Where Shall John Go?

Iran

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We had spent four years in the surgical registrar grade, three of them after our fellowships, when we saw two advertisements in the *British Medical Journal*—one for a surgeon, and the other for a “general hospital doctor,” at the Christian Hospital, Ghorveh, Kurdistan, Iran. Having always planned to spend some time in the mission field, we applied. While we were there ART was able to arrange, through personal contacts, a further academic year’s work in the surgery department and hospitals of Pahlavi University, Shiraz: once in Shiraz, JT found a surgeon was required at the Christian Hospital there.

Iran, past and present

To many readers the name of Iran will conjure up images of famous archaeological and ancient historical sites such as Persepolis, its less-familiar neighbour Pasargadae, and perhaps Susa and Ekbatana. These date from the vast Persian empire founded by Cyrus the Great during the sixth century BC. This empire was undoubtedly ahead of its time; but from the end of that empire to the present century, social progress was minimal, so that Iran entered the twentieth century as a primitive society by Western standards, and it was only under the Pahlavi dynasty—the present Shah and his father—that vast strides into the present day were taken, accelerated recently by revenues from oil. Such rapid social change is bound to have a certain mass psychological effect on the people and amid the optimism of educated Iranian youth we thought we detected a measure of insecurity among the less sophisticated older city-dwellers, and among the village peoples.

Iran has been a constitutional monarchy since 1906, and is now governed by a single political party; the Shah, of course, has a firm hand on the helm. In many ways the system seemed suitable for effecting rapid social change in such a vast land inhabited by such a diversity of peoples. In the cities, the Government aims to have the best of everything, including medical care, and for this no expense is spared. The poorer community usually lives in what was the original city but is now “downtown.” The cost of living in cities is high, even by today’s inflated Western standards, but professional salaries and fees are geared to this, and a rental of £500-£1000 monthly for a family house is not so dreadful as it sounds. Iranian furnishings, clothing, and the like are often most attractive in design but may be disappointing in quality or, more particularly, durability. Food, if one cooks Iranian style, using flat-bread, rice, vegetables, pulses, eggs, and

small amounts of meat, with lavish servings of fresh fruit, may be quite cheap; but, like all imported goods, imported foods are very expensive, although a wide range is available. Local Iranian schools, however excellent for Iranian children, are not suitable for Europeans; Tehran and Shiraz have good English-language schools, but elsewhere in the country, unless working with a company which has a private school, one would at present feel compelled to send children to a school in the United Kingdom. This apart, language is not an insurmountable obstacle: English is widely spoken in cities; most doctors understand it; and indeed Pahlavi University, Shiraz, uses English language as the medium of instruction. Patients will speak Farsi, which is an Indo-European language and not too difficult to learn to speak adequately. It is, however, difficult to learn to read and write the Arabic script.

In the country areas the picture is entirely different. Three-quarters of Iran’s population live in small towns and villages; these are usually small communities each centred on a patch of cultivable land on the banks of a river or mountain stream, accessible only by rough dirt road. Living conditions are poor by our standards: in villages small mud-brick or straw and clay houses have small high-set windows and no electricity, telephones, or running water; the family lives, eats, and sleeps in a very small space with virtually no furniture—but often on a floor completely covered by an assortment of fine carpets. Cooking and heating are by Calor-type gas, or paraffin or other petroleum products, which are, of course, relatively cheap; in winter “central heating” is provided by slowly-burning dried cow dung. In summer much living is done out-of-doors in the customary walled courtyard. Villagers may appear poor, but most can afford all essentials and, although they work hard—and the women have a particularly tough life—the diet is usually adequate, and indeed is less refined and probably better balanced than those of Western societies. This and the extended family ensure that, despite the lack of social security, real poverty and malnutrition are rare in the villages. For foreigners in such rural areas, housing of adequate standard and provided with all services may usually be found in a small town, such as Ghorveh (population about 10 000), and will be quite cheap. There are, of course, no English schools, and language in medical care may be more of a problem because of tribal tongues and dialects; local people, however, can always be found to translate these into Farsi.

Travel within Iran, for business or recreation is generally cheap (except for air fares, which are comparable with those of other airlines). Petrol works out at just over 20p a gallon. Railways are few and trains slow, but the bus is the vehicle of public transport, and there is a vast and highly efficient network of long distance coach services. On the whole, main roads are of good quality, but distances are enormous: Shiraz to Isfahan, for example, is 500 km, mainly across arid desert and barren mountains. There are many recreational facilities in the cities and in the resorts on the Caspian Sea; ski-ing is available in the Alborz mountains, and climbing, fishing, and hunting there and in the Zagros range: and, of course, there are the famous

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archaeological and tourist sites, and the magnificent mosques of Isfahan, Qom, Mashad, and the other cities.

Climatic conditions in such a large country must vary, but, with the exception of the Caspian Sea and Gulf coasts (which are very humid and never really cold), the climate may be described as "dry tropical," with very hot dry summers, snowy or wet winters according to altitude and latitude, and particularly pleasant spring and autumn weather. An occasional earth tremor may be an interesting experience.

Medical needs and patients' attitudes

In a country geographically six times the size of the United Kingdom, with varied environmental conditions and a mixture of races, it is not surprising that the pattern of disease should differ from one area to another, and though there have been regional surveys of particular diseases—for example, small intestinal lymphoma—comprehensive national epidemiological statistics do not exist. In many respects the diseases prevalent in Iran will be similar to those at home: peptic ulceration is common (particularly in aspiring businessmen), gallstones are not infrequent, and renal colic is a common cause of hospital admission. On the other hand, the range of diseases will differ in degree as well as in kind, and the foreign doctor can expect to see many patients with advanced rheumatic heart disease and chronic osteomyelitis, several with hydratid disease, and the occasional one with G-6-PD deficiency or small bowel lymphoma.

There are few cases of "tropical" disease, the climate being hot but very dry in summer, but infections (specific and non-specific, including tuberculosis in many forms) and parasitic infestations form a major part of any doctor's work, while the various malignancies contribute a lower proportion, and their distribution differs. Carcinoma of oesophagus and stomach are common, while those of colon are extremely rare. Bronchial carcinoma is on the increase (as is cigarette smoking). Diverticulitis is almost unknown; appendicitis is rare in country areas but becoming more common in cities, where the local people often eat more "Western"-type foods. Although postoperatively patients are exceedingly reluctant to leave their beds, and tend to lie motionless for hours, deep vein thrombosis hardly ever occurs. Obstetric problems are similar to those elsewhere, but, especially in the rural areas, often present in very late stages. Throughout the country psychiatrists are in short supply, and therefore too overworked to be really effective: this is a field where the sudden leap into the twentieth century in a generation or two has produced many problems. Women are the main victims: in the villages, they hear of progress all around them but still find themselves working in the fields as well as in the home, and often start childbearing very young producing up to ten—or even more—children by the time they reach 30. Under such pressure they produce an assortment of fairly gross hysterical manifestations, such as coma, aphasia, or paralysis.

In the university cities the need is for established specialists who are able to train, or pass on some special knowledge to, the Iranian junior hospital doctors and specialists. The money being spent so lavishly is buying skills; it may also buy equipment, but money unfortunately cannot always overcome the problems of getting the equipment there, and the even greater difficulty of servicing it. If one doctor does not produce immediate improvement, the patient will not return (having transferred his allegiance to another), while the patient who thinks he is cured sees no need to return. This makes follow-up and continuity of care difficult, and therapeutic trials or clinical research impossible, and, as elsewhere, has resulted in a tendency among doctors either to use therapeutic sledgehammers to crack clinical nuts, or to indulge in "blanket" prescribing.

In the villages, the problem of delay is not confined to obstetrics: infections and trauma also present at a late stage, and any form of haemorrhage constitutes a crisis because of the

superstitious belief that death is the result of giving blood. Indeed, superstition is responsible for many delays: fear of hospitals, conviction that surgery means death, and the application of traditional tribal remedies as a first line of treatment for many ills all cause the patient to postpone visiting a doctor, or to refuse treatment. Conversely, many villagers have heard of remarkable cures after injections or pills, particularly the former, and may expect some instant-cure magic from the needle itself, or may love to take large numbers of pills. But the face of medicine in Iran is changing rapidly, and will do so more completely as education advances.

Distribution of medical care

The delivery of a high and uniform standard of health care to a country of 628 000 square miles, such as Iran, containing many thousands of villages, is formidable logistically. The difficulties are compounded by a high population growth rate; lack of education (until recently); and the reluctance of doctors to practise in country areas, where they are socially and economically deprived. Although the conservative attitudes, superstitions, and ignorance of basic health care of the elderly villager are further barriers, paradoxically his educated son will expect more from, and make proportionately greater demands on, the health services available.

Two years' military service is compulsory for all doctors after graduating; 18 months of this are spent in the Health Corps, often as the sole doctor in isolated village communities. Although this brings medical care to many who would otherwise have none, it is limited by the number of doctors graduating each year and the scheme is augmented by the creation of many new Red Lion and Sun Clinics (the Iranian equivalent of the Red Cross), some of which are staffed by foreign doctors under government contract.

Training programmes for auxiliary health workers who will return to the rural areas have now been in operation for a few years, notably those organised by the Pahlavi University of Shiraz, but there are insufficient numbers to provide universal primary medical care and basic health instruction.

Most small towns have government hospitals where emergency and some elective surgery is done, although many of those wanting treatment prefer, if possible, to go to one of the cities, where they assume it will be better. This partly explains the large number of doctors in private practice in Tehran, Isfahan, and Shiraz, many of whom elect to work part-time in university, government, or insurance hospitals. An increasing proportion of the population have health insurance cover provided either by the government or the companies for which they work.

There are medical schools in Mashad, Tabriz, Ahwaz, Isfahan, and Tehran, and in Shiraz (where one of us worked for an academic year). The medical college at Pahlavi University is one of several faculties dotted throughout the city. Here, since most of the University Teaching Staff have had their postgraduate training in the USA, the style of medical practice is modelled fairly closely on the American pattern, as are methods of teaching. Previously it was necessary for the newly-qualified graduate to go abroad to gain experience and postgraduate qualifications, but now there is more emphasis on greater self-reliance in training medical graduates, arising from the realisation that a locally-trained doctor may be more competent at treating the diseases of his homeland. Iran previously lost most of its best doctors overseas, but clearly this trend is being reversed—by discouraging emigration and by promising well-paid hospital posts with modern facilities to specialists willing to return.

Options for the young British doctor

A foreign doctor may not run a private practice (and this includes general practice, which in any case exists almost exclusively in country areas) nor may he work in a private

hospital. There are exceptions: many young Pakistani and Filipino doctors have been contracted to run village clinics until enough Iranian doctors or health workers have been trained, but this work is often tedious because of poor facilities, and they are almost intolerably isolated.

Three main openings remain: university or government hospitals, mission hospitals, and private work for a foreign company. About the last, we have no direct information: the companies concerned advertise as necessary in the medical journals, and agree a contract privately with the doctor appointed.

The Iranian government and medical council will grant work permits only to those who have been qualified for at least five years and who hold a specialist qualification (FRCS, MRCP, or similar); this rules out many keen newly qualified doctors who would enjoy travel before entering upon career and family commitments.

For the appropriately qualified young doctor wishing to work in a university post, the main role will be that of a teacher and he must expect to spend many hours each week in wardrounds, seminars, and informal discussions. In a government hospital he would be more committed to the service needs of the community. Specialists such as neurosurgeons, urologists, orthopaedic surgeons, paediatricians, and dermatologists are in greater demand than general surgeons or general physicians. In university he could expect to be placed at associate or assistant professor level depending on experience.

Since the progression of university staff up the twin ladders of status and salary is based partly on number of publications, research is encouraged and indeed there are definite possibilities for clinical research (and financial backing is usually obtainable if it has local relevance). Difficulties exist in the collection and collation of data since patients rarely return for follow-up.

These posts may be advertised in British journals, but it is often possible to obtain a post simply by writing to the head of department of the desired specialty in a university or hospital of the doctor's choice; an even better method is by private introduction. The employing body will generally smooth paths so far as work permits and other documents are concerned, but one must be prepared for considerable delays before everything can be arranged by post from the UK, and it is never advisable to set out from home before all terms, salary, and conditions are fixed *in writing* on a suitable contract. It would also be worth trying very hard to obtain a written promise of university or hospital accommodation; private houses are difficult to rent and are usually very expensive. The employing authority should, at the least, help in the search for a suitable house.

Christian hospitals now blend with the Iranian system of medical care, having many insurance patients, some private patients, and always some facilities for the really poor; most of the staff are local. They also tend to treat many members of the expatriate community of a city, on an outpatient (GP) and inpatient basis. They are not exempt from the qualified-specialist-5-years'-experience rule, and from this arises one of the snags—that, in addition to practising one's specialty, one will have a fair amount of general work. Should Dr John happen, instead, to be Dr Jane, she will be expected, whatever her background, to practise a good deal of gynaecology. The specialist is not protected from public choice as in the universities. The other drawbacks are frequent lack of junior staff, and the fact that a minimum commitment of two years is generally expected. But there are advantages: one is working with a medical nucleus of one's compatriots and Iranian Christians; and good free housing is generally available within the hospital compound. One may be employed either (a) as a missionary (which means missionary training), with a small basic salary, but with items such as school fees and family fares, both for school and for home leaves, paid; or (b) as a sort of freelance specialist, in which case (in the larger hospitals especially) the salary is more than adequate. As a freelance doctor one would still be expected to be a committed Christian, although not of any particular denomination. Despite the frustrations mentioned above, this can be a very happy job for the right person; and it is worth noting that

the Christian Hospital in Shiraz will now pay the fare and salary for a single person for a three-month trial and "orientation" period, after which, according to reactions on both sides, it will pay either his fare home or his family's fares and expenses to join him. It may well be possible to come to some similar arrangement with the Isfahan Christian Hospital; Ghorveh might find it difficult, being smaller and in a country area, and therefore less secure financially.

For information about missionary or Christian Hospital work, write to the Church Missionary Society, 157 Waterloo Road, London SE1 or directly to the medical superintendent of any of the three surviving Christian Hospitals in Iran: Ghorveh, Kurdistan; PO Box 12, Isfahan; or PO Box 10, Shiraz.

Conclusion

Working in Iran may be a fascinating and at times rewarding experience, despite the frustrations. One must remember that this is a Moslem society, with a people whose ways of thinking owe nothing to Western traditions of logic, so that such qualities as friendliness, politeness, and hospitality (which abound) are more important than those of efficiency and reliability. The personal approach is almost always preferable to, and more effective than, the most detailed official letter. Clinical experience will be far broader, and responsibility greater, than could be obtained at home; and the experience will be enriching, even if not necessarily of direct relevance to a future specialist career in UK.

We have not regretted the two-and-a-half years spent in Iran, and not all the interest has been medical; we made many friends, both Iranian and expatriate, and felt privileged to share in the life of a nation whose background is totally different from our own, at an historic stage in its development. However, John may well return with relief, and greater appreciation (as we did), to the comprehensiveness of the National Health Service and the efficiency with which, despite recent upheavals, it continues to serve the community; and he may find himself more aware of the traditional and widespread British quality of *caring*.

Some of the less severely handicapped thalidomide victims may one day consider marriage. What is the risk that the deformities will be transmitted to the children?

None so far as we know.

Is there any convincing evidence from controlled clinical trials that anti-influenza vaccination is effective in preventing influenza? How justifiable is it in these difficult times to press a DMT to allocate money for the mass inoculation of nurses and other health workers each year to insure against sickness absence in a possible influenza epidemic?

Immunisation against influenza has certainly conferred a degree of protection in the past, at least 60%.¹ The answer to the second part of the question is more difficult, since it depends not only on the predicted degree of protection but also on a prediction of the severity and extent of the next winter epidemic and on economic considerations within a health district. Perhaps the most important point is that decisions about influenza immunisation policy should be made for each winter independently, based on up-to-date information from world surveillance of influenza. It seems unlikely that influenza will be severe this winter, even if there is an extensive epidemic. The currently available inactivated vaccine contains A/New Jersey/1976 as well as A/Victoria/1975 and a current B strain, and therefore is likely to provide at least 60% protection and probably more. Until a major antigenic change occurs and spreads, the only clear priority is to immunise those at special risk of severe influenza because of chronic illness.

¹ Pereira, M S, *et al*, *British Medical Journal*, 1972, 4, 701.