This month • ethics • student doctors • the team • tuberculosis • HIV infection • ultrasound • cervical screening • alcohol

Whose body is it anyway?

ORGAN transplantation is an established feature of modern medical care and until someone stops paying for the cyclosporin, we all have a responsibility to do something about the gap between the supply of donor material and the thousands of potential recipients. Hospital staff, who more often than not fail to ask the right questions at the right time, are at the centre of this but general practitioners can help by raising the general level of donor awareness. More donor cards may not be the answer, though, for according to one transplant surgeon the absence of this elusive bit of plastic at the critical time merely acts as a let out for reticent intensive therapy unit staff.

These thoughts were prompted by a provocative article from a senior pathologist in Saskatchewen who argues powerfully that the rights of the potential organ recipient should outweigh those of the other parties concerned, including the deceased and their next of kin. He sees our physical selves as belonging to and inevitably returning to the 'planetary biomass'; against this background there can be no concept of ownership of a physical body and in terms of this biological ethic, organ transplantation is an incident of neutral value.

Emson advocates moving towards mandatory availability of organs suitable for transplantation, without request, and believes that our readiness to accept such ideas is constantly underestimated. He would like to see a funded policy of education to expedite acceptance of such views, emphasizing for example that the procedures necessary for organ transplantation neither disfigure a body for contemporary funeral rites nor significantly delay its release for them. Whether or not our patients are ready for this, it is certainly a message which bears repetition within our profession.

Source: Emson HE. The ethics of human cadaver transplantation: a biologist's viewpoint. *J Med Ethics* 1987; **13**: 124-126.

Changes in student doctors' views

WITH general practice on the undergraduate syllabus of every medical school in the UK, are today's graduates any different from those of a previous generation? This study attempts to answer that question obliquely by comparing the attitudes of students at two mid-western medical schools, interviewing them annually from before entry to the end of their first year as qualified doctors. The schools differed in their orientation, one being committed to training specialists and the other focusing more on community practice. The students in both schools were found to become less authoritarian and more egalitarian in their attitudes as they progressed through their education, but this trend was more marked in those attending the school committed to community practice. However, the curricula in the two schools are similar both in content and in timing of presentation, and the authors suggest that the difference is partly a result of socialization, with students increasingly taking on the values of faculty members. In other words, they support the growing feeling that if general practitioners want to influence medical education in this country, they might achieve more by trying to change the values of everyone else in the medical faculties, rather than the direct route of actually teaching general practice to medical students.

Source: Lavin B, Haug M, Belgrave LL, Breslau N. Change in student physicians' views on authority relationships with patients. *J Health Soc Behav* 1987; **28**: 258-272.

Viability of primary health care teams

IT is refreshing to find social scientists questioning the whole concept of primary health care teams rather than telling those involved how to make them work better. A recent paper from a department of humanities in the USA pointed out that the team concept was linked to expectations about primary care in response to the increasing number of health professionals. Expectations about primary care reflect social and professional values such as first, a patient-centred view of accountability; secondly, the universal acceptability of a decent minimum standard of health care; thirdly, a broadened definition of medical responsibility for health and wellbeing; and fourthly, an orientation towards supportive long-term care of chronic illness. The problem is that primary care is an intensely personal activity whereas health planners may think in terms of systems of health care delivery. But sick people do not encounter a delivery system but another person, and it is this contact which is the basis of primary care and a major theme in general medical practice. If the team concept of primary care is rooted in values of accessibility, comprehensiveness and continuity, then the personal values of primary care depend on one-to-one relationships and accountability. It is here that the concepts clash and result in conceptual ambiguities and inter-professional tensions. For instance, what happens to personal responsibility and confidentiality when patients with psychosocial problems are referred to community health teams where the most private matters are openly discussed often without the patient's knowledge or informed consent.

These tensions surface in another article which takes an anthropological look at the problems of doctor–nurse collaboration. The desire for status enhancement is clearly identified as a motivation for those who advocate nurse practitioners; also identified are the difficulties imposed on collaboration on a personal level by professional hierarchies. However, it is no longer good enough to play the feminist card in the battle for status between doctors and nurses. There are an increasing number of male nurses and almost half of all medical students are now female. Perhaps we should be taking a clearer look at the entrance qualifications and training of the two professions, particularly in the area of primary care.

Sources: Barnard D. The viability of the concept of a primary health care team: a view from the medical humanities. *Soc Sci Med* 1987; **25**: 742-746. Campbell-Heider N, Pollock D. Barriers to physician–nurse collegiality: an anthropological perspective. *Soc Sci Med* 1987; **25**: 421-425.

TB is still a killer

TUBERCULOSIS still kills more people in Ireland than any other infectious disease, and more than in any other EEC country. There is excess mortality among elderly male widowers of poor socioeconomic circumstances and there is often considerable delay between onset of symptoms and starting treatment. Accurate mortality statistics are hard to obtain as there is often confusion between deaths primarily from TB and deaths from TB-related causes. Continual education and vigilance are important if TB is to be conquered, and the winding down of TB services for economic reasons is short-sighted.

Controversy exists over where TB is best treated — the concept of custodial care in sanatoria is outdated and patients may be better off in general hospitals under the combined care of respiratory physicians and community care teams skilled in contact tracing. Many patients die suddenly when treatment is started and allergic reactions to released tuberculoprotein products or acute adrenal failure have been suggested as the cause. Close electrolyte monitoring is essential and steroids may be necessary for several weeks. The Keatsian picture of 'galloping consumption' is passé as TB is now mostly a disease of the elderly hiding behind a camouflage of other multisystem diseases.

Another paper from the *Irish Medical Journal* highlights the marked difference between the annual notification of new cases of TB in the two parts of Ireland. In 1984 the rate in Northern Ireland was 11 per 100 000 people and in the Republic 24 per 100 000. This difference is even more noticeable when comparing contiguous areas on both sides of the border. Figures from 1911, before partition, show that the area which now comprises Northern Ireland had a similar mortality rate for TB as the rest of the island.

Bacterial diagnosis of pulmonary TB is greater in Northern Ireland than in the Republic (more than 60% versus less than 50%, respectively in 1982–86). In Northern Ireland, notification of patients who had chemoprophylaxis without evidence of active TB was discontinued in 1982 while in the Republic there is no uniform policy on the notification of such patients. There may be significant misdiagnosis of TB in the Republic, and more accurate bacterial diagnosis is needed. The data suggest that notification rates, as currently organized, are not a reliable disease index. The annual TB infection rate is more reliable, but requires several serial tuberculin skin tests of a non-BCG-vaccinated population. In Northern Ireland, the BCG vaccination is administered to adolescents but in the Republic there is no clear policy on mass BCG vaccination. A uniform policy throughout the island is called for, either by abolition of the programme or deferment to adolescence.

Sources: Fitzgerald M. Tuberculosis: a continuing problem. *Ir Med J* 1987; **80:** 190-191. Howell F, Ó Laoide R, Kelly P, *et al.* Mortality from tuberculosis: a cause for concern. *Ir Med J* 1987; **80:** 205-206. Bredin C. A comparison of tuberculosis in the Republic of Ireland and Northern Ireland. *Ir Med J* 1987; **80:** 321-323.

Risk of HIV infection among dental professionals

AN American group have studied 1309 dental professionals (1132 dentists, 131 hygienists and 46 assistants) without behavioural risk factors for the acquired immune deficiency syndrome (AIDS) to determine their occupational risk for infection with the human immunodeficiency virus (HIV). Subjects completed questionnaires on their behaviour; the type, duration and location of their dental practice; their infection control practices; and the estimated numbers of potential occupational exposures to HIV. Serum samples were tested for antibodies to HIV and to hepatitis B surface antigen (unvaccinated subjects).

Fifty-one per cent of the subjects practised in locations where many cases of AIDS have been reported and 72% treated patients who had AIDS or were at increased risk for it. Ninety-four per cent reported accidental puncturing of the skin with instruments used in treating patients. Adherence to recommended infection control practices was infrequent. Twenty-one per cent of unvaccinated subjects had antibodies to hepatitis B surface antigen. Only one dentist without a history of behavioural risk factors for AIDS had serum antibodies to HIV.

The authors conclude that despite infrequent compliance with recommended infection control precautions, frequent occupational exposure to persons at increased risk for HIV infection, and frequent accidental puncturing of the skin with sharp instruments, dental professionals have little risk of HIV infection.

Source: Klein RS, Phelan JA, Freeman K, *et al.* Low occupational risk of human immunodeficiency virus infection among dental professionals. *N Engl J Med* 1988; **318:** 86-90.

Safety of diagnostic ultrasound

DIAGNOSTIC ultrasound is a potent symbol of the National Health Service's current financial problems. In a comparatively short time it has gone from specialized research to a standard diagnostic technique available in most district general hospitals, with attendant costs to the NHS. This commentary in the *Journal of Obstetrics and Gynaecology* starts by repeating that all the national and international bodies to have reported have found no adverse effects of ultrasound on human patients and operators, and ends with a personal conviction of its usefulness. In between, however, the author summarizes the other problems with admirable clarity: 'The casual observer might be forgiven for wondering why the medical profession is now involved in the wholesale examination of pregnant patients with machines emanating vastly different powers of an energy which is not proven to be harmless to obtain information which is not proven to be of clinical value by operators who are not certified as competent to perform the examinations.'

As always, the technological advances have travelled much further and faster than the programmes and techniques for their rational evaluation. Minerva in the *British Medical Journal* asked how the medical profession can go on criticizing alternative practitioners for not subjecting their ideas to clinical trials when its own treatments have been introduced with inadequate assessment. The casual observer also needs to remember that the pattern will always repeat itself if there are not strict procedures to control the application of new technologies.

Source: Meire HB. The safety of diagnostic ultrasound. *Br J Obstet Gynaecol* 1987; **94:** 1121-1122.

Screening for cancer of the cervix uteri

A STUDY from Sheffield analysed variations in screening activity and mortality from cervical cancer within the city (*Community Med* 1987; **9:** 160-170). In electoral wards with high indices of socioeconomic deprivation the incidence of cervical cancer was high but the screening uptake was low, particularly in women aged over 35 years. In addition there was evidence of a high case fatality rate in the most deprived areas. Whereas the smear rate for older women was low in areas of deprivation, this was not the case for younger women. Eighty-three per cent of deaths from cervical cancer in Sheffield occurred in those aged 50 years or over, but only 12% of smears came from this group. Many younger women are having smears at frequent intervals at health authority and family planning clinics and approximately 50% of smear resources in Sheffield will be used by 19% of women.

Another approach to the screening of older women has now been described whereby all female patients admitted to a district general hospital with non-gynaecological conditions were offered a cervical smear test. From 1979 to 1985, 4106 women were tested and pathological abnormalities of all grades were detected in 90 patients. Of the women screened, 68.8% were aged 40 years or more, and in 1979 over half of these had never had a test before, although this number fell to 26% in 1985.

Source: Hudson EA, Heiverston S, Jansz C, Gordon H. Screening hospital patients for uterine cervical cancer: seven year experience. *Community Med* 1987; **9:** 350-358.

Drinking sensibly

IN the first Benno Pollak lecture, given in April 1987, Professor Kendell has tried to answer questions about how much it is safe to drink, both for individuals and for communities. First, he challenges his own question, presenting a wealth of evidence that the damaging effects of alcohol occur for many individuals at levels of consumption well below those currently recommended as 'safe'. He points out that the distribution of drinking patterns superimposed on the previous statement leads to a much heavier burden of alcohol damage in the community being contributed by moderate drinkers than by heavy drinkers.

A policy directed at 5% of the community with the heaviest drinking habits would only deal with a small proportion of the adverse effects, whereas designating all those drinking more than the royal colleges' recommended amounts of 21 units per week for men or 14 for women would put a quarter of the adult population into the high risk group. This leads directly to the argument for trying to reduce the average level of alcohol consumption for the whole population by fiscal means. A reduction to two thirds of the present consumption of alcohol would represent a return to the levels of the early 1960s and would bring considerable benefits. Doctors can congratulate themselves on beginning to set a better example than in the past: their standardized mortality ratio from cirrhosis of the liver (as well as from lung cancer) has fallen from the 1950s to the present.

The succeeding comments mostly support the argument that the government should overcome its timidity (*sic*) and take some responsibility for the nation's destructive drinking habits. Some commentators have suggested that it is too simple to see price as the sole regulator of consumption — there are numerous cultural factors at work. However, as others point out, price is one of the factors and the easiest to manipulate.

Professor Kendell admits that changing public attitudes is going to take a long time. It took 20 years for public attitudes to smoking to change markedly; the facts of the relationship between alcohol consumption in the community and alcohol-related morbidity have now been known for 10 years and perhaps it will take another 10 years before they can be turned into effective public policy.

Source: Kendell RE. Drinking sensibly (and comments). *Br J Addict* 1987; **82:** 1279-1300.

INFECTIOUS DISEASES UPDATE

Hantaan virus infection

The Hantaan river which flows between north and south Korea gave its name to the virus now recognized as responsible for Korean haemorrhagic fever. This disease, endemic in Korea, also caused problems for British forces during the Korean war. It has a mortality of around 1–20% following sudden onset of fever, vomiting, haemorragic manifestations and shock. Renal failure and liver dysfunction are commonly present. Field mice are usually the source of the infection in man and life-long asymptomatic carriers of the virus.

It has now been recognized that illness due to the same or similar viruses occurs in many other parts of the world including Europe where rats (especially in conurbations) and the common vole are the main vectors. In Scandinavia the disease was called *Nephropathica epidemica* to draw attention to the renal features and to emphasize that in this form haemorrhagic manifestations are unusual. This milder disease is now being recognized throughout western Europe. The onset of illness is usually sudden with fever, myalgia, headache and sometimes conjunctivitis. Nausea, vomiting and pain in the loins and abdomen are common. Proteinuria, haematuria and self-limiting renal failure occurs. Recovery is usually complete with a mortality of less than 0.5%. Many cases probably never require hospital admission and it seems likely that this virus is responsible for some of the unexplained cases of fever seen in general practice, particularly if urine abnormalities are detected and no bacterical causes are discovered. The disease should be considered especially when there is a known contact with rodents, such as in rural areas or gardens. Leptospirosis, also contracted through rodents can occur concurrently. Influenza, hepatitis and the causes of acute abdominal pain also enter into the differential diagnosis. Acute cases have been recognized recently in Britain and the presence of antibodies in otherwise healthy individuals suggests that the infection is more widespread than currently recognized.

Pontiac fever — Lochgoilhead

An outbreak in January of this year of an influenza-like illness in Lochgoilhead, Argyll and Clyde, would seem likely at the time of writing to have been due to a mild form of legionellosis similar to what has become known as Pontiac fever. More than 150 people were affected.

The more severe legionnaires disease which occurs sporadically and in localized outbreaks is characterized by pneumonia, fever, often confusion and diarrhoea and contrasts with Pontiac fever; an influenza-like illness, comprising fever, myalgia, headache, cough and less frequently diarrhoea and vomiting. Outbreaks of legionella infection are typically a consequence of modern technology since they are associated with air conditioning systems, industrial cooling towers and whirlpool spas. When these systems become infected fine droplets containing the organism can be distributed throughout enclosed areas, often with high attack rates among those exposed. Of the few large outbreaks of Pontiac fever that have occurred most have been due to *Legionella pneumophila* although one in Canada was due to *Legionella feelii* and *Legionella micdadei* may be responsible in Lochgoilhead. Since legionella are widely spread in soil and especially mud, it is not difficult for organisms to contaminate water supplies. Protection against infection depends upon ensuring regular and adequate chlorination of water supplies in particular when it is being recirculated in the types of equipment described above.

Japanese B encephalitis

Vaccination schedules for athletes and visitors to the 1988 Olympic games in Seoul, Korea, will soon have to be considered. Japanese B encephalitis occurs in many Far Eastern countries usually sporadically but occasionally causing epidemics. The wild pig appears to be an intermediate host and the disease is generally contracted through mosquito bites. The chance of contracting infection in Seoul itself would seem to be slight but vaccination against this infection should be considered for those intending to tour more extensively in rural parts of the country. For most of those attending the games, however, protection against tetanus, poliomyelitis and considering immunization against faecal oral spread infections such as typhoid and hepatitis A will be more relevant.

Suggestions for topics to include in future updates are welcomed and should be passed to the contributor, Dr E. Walker, Communicable Diseases (Scotland) Unit, Ruchill Hospital, Glasgow G20 9NB (041-946-7120), from whom further information about the current topics can be obtained.