before dementia becomes obvious,[3] perhaps as a consequence of the disease, which may attenuate their effect in a cross sectional design. Indeed, Purandare and colleagues mention that body mass index was lower in both groups of patients with dementia than in the control group.

Even if this study leaves the question of mechanisms unanswered, it emphasises one very important issue related to preventing and treating dementia. The classical view of dementia has strongly influenced therapeutic approaches, making it difficult to tailor treatments to patients' various needs. If the diagnosis is vascular dementia, treatment aimed at cognitive impairment is sometimes overlooked, and if the diagnosis is Alzheimer's disease, vascular factors may be overlooked. Artificially labelling patients with one single diagnosis is less helpful than trying to identify and treat all possible aetiopathogenic factors. Early and effective treatment of vascular risk factors may have positive effects not only for cardiac health but may also help in preventing or postponing the onset of dementia.

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Competing interests: None declared.

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Kidneys for transplant

Radical changes should mean we get more of them, better allocated

See also p 1124

At the end of 2004, 5299 patients in the United Kingdom were waiting for kidneys from deceased donors, and during that year 1427 transplants from dead donors and 463 from living donors were performed.[1] The gap between supply and demand for kidney transplants continues to increase, but several important initiatives are under way to attempt to increase the total number of kidneys available and also to change the way donated organs are allocated.

Several centres are now retrieving organs from non-heart beating donors as well as conventional brain dead donors. These organs come from patients who have a cardiac arrest and cannot be resuscitated, whose kidneys are flushed with a cold preserving solution so that the kidneys can then be removed before irreversible damage occurs. With careful selection of donors and appropriate infrastructure these kidneys have been shown to perform as well as kidneys from brain dead donors.[2]

The drive to increase the number of kidney transplants from living donors has also been successful: the total number of living donor kidney transplants in the UK has increased by 33%, from 347 in 2000 to 463 in 2004.[3] However, many potential living donor transplants cannot proceed because of incompatible donor and recipient blood groups or preformed anti-HLA antibodies with donor specificity in the recipient. A change in the law may help ease this problem.

Later this year the new Human Tissue Act (www.opsi.gov.uk/acts/en2004/2004en30.htm) and the Human Tissue (Scotland) Act will allow the donor kidneys from two such immunologically incompatible potential living donor and recipient pairs to be interchanged to create two compatible pairs. The acts will also allow non-directed donations from so called altruistic donors—that is, a kidney donated by a healthy person without them being told who the recipient will be. UK Transplant, which coordinates the matching of donated organs and recipients, is exploring how best to facilitate these new types of donation, but experiences from other countries are encouraging.[4]

The shortage of organs has highlighted inequities in access to deceased donor kidneys, and after prolonged controversy the national kidney allocation scheme administered by UK Transplant has changed from this April. The main changes, hammered out by representatives of patients and professional groups, are radical but represent a fairer deal for patients in that they take more account of waiting time and less of tissue type matching. The scheme continues to take into account many factors relating to the donated kidney and potential recipients using complex computerised simulations designed to balance equity of access and utility of transplanted kidneys.

The background to the changes includes evidence of variation in access to kidneys and recent improvements in immunosuppression.[5] UK Transplant data reveal considerable variation in the proportion of dialysis patients put on waiting lists for transplantation in different parts of the country.[6] Time from starting dialysis to going on the waiting list also varies between centres.[7] Finally, the old UK Transplant allocation system, with its emphasis on tissue type matching, resulted in huge variations in waiting times for those patients listed, such that

This article was posted on bmj.com on 27 April 2006: http://bmj.com/cgi/doi=10.1136/bmj.38833.785984.47

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patients not yet on dialysis were often given a transplant in preference to those who had been on dialysis for 10 years or more.[8] In all these situations patients from ethnic minorities were particularly disadvantaged,[9] partly because of their increased prevalence of rare blood groups and tissue types.

Recent data also show that, probably because of more potent immunosuppressant drugs, tissue type matching has a much smaller effect on the long term outcome of kidney transplantation.[5] While still important for large groups of patients, the effect for an individual is much less important than it used to be.[10] At the same time renal transplantation has been recognised to improve survival as well as quality of life compared with remaining on dialysis: patients on waiting lists are 2-3 times more likely to die than those allocated kidneys.[11]

In the past, when the allocation system was debated some parties argued that patients favoured the status quo to optimise the use of available donor organs. Yet this seemed contrary to the impression held by many clinicians looking after patients with established renal failure. Indeed a recent study showed clearly that patients on dialysis and undergoing transplants consider waiting time to be very important.[12]

The debate surrounding organ allocation is a good example of how patients may be involved in decisions about rationing in health care. Although the organ allocation organisation in America (OPTN/UNOS) has patient representation, it is cautious about the role patients should have in deciding allocation policy,[13] and the need to consider patients' opinion is not included in the summary mission statement of the European transplant kidney allocation organisation (EKTAS), published this year.[14] The discussions following the death of the footballer George Best (who underwent a liver transplant) show that organ allocation is of interest not only to specialists but also to doctors generally and the general public. Resolving the conflicting demands of equity and making best use of a scarce resource is indeed complex but must include obtaining the wishes of patients.

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Competing interests: None declared.

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HPV vaccine and adolescents' sexual activity

It would be a shame if unresolved ethical dilemmas hampered this breakthrough

In June 2006 the US Food and Drug Administration is expected to approve a human papilloma virus (HPV) vaccine which is over 90% effective in preventing new infections and precancerous cervical lesions caused by the HPV types that it covers.[1 2] The vaccine prevents cancer through preventing sexual transmission of HPV types that cause cervical cancer.[3] This link to a sexually transmitted infection raises ethical concerns that must be resolved if the benefits of preventing cancer are to be realised.

The vaccine must be given before HPV infection is acquired. It is most likely to be recommended for 11-12 year olds, because by the ninth grade (age 14-15) 28% of girls in the US are sexually active. This has prompted some advocates of premarital abstinence to charge that HPV vaccination will condone or promote sexual promiscuity. However, its impact will probably be small because multiple factors are associated with initiation of sexual activity; fear of sexually transmitted infections is not a major reason for abstinence, and condom availability programmes have not been associated with behavioural disinhibition.[4]

For adolescents aged under 18 medical interventions, including vaccinations, generally require informed consent from both the parents and the adolescent.[5] Thus several possible combinations of decisions about HPV vaccination exist. If both parent and adolescent agree to the vaccine there are no ethical problems. In surveys, about 75% of well informed parents say they would accept the vaccine.[6] Some parents would refuse because they believe the child is not sexually active; if they were to agree at a later age, cumulative uptake would be even higher. Little is known about adolescents' attitudes to the vaccine. If both parent and adolescent refuse the vaccine, the physician can try to educate and persuade them. Coerced vaccination is not justified because there is no public health emergency. Similarly, forcing an intervention over an adolescent's objections is not justified

BMJ 2006;332:1106–7