the director of health services. Finally, I was told that the project was underfunded and there was little prospect of getting more money.

Primary health centres—a consumer's view

The positions of the primary health centres and subcentres are not convenient for many people, and villagers may have to take a day or several days off work to get there. This resultant loss of income (many are paid a daily wage and there is no provision for sick leave) coupled with the cost of travel may make them very reluctant to make the journey, especially if it is only, for example, for a routine antenatal check up. If their health problem requires long term treatment or supervision—for example, for tuberculosis—repeat visits for new supplies of medicine or a check up may be prohibitively costly, and, not surprisingly, many "fail to comply." It is not just a question of ignorance but of ergonomics. Next, primary health centres are manned only intermittently and there seems little concern to provide a 24 hour service. Again, mistrust of the services on offer is widespread, not least because family planning takes priority (it is encouraged by paid incentives and failure of health workers to carry it out is penalised). This usually takes the form of inserting IUCDs or laparoscopic sterilisation. Special days are held when literally hundreds of women are treated at a time. Many women are fearful of the whole concept of family planning and those who have all too often seen young children and babies die do not share the health workers' enthusiasm for limiting their families (child labour is an important source of family income

in some areas) and any approach by such a worker, even ostensibly on another mission, may be regarded with suspicion.

Finally, and perhaps most importantly of all, because these centres are run "from above" the loyalties of the health staff concerned are with the higher authorities and not the villagers, with whom their relationship may be poor. The social divides among doctor, nurse, health worker, and the illiterate villagers all too often result in a failure to communicate effectively. By and large villagers seek help only when really ill and the concept of preventive medicine is alien. They do not question the services on offer at the health centres for they have little idea of what should be provided and no means of knowing if the centre is meeting its objectives.

Medical care in urban areas

Only about 14% of the hospital beds are in the rural sector (although this is where three quarters of the population live) largely in the equivalent of small cottage hospitals and larger 250-500 bedded district hospitals, where the facilities are basic, good nursing and auxiliary back up may be scarce, and specialist care is necessarily limited. In the urban areas, however, patients have ready access to medical treatment in a variety of settings depending on what they can afford. Those who can afford little or nothing go to municipal dispensaries or state government hospitals. These hospitals are spartan and densely overcrowded (a 40 bedded ward may have to house up to 80 patients). Paramedical staff may be in short supply and appropriate equipment, drugs, supplies of blood, x ray and laboratory facilities are limited. Privacy and highly personalised care are impossible and the environment—if the state hospitals I saw were representative—is grim.

Employees of certain state or centrally run organisations and industries have their own hospitals and dispensaries where medical care is provided free of charge. A good example is the railway hospitals, which look after the 1.8 million railway employees and their dependants. (There is, of course, a strict definition of dependant.) I visited one in Calcutta and was impressed by the cleanliness and orderliness and the attempt to soften the environment with a few pictures. Outside the state and centrally run hospitals several hospitals are run on a charitable or voluntary basis, giving free or heavily subsidised care. To take another example from Calcutta, the Ramakrishna Mission has 500 beds. A quarter are free and the rest are pay beds for which charges are a third less than in the private sector. The administration is in the hands of monks, who are also responsible for fund raising. Once again cleanliness and the human touch were in evidence.

The voluntary health sector is active in India, and, as one of my hosts wryly remarked, "there are probably more than 100 Mother Therasas in Calcutta." Some organisations, such as the Spastic

FIG 2—A white elephant complete with garage at the primary health centre.

Society, provide care for the chronically sick (in this case disabled and mentally retarded children), especially those from the urban slum areas. Without them little or nothing would be done to help such patients because most state medical services do not have the facilities for the care these patients need.

Private practice flourishes

"When a new patient comes to my surgery one of the things I always ask him is how much can he afford," said one pragmatic and highly successful private practitioner I met in Bombay. In context this is not an unreasonable question for it is very much a case of you pay your money and take your choice—x ray examination or computed tomogram, public ward or private suite. Precise figures are hard to come by, but about two thirds of the expenditure on health is in the private sector and about two thirds of India's doctors work as private practitioners. Some rent or buy a room in the high street and put up a board outside, others join together to run a small polyclinic. These are a bit like a health centre with or without beds but tend to be staffed by "specialists" for it is essential to be seen as an expert in something.

Private practice may be combined with work in the public sector and indeed it is advantageous to have a foot in both camps because the doctor can get his private patients investigated and treated free of charge in a state run hospital. This obviously militates against the poor, because the patient who can afford to see the doctor privately first tends to get priority over the one who has fought his way (along with up to 150 others that morning) to see the same doctor in the state hospital outpatient department.

If a patient needs admission, out of choice anyone who can afford it will opt for a bed in the private sector. Nursing homes range from basic to luxurious but at least they provide some privacy and personalised care even if the professional care is no better (some would argue occasionally worse) than in state hospitals. Many places allow the relatives to stay and families may sleep in shifts next to the patient serving as both full time nurses and private caterers. This also happens in state hospitals to a greater or lesser extent.

Besides these small clinics there are many modern hospitals, many of which are comparable to their private counterparts in the West. These may offer a wide range of services—for example, in one I visited there were seven different categories of pay bed, ranging from about £1.30 a day for a bed in a general ward, through £25 for a first class air conditioned room with lavatory, to £57 for intensive care. "Doctor visits" and the price of each investigation were scaled up proportionately and then added on to the bill. Surely an accountant's nightmare, but none the less these hospitals seem to be run efficiently and profitably, the facilities are good and equipment up to date. Private hospitals are seen as a good investment and are mushrooming in the big cities.

Concluding on contrasts

"Cold wave hits Delhi, 147 dead," read the local newspaper. It was hard to believe as I sat indoors listening to the whirr of the air conditioning and escaping the noonday sun in the southern state of Kerala. But that is India, a land of immense climatic and geographical contrasts. It is also a land of astonishing cultural, social, and economic contrasts. The last are particularly evident in the urban areas, where comfortable flats in high rise blocks lie close to the homes of thousands who live on pavements or rent an 8 foot room in a slum, which may house so many people that they have to sleep in shifts. And yet people still seek the inhospitable shelter of the city (in Bombay they come, each week, in their hundreds) because the cities are seen to offer more hope of making a living than the barren rural areas. Finding a job of any sort is a priority and not surprisingly ill health may get attention only when it threatens survival or prevents the bread winner from earning.

One or two doctors I spoke to voiced annoyance rather than compassion about the ignorance of the people, and their failure

to distinguish between quacks and real doctors, between appropriate treatment and magical cure all injections. Ignorance and illiteracy are, undeniably, important problems, and undoubtedly improving the overall standard of education and literacy would do much to improve people's awareness of health resources. For example, in Kerala a high level of literacy and female education is linked to improved life expectancy and remarkably low infant and child mortality rates (despite the fact that the state is not rich). But others believe that Kerala's unique health status is due not purely to educational improvements, but also to the social and political developments that were introduced after the state came under communist rule in 1957. These included implementation of policies of land reforms, which gave labourers a much better deal and promoted an awareness of the power of effective organisation of labour forces. This, it is argued, has led to the demand for curative and preventive services that does not exist in many other states.

The implications are clear and best expressed in the words of one doctor I spoke to: "India can solve her own health care problems but she needs to change her orientation, to stop looking to the West. It's the wrong model; the workable one is in China." But there has been a lot more to China's successful medical programme than the barefoot doctor, for it has dictated how and where its doctors would work. India is a long way from accepting such loss of professional freedom—even if it might be in exchange for better health for all.

References

- 1 United Nations Children's Fund. *An analysis of the situation of children in India*. New Delhi: UNICEF, 1984.
- 2 Central Bureau of Health Intelligence. *Health statistics of India*. New Delhi: Ministry of Health and Family Welfare, 1982.
- 3 *Bhore Committee Report of the Health Survey and Development Committee*. Ministry of Information and Broadcasting: New Delhi, 1946.
- 4 Indian Council of Social Science Research and the Indian Council of Medical Research. *Health for all; an alternative strategy*. Pune: Indian Institute of Education, 1981.
- 5 Ministry of Health and Family Welfare. *National Health Policy*. New Delhi: Government of India, 1983.

What is the place of retinoids in the treatment of facial acne in a man in his 60s? He has been treated long term with tetracyclines.

The first question to be asked is whether the patient has been given adequate doses of tetracycline or erythromycin. It is now clear that to control acne well the patient must take 1 g a day of tetracycline or erythromycin, the tablets being taken half an hour before food with a sip of water for a minimum of six months. If this does not work then minocycline 100 mg twice daily will be worth trying. Whichever treatment is used, I assume that topical treatment with benzoyl peroxide or retinoic acid has been used in conjunction with the antibiotics. If the patient has failed to respond to six months of this type of treatment retinoids may be considered. The drug of choice is isotretinoin (Roaccutane), which is available only through hospital practitioners. The drug works by influencing the major aetiological factor concerned with acne, sebum production, which it suppresses by up to 90%. One mg/kg/body-weight for four months is recommended. All patients will get mucocutaneous side effects, which are well controlled with lip salves and emollients. Older subjects have a greater risk of a drug induced arthralgia, but, assuming that the patient has no troublesome "rheumatism," especially in the lower back, then I would not hesitate in giving the patient the drug. His fasting lipid concentrations and liver function tests must be monitored regularly every six weeks since isotretinoin may produce a dose dependent use in lipids and liver enzymes, but usually only up to or just beyond the top limit of normal. These side effects are quickly reversed on stopping the drug. Recent evidence suggests that this treatment is associated with a long term remission—and often a cure.—W J CUNLIFFE, consultant dermatologist, Leeds.

Peck GL, Olsen TG, Yodes SW, *et al*. Prolonged remissions of cystic and conglobate acne with 13-cis-retinoic acid. *N Engl J Med* 1979;300:329-33.

Jones DH, Cunliffe WJ. A follow up of 13-cis-retinoic acid therapy in acne. In: Cunliffe WJ, Millers AJ, eds. *Retinoid therapy*. Lancaster: MTP Press, 1984:241-51.