public response and the quality of the organs. Now that a national precedent has been set we intend to implement our programme.

Early cooling of the organs is crucial to success, but concern has been expressed over the legality of organ perfusion catheters being placed before consent has been obtained from the dead person's relatives. There is no case law on the subject, but the Human Tissues Act of 1961 could be interpreted as allowing this action. The person "lawfully in possession" of the body may give permission for organs to be removed provided he or she has "made such reasonable inquiry as may be practicable" and has no reason to believe that either the dead person or his or her relatives objected to organ donation. Thus it seems that the designated health service officer "in possession" of the body could give permission for organ perfusion. Public opinion is supportive, but the procedure might be construed as constituting interference with a corpse, which is a criminal act.

In planning our programme we have consulted with our coroner, local medicolegal experts, the health authority's legal department, and the regional ethics committee, and we intend to publicise the programme through the local media. This serves to inform people of our intentions, to canvass opinion, and to provide some protection if our actions are challenged legally.

We think it unfortunate that the paper by Varty and colleagues¹ and that by A O Phillips and colleagues² were published and commented on as a pair. The technique used by Phillips and colleagues did not entail in situ perfusion of the organs and is, in effect, the same as that abandoned when the criteria regarding brain stem death were established. This yields inferior and probably unacceptable results, and the paper serves to highlight this.

The planning, consultation, and education needed to initiate a programme to obtain organs from non-heart beating donors are considerable, and an experienced surgical team large enough to permit constant availability is essential. Such programmes could, however, herald the expansion in renal transplantation that has been urgently required for several years.

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- 1 Varty K, Veith PS, Morgan JD, Kehinde EO, Donnelly PK, Bell PRF. Response to organ shortage: kidney retrieval programme using non-heart beating donors. *BMJ* 1994;308:57 (26 February.)
- 2 Hattori R, Kinukawa T, Ohshima S, Matsuura O, Ono Y, Fujita T. Outcome of kidney transplantation from non-heart beating donors: comparison with heart beating donors. *Transplant Proc* 1992;24:1455-6.
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Old technique should be renewed

EDITOR,—The increasing numbers of patients awaiting kidney transplantation in the British Isles has led to renewed interest in the use of non-heart beating organ donors.^{1,2} A J Wing and R W S Chang contend that the higher rate of primary non-function, greater mortality, and lower graft

survival associated with non-heart beating donors lead to a number of clinical and ethical problems in their use.³ Our former experience in Belfast suggests that these problems may be less important than the recent studies suggest.

Twelve Belfast patients received renal transplants between 1965 and 1968.⁴ In 10 of these the initial warm ischaemia time (time elapsed from cessation of heart beat until perfusion of the organs with cold perfusion fluid) was recorded and ranged from 26-105 minutes (mean 82.6 minutes); in eight it was 74 minutes or longer. All kidneys functioned, after a period of early non-function. The shortest period of function was five weeks in a patient who died from a cerebral episode related to her original disease of tuberculosis, with a functioning graft. Three of the grafts (initial warm ischaemia 89, 74, and 83 minutes) continue to function after 341, 332, and 329 months; one of these is recorded on Terasaki's 1994 listing as the longest surviving cadaver graft in the world (P I Terasaki, personal communication).

Between 1968 and April 1979, 160 cadaver grafts were carried out. In 53 the initial warm ischaemia time was 30 minutes or longer (range 30-80 (mean 47.5) minutes); five (9.4%) did not function. In 13 it was 60 minutes or longer (60-80 (65) minutes); all functioned. After this date only eight patients are recorded as having a warm ischaemia of 30 minutes or longer; seven of the kidneys functioned.

The use of non-heart beating donors in no way prejudiced patient or graft survival; on the contrary it contributed to some of our best results. Of these grafts, 91% functioned without the use of in situ perfusion. The change to heart-beating donors reduced the incidence and duration of postgraft oliguria, greatly reduced the logistical problems associated with retrievals outside the intensive care unit, and simplified the mechanisms of the surgical procedure, but it did not significantly change our results of renal transplantation.

With the increasing discrepancy between the number of potential recipients for kidney grafts and the number of kidneys available, we believe that we have an obligation to re-examine the use of non-heart beating donors. Our former experience suggests that this expertise could be renewed.

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- 1 Varty K, Veith PS, Morgan JD, Kehinde EO, Donnelly PK, Bell PRF. Response to organ shortage: kidney retrieval programme using non-heart beating donors. *BMJ* 1994;308:575. (26 February.)
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Vitamin K prophylaxis in infants

EDITOR,—Editor's Choice in the edition of 2 April states incorrectly that the British Department of Health recommends that "doctors should give an oral dose of vitamin K at birth, a further dose a week later, and a third dose six weeks after birth to those babies who are breast fed." In fact, the Department of Health has stated that the available facts do not permit a clear consensus on the safest form of prophylaxis for newborn babies. Therefore

it is important that paediatricians and midwives, and other health care professionals with responsibilities in this area of practice, should establish locally agreed policies for each maternity service for the administration of vitamin K to infants.¹

Advice similar to that quoted in Editor's Choice was given in the report of an independent group of experts convened by the British Paediatric Association with the support of the Department of Health.² This report has been an important source of information for paediatricians and health professionals in other disciplines when they establish policies and practices locally. It emphasises the importance of ensuring that breast fed infants receive the vitamin K supplements they need.

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- 1 Department of Health. *Prophylaxis against vitamin K deficiency bleeding in infants*. London: DoH, 1992. (PL/CMO(92)20, PL/CNO(92)14.)
- 2 *Vitamin K prophylaxis in infancy. Report of an expert committee*. London: British Paediatric Association, 1992.

Ischaemic heart disease and cholesterol

Safety of cholesterol reduction remains in doubt

EDITOR,—At their core the papers by M R Law and colleagues are about the advisability of reducing the cholesterol concentration in the general population, principally through restriction of dietary fat.¹⁻³ This primary prevention mandate is plagued by controversies, while consensus exists for lowering cholesterol in patients with coronary heart disease. What, then, do the papers add to the issues surrounding population based dietary treatment to lower serum cholesterol concentrations?

With respect to evidence that a low cholesterol concentration is associated with increased mortality from causes other than coronary heart disease Law and colleagues emphasise that these relations are seen exclusively in community based populations rather than in (typically smaller) cohorts based on occupation. They assert that illness present at entry to community based studies caused a fall in cholesterol concentrations. The authors fail to recognise, however, that the largest "community based" cohort was in fact recruited primarily from employee groups.⁴ Moreover, no evidence is presented that more illness existed in community samples, that these conditions preceded a fall in cholesterol concentration in people healthy enough to volunteer for participation, and that such illnesses account for the associations with mortality. Quantitative attempts to remove the effects of conditions present at the time of baseline measurement of cholesterol (by exclusion of deaths occurring in the first five years of observation) have documented the persistence of numerous associations between low cholesterol concentration and mortality.⁵

With respect to efficacy and safety, Law and colleagues combine the six major primary prevention trials⁶ with 19 secondary trials (typically using drug treatment) and a treatment study entailing resection of intestine. Aggressive treatment studies of patients known to have a serious illness cannot, however, be cited as supporting the efficacy and safety of a preventive intervention for the general public. Compared with previous meta-analyses, Law and colleagues add no new evidence concerning primary prevention through modification of diet; the only published trials entailed polyunsaturated fat substitution or supplementation rather than the currently recommended low fat diets. Secondary prevention trials of low fat

diets reduced neither morbidity nor mortality from coronary heart disease.

When preventive interventions in healthy people are considered, safety must be clearly established. In 1990 an analysis of mortality in primary prevention trials showed only a trend for reduced mortality from heart disease and significant excesses in deaths from cancer and from suicide and accidents.⁶ To these mortality data Law and colleagues add only the one year expanded clinical evaluation of lovastatin (EXCEL) study, in which treated patients experienced increased mortality from both coronary heart disease and other causes. The finding of increased mortality from suicide and accidents in clinical trials has been shown to be as robust as, if not more robust than, the reduction in mortality from coronary heart disease and is corroborated by evidence from several epidemiological and experimental studies not cited by Law and colleagues.⁷ Despite any of our desires to the contrary the safety of long term reduction remains in question and the efficacy of low fat diets remains improved.

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- 1 Law MR, Wald NJ, Wu T, Hackshaw A, Bailey A. Systematic underestimation of association between serum cholesterol concentration and ischaemic heart disease in observational studies: data from the BUPA study. *BMJ* 1994;308:363-6. (5 February.)
- 2 Law MR, Wald NJ, Thompson SG. By how much and how quickly does reduction in serum cholesterol concentration lower risk of ischaemic heart disease? *BMJ* 1994;308:367-72. (5 February.)
- 3 Law MR, Thompson SG, Wald NJ. Assessing possible hazards of reducing serum cholesterol. *BMJ* 1994;308:373-9. (5 February.)
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Authors' reply

EDITOR,—Matthew F Muldoon and Stephen B Manuck make four points. Firstly, our criterion for defining the employed cohorts was that all the subjects were employed. The investigators of the MRFIT screeners study confirmed that there had been substantial recruitment from community settings as well as some from employment settings, so it was appropriate to exclude the study from the employed group. The mortality data were consistent with this intermediate status: the relative risk of death from all causes except ischaemic heart disease in the fifth of men with the lowest cholesterol concentration compared with the rest was 1.0 in the employed cohorts, 1.1 in the MRFIT screeners, and 1.3 in the cohorts recruited entirely from community settings. (The published data on excess mortality applied to only the 6% of the MRFIT screeners with the lowest concentrations.)

Secondly, chronic liver, bowel, and other diseases, or their causes, lower the serum cholesterol concentration, but their clinical progression is too slow, and delayed by treatment, for the association of mortality with low cholesterol concentration to be removed by the exclusion of deaths in the first five years.¹ The associations were absent in the studies of employed cohorts and the international data.¹

Thirdly, the statement on the three trials of low

fat diets is incorrect. The statistical power of these trials was limited, but the observed results (table IV of our paper on ischaemic heart disease)² are similar to those of the six dietary trials of polyunsaturated fat substitution and 18 drug trials which did produce conclusive results. Low fat diets, like other dietary, drug, and surgical regimens, lower serum cholesterol concentrations. The similar reduction in ischaemic heart disease produced by different regimens with little in common except cholesterol lowering indicates that it is the reduction in cholesterol itself that is critical.

Fourthly, the concern regarding suicide and accidents arose from just two trials; the increase in mortality from these causes was not significant in either, and the deaths occurred mainly among men who did not take the treatment. There was no excess in the other trials or in the employed cohorts; in community cohorts the excess was removed by the exclusion of deaths in the first six years.¹ The experimental studies of aggressive behaviour in animals given different diets that are referred to are difficult to interpret and do not counter the direct evidence from the trials in humans that show no effect of substantial reduction in cholesterol on anxiety, depression, and other psychological variables.¹ The inclusion of the smaller community cohorts does not alter our conclusion. There is no evidence that low serum cholesterol concentration causes death from accidents and suicide; it is an error of judgment to say that the suggested link is "as robust as, if not more robust than," the reduction in mortality from ischaemic heart disease.

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Practice nursing

Free nurses from taking blood

EDITOR,—I agree with David Jewell and Pat Turton that practice nurses should be encouraged towards greater professionalism.¹ However, their assessment of the practice nurse's present role was a glossy representation of the York census,² and they failed to suggest radical enough solutions to the problem of how to create and fund this change.

At present practice nurses spend much of their time performing predominantly simple tasks; grade F or G nurses are overtrained to do these tasks. Their expensive time is a resource which should be being used to run health promotion and chronic disease management programmes. The York survey found out what nurses were doing, but it did not inquire how much of practice nurses' time was spent in which activity. Our practice nurse spends 38% of her time taking blood samples, for instance. The practice nurse needs to be freed

of her simplistic, task based activities, thereby releasing time for training, managing chronic disease, casualty-type work, and counselling.

Consider the following. We have now implemented information technology to a greater or lesser degree and are hopefully therefore more efficient—that is, we need less employee time to do the same or more administrative work. Consequently there is less pressure on receptionist-secretarial time. In hospitals, for over 10 years, lay people have been trained and employed as phlebotomists (incidentally on a lower salary grade than receptionists). Therefore, to give your nurse time to develop her role, train your receptionist to take blood.

In South Tees six practices have successfully put volunteer receptionists through the single day of training in venepuncture theory required. Unfortunately, however, subsequent antagonism from nurses, who felt threatened that their role was being somehow diminished, meant that only one of the receptionist-phlebotomists has been able to continue practical training. I would be delighted to advise any other practices who wish to take this idea forward. The legal and professional aspects have all been addressed and we are currently assessing patient acceptability.

Surely it is practice nurses with their community colleagues who must work to enhance their professional status, creating perhaps a Royal College of Community Nursing?

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- 1 Jewell D, Turton P. What's happening to practice nursing? *BMJ* 1994;308:735-6. (19 March.)
- 2 Atkin K, Lunt N, Parker G, Hirst M. *Nurses count: a national consensus of practice nurses*. York: University of York, 1993.

Academics should be more realistic

EDITOR,—I am staggered by the disparity between David Jewell and Pat Turton's vision of practice nursing and the reality in Avon.¹ I work in an area not acknowledged as deprived by the Jarman index but shown by Bristol and District Health Authority to be one of three areas in Avon to have unduly high mortality and morbidity. We strive to provide a high quality service to our patients by having a low list size, thus giving patients access to above average numbers of doctors and practice nurses. Our reward from Avon is to have our budget for ancillary staff screwed down time after time.

The chairman of our family health services authority says that sorting out deprivation is too difficult. It is just as well that we don't apply the same attitude to some of our patients. It would be a great advantage to general practice if our academic friends forsook cloud cuckoo land and joined the real world.

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- 1 Jewell D, Turton P. What's happening to practice nursing? *BMJ* 1994;308:735-6. (19 March.)

Correction

Health promotion in general practice

A typesetting error resulted in the names of only two (Paul Pharoah and Simon Sanderson) of the three authors of this letter being printed (26 March, p 852). The third author was Andrew Ness of the Institute of Public Health, Cambridge.