We believe, then, that there are grounds for concern about the function of the testes. Cancer of the testis is clearly associated with undescended testis and dysgenetic testis, but we do not know its cause. Nor do we know that of undescended testis, and the causes of poor semen quality are in most cases obscure.

What possible explanations have been put forward? Many years ago oestrogens were suggested as playing a part in cancer of the testis,[14] and epidemiological data show that administration of stilboestrol during pregnancy may lead to an increase in cancer of the testis and other abnormalities, including undescended testis and a low sperm count. Clearly only a few men were exposed to stilboestrol in utero, and neither it nor other drugs can be blamed for the general trends, but many manmade toxins in the environment may act as oestrogens,[15 16] and these pose a theoretical risk to the male fetus if ingested by the mother before or during pregnancy.

This "oestrogen hypothesis,"[17] which has received wide coverage in the media, is just that—a hypothesis—but progress in science must be based on refutable ideas. Much more basic and clinical research work is needed. When research in male reproduction is compared with that in many other branches of medicine our understanding of disorders of the testis is seen to be extremely limited.[12] Much more work is needed on the environmental toxins that are potentially oestrogenic.[18] How are they absorbed and metabolised? Are they bioaccumulative? Several chemicals, including isomers of dicophane (DDT), polychlorinated biphenyl compounds, and certain surfactants, have been shown to be oestrogenic, and the list of such chemicals is still growing. We still do not know what concentrations and mixtures of these chemicals might be hazardous to male reproductive function.

In the meantime we should, perhaps, try to obtain better prospective data on the function and health of the testes of men in the general population.

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European directive on training for general practice

Doctors, patients, or profession—someone is going to lose out

Widespread anxiety exists about fully implementing the European Union directive on specific training for general practice. Training for general practice has been mandatory in Britain since 1981, with the legislation embodied in the NHS Vocational Training Regulations.[1] These regulations apply to the training of principals in general practice in the NHS, but other categories of doctors, such as locums and assistants, have not needed to comply.

In 1986 the European Community introduced legislation to make specific training for general practice mandatory in all member states.[2] This directive was consolidated with previous directives in 1993 to become Directive 93/16/EEC[3]; member states must fully implement it by 1 January 1995. The directive provides for the mutual recognition of diplomas and periods of training and defines the minimum acceptable length of specific training. It also requires that each member state ensures that "the exercise of general practice under national Social Security schemes" from next January should be conditional on doctors having undergone a period of specific training or on having been exempted from that training by the issue of an acquired right.

The problem now facing Britain is what to do about the many doctors who have been working as locums or assistants within the NHS but have never been principals and have not previously been required to complete training under the vocational training regulations. Member states are empowered to grant acquired rights to practise to whomsoever they choose, but once granted that acquired right will permit a doctor to practise as a general practitioner within the social security system in any member state within the European Union. The purpose of granting acquired rights is to enable doctors who have been practising since before training was introduced to continue to practise. A similar situation existed in 1981 when categories of doctors working as NHS principals were granted permanent exemption from the vocational training regulations when they became fully operational.

Several important questions arise. Firstly, locums and assistants who have not been vocationally trained have been allowed to practise in Britain. Should this continue or should such doctors have to undergo a period of training at this stage in their careers; if so, how is this to be arranged and financed? Secondly, is it acceptable for patients to be

treated by doctors who are incompletely trained and who are not taking part in a training programme? Thirdly, is it good for medicine as a whole, and for general practice in particular, for the specialty of general practice to be regarded as a place where untrained doctors can safely work. And lastly, what message is being given to doctors who have completed their training or are in the process of doing so by the granting to untrained doctors of acquired rights to practise as a general practitioner in any member state of the European Union, particularly when such training has been mandatory in Britain since 1981?

Of several possible solutions, any one is unlikely to satisfy all parties. One option is that all doctors working in general practice—whether as locums, assistants, or principals—should have been fully trained and hold a Joint Committee on Postgraduate Training for General Practice Certificate to that effect. Although relatively simple administratively, it would remove out of hours cover for large numbers of patients at a stroke and mean that general practitioners in isolated communities could not take holidays. It would also put a strain on the training system by increasing demands for further training.

The second option is for any doctor currently working in any capacity within general practice in the NHS be granted an acquired right to practice. Again this would be relatively simple to implement but would give a very negative message to those currently in training and those who are striving to improve the standards of general practice. The third option is some sort of compromise to allow those currently practising without training to continue to do so in a limited capacity and to offer them retraining, thereby making them eligible for a certificate from the Joint Committee on Postgraduate Training for General Practice. Although the most logical solution, this would be the most difficult to implement within the legislative framework, and any extra training would obviously have resource implications.

The responsibility to decide which doctors will be granted acquired rights rests with the governments of member states. It is difficult to see how the problem can be resolved without difficulties for some of the interested groups. But the decision must be taken soon; the relevant legislation has been in existence since 1986, and the problems have been foreseen by many groups within the profession for a long time.

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Should doctors charge doctors for medical services?

Private health insurance is changing the ground rules

Traditionally, doctors seeing other doctors, their wives, or their dependent children as private patients have charged no fee. Charging between professional colleagues has been regarded as undignified, unpleasant, and unseemly.

In the days before comprehensive insurance, charges to patients were an appreciable burden, which doctors were reluctant to inflict on their colleagues. The lack of a charge cements relationships and shows that the medical profession, unlike some other professions, refuses to bow to outside pressure to make it more financially aware and money driven. There is, however, increasing pressure to change this practice—not from doctors providing services, who enjoy the warm professional feeling derived from not charging colleagues, but from the doctor-patients themselves.

This change has probably occurred because more doctors and their families are insured to cover the cost of private treatment. The policies negotiated by the BMA with the major medical insurers for doctors are at special rates. One type of policy assumes that no fee will be charged by the providing doctor and is designed to cover only hospital fees. The other type, designed to cover both medical and hospital fees, is more expensive but still cheaper than similar policies sold to the public. This more comprehensive policy is increasingly popular. Altogether some 20 000 medical practitioners in Britain, a fifth of the profession, now have private medical insurance.[1]

The intensity of reluctance to charge may vary according to whether the doctor-patient is an immediate colleague working in the same area or a more distant colleague who is working, or has worked, so far away that there is never likely to be, or to have been, any sharing of responsibility for patients. Indeed, the doctor-patient may be from abroad. Another factor is that the charge for a routine check up, for example, may not be refundable through an insurance policy, although many doctors express the view that they are too embarrassed to return for such check ups if there is no charge at all. The insurance companies would prefer doctors not to charge each other, and their favourable premiums for doctors are based on the assumption that they do not. At one time they would help to finance a gift for the providing doctor, but this is no longer allowed by the income tax inspectors.

Perhaps a way forward is for doctors to continue to avoid charging other doctors and their immediate families unless specifically instructed to do so by the patient. If such an instruction is given, then for routine check ups not covered by medical insurance a small fee could be charged to cover administrative and practice expenses. For items covered by insurance policies the standard insurance company charge could be made. If this becomes standard practice, insurance companies might have to adjust their premiums accordingly and treat doctor-patients in the same way as members of the general public.

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