outcomes study had a range of purposes. The two methodologies have a complementary function and should not be promoted as polar opposites. Each methodology, however, is grounded in a distinct paradigm; in particular, qualitative methods are more concerned with developing adequate conceptual frameworks than with establishing generalisability. We suggest that, although it is common, it is inappropriate to judge qualitative methods from a quantitative standpoint, as Bisset and Chesson are attempting to do.

PANDORA POUND
Research sociologist

PATRICK GOMPERTZ
Research fellow

SHAH EBRAHIM
Professor of clinical epidemiology

Department of Public Health,
Royal Free Hospital School of Medicine,
London NW3 2PF

MIKE BURY
Professor of sociology

Department of Social Policy and Social Science,
Royal Holloway College,
University of London,
Egham Hill,
Surrey TW20 0EX

1 Anderson R. *The aftermath of stroke: the experience of patients and their families*. Cambridge: Cambridge University Press, 1992.

Elective ventilation of potential organ donors

EDITOR,—Elective ventilation of deeply comatose patients close to death in order to preserve their organs for transplantation is in breach of the common law requirement that medical treatment be directed to the patient's benefit. There is no implication, however, that elective ventilation is harmful to the patient. The legal issue is purely that of the intention of the medical intervention.

This law aims to protect the patient's best interests. Contrary to the point made by Alex Manara and Claire Jewkes, however, the medical community and society have already accepted exemptions to this law.¹ For example, immune deficiency and leukaemia in children are commonly treated by bone marrow transplants from sibling donors. The legal principles involved in bone marrow donation by legally incompetent minors seem identical with those involved in elective ventilation, while the ethical problems seem more difficult. This clinical practice, however, has been widely accepted for decades both in Britain and internationally.

M S Nielsen is right that the underprovision of intensive care facilities in Britain is far from ideal for implementing elective ventilation.² In 1993, however, when most transplant units were in the early stages of considering elective ventilation, 28 donors in Britain had elective ventilation (British Transplantation Society, unpublished findings). In Exeter, from 1988 to 1994, 19 of 57 donors (including two donors of several organs) had elective ventilation (H Riad, personal communication).

Those opposed to elective ventilation should note that the legal exemption being sought is enabling, not prescriptive. When the transplant and intensive care teams are in favour and the next of kin of a suitable patient agree, and if at the critical time the pressure on intensive care facilities permits, elective ventilation should proceed with the highest ethical and clinical standards. The ethics committees of both the BMA and the Royal College of Physicians have approved the ethics of elective ventilation.³

The main clinical uncertainty is the risk of a persistent vegetative state. The British Transplantation Society's protocol has been devised to try to minimise this risk. The society believes that, if elective ventilation were legalised, the initial way

forward should be a carefully audited clinical trial. Subsequently, mandatory registration of all patients entered into elective ventilation protocols would be important. The council of the British Transplantation Society is unanimous in its view that the government should find a mechanism to remove the legal restriction on elective ventilation.

J FABRE
President, British Transplantation Society

Institute of Child Health,
London WC1N 1EH

1 Manara A, Jewkes C. Elective ventilation of potential organ donors. *BMJ* 1995;311:121-2. (8 July.)

2 Nielsen MS. Elective ventilation of potential organ donors. *BMJ* 1995;311:122. (8 July.)

3 Williams R. More donor organs for transplantation. Elective ventilation proposals. *J R Coll Physicians Lond* 1993;27:214-5.

Doing particular good in today's NHS

EDITOR,—C J Burns-Cox keeps a philosophical directive from Gandhi on his office wall.¹ Colleagues labouring under the burden of managerial politics in today's NHS might prefer something more homespun. My own choice is from the (mad?) English visionary William Blake: "He who would do good to another must do it in Minute Particulars: General Good is the plea of the scoundrel, hypocrite and flatterer, for Art and Science cannot exist but in minutely organized Particulars and not in generalizing Demonstrations of the Rational Power."

P J E M WILSON
Consultant surgical neurologist

Walberton,
West Sussex BN18 0PQ

1 Burns-Cox CJ. What happened to care? *BMJ* 1995;311:265. (22 July.)

2 Blake W. Jerusalem. In: Keynes G, ed. *Blake: complete writings with variant readings*. London: Oxford University Press, 1966:60.

Advice on alcohol consumption has narrow perspective

EDITOR,—The Royal Colleges' advice to the public and the editorial by J Michael Gaziano and Charles Hennekens¹ have taken a narrow perspective of the ill effects of alcohol, and ignored several issues.

The studies concentrate on mortality and not morbidity and even for mortality have inadequate data on accrued risks.¹ Cumulative morbidity resulting in physical diseases (for example, cerebral atrophy) and indirect "hidden costs" (for example, road traffic accidents) are ignored or unknown. For example, alcohol is considered an important factor in 52% of episodes of wife battering, 50% of rapes,² and almost 25% of deaths on the road,³ and the existence of a safe threshold of alcohol intake for these is debatable. The non-drinking victims of alcohol related violence or accidents are not reflected in these studies. While alcohol misusers may reduce their mortality figures, mortality and morbidity rates in non-drinkers may rise because of indirect effects of alcohol.

Whether a "medically sensible limit" brings acceptability to alcohol is unknown, and the cliché may be cleverly used by the alcohol industry. On one side, non-drinkers may begin to drink and occasional drinkers may increase their alcohol intake because alcohol is considered "safe." On the other, heavy drinkers are heeding medical advice to reduce their intake. The end result depends on a complex interplay of factors. There is a significant positive correlation ($r=0.92$) between the population average for alcohol intake, and the prevalence of heavy drinking,⁴ so if there is an increase in the average consumption then a

corresponding increase in the number of heavy drinkers is likely.

The profession previously erroneously identified a safe limit for alcohol to avoid cirrhosis: 160 g per day. The continuing search for a "sensible limit" based on separate organ systems is a myth. We need to look at the problem of alcohol in a holistic manner, which includes morbidity and the cost to society as a whole, before proposing such limits.

SAROJ JAYASINGHE
Senior lecturer in clinical medicine

Faculty of Medicine,
University of Colombo,
Colombo 8,
Sri Lanka

1 Gaziano JM, Hennekens C. Royal colleges' advice on alcohol consumption. *BMJ* 1995;311:3-4. (1 July.)

2 Royal College of Physicians. *Preventive medicine*. London: RCP, 1991.

3 Foster GR, Dunbar JA, Whittier D, Fernando GCA. Contribution of alcohol to deaths in road traffic accidents in Tayside 1982-6. *BMJ* 1988;296:1430-2.

4 Rose G, Day S. The population mean predicts the number of deviant individuals. *BMJ* 1990;301:1031-4.

Other factors may have contributed to epidemic of renal failure

EDITOR,—The findings of Mohammed Hanif and colleagues about the epidemic of acute renal failure in Bangladeshi children after ingestion of paracetamol elixir contaminated with diethylene glycol had certainly contributed to a reduction in the incidence of the disease.¹ We faced this type of postfebrile anuric acute renal failure since 1981. Between 1981 and 1991, a total of 1837 children with this illness were admitted to the paediatric renal unit of the Institute of Post-Graduate Medicine and Research, Dhaka—the tertiary referral centre in Bangladesh. In spite of treatment including peritoneal dialysis, the average mortality was 77%.^{2,3} In 1988 the World Health Organisation sent a paediatric nephrologist from Britain who stayed here for three weeks and reported her experience.⁴

A prospective epidemiological study carried out in 610 children admitted to our unit with the disease from July 1988 to June 1991,⁵ showed extreme poverty (85%), illiteracy (70%), ignorance about fluid intake during fever or diarrhoea (98%), and ignorance about the danger of prolonged anuria (99%) among the parents of the affected children.⁵ A clustering of cases (80%) was observed during hot seasons. Over half the children (56%) had received paracetamol along with antibiotics (mainly co-trimoxazole or amoxycillin) and 15% had received paracetamol alone before anuria developed. Many of them received the suspension and tablet forms, not the elixir that could have been contaminated with diethylene glycol. Nine per cent had received homoeopathic and herbal medications; 20% did not have any medication at all.

It is obvious that factors in addition to contaminated paracetamol were responsible for this epidemic. The mortality was 19% in those who were admitted within 24-48 hours after last voiding and 90% in those who came after 48 hours ($P<0.001$). The rise of serum creatinine concentration was directly proportional to the duration of anuria. Needle biopsy in 32 cases showed necrosis, degeneration, and atrophy of tubules, the glomeruli being normal in all of them.

It was concluded that these children had developed ischaemic tubular necrosis following fluid and electrolyte loss. Poverty, illiteracy, ignorance, and the indiscriminate use of drugs were the predisposing factors for the high incidence. Delayed seeking of medical advice and lack of adequate treatment facilities contributed to the high mortality. Extensive propaganda and motiv-

ation in the mass media, based on these findings, was a vital role in lessening the incidence of the epidemic.

MOAZZAM HOSSAIN

Professor of paediatric nephrology,

Institute of post-graduate medicine and research, Dhaka

Paediatric Nephrology Department,
Royal Manchester Children's Hospital,
Manchester M27 4HA

- 1 Hanif M, Mobarak MR, Ronan A, Rahman D, Donovan JJ Jr, Bennis ML. Fatal renal failure caused by diethylene glycol in paracetamol elixir: the Bangladeshi epidemic. *BMJ* 1995;311:88-91. (8 July.)
- 2 Rahman M, Hossain MM. Acute renal failure in Asia. In: Michinobu Hatano, *Nephrology*. Tokyo: Springer-Verlag, 1991:804-14.
- 3 Rahman M, Hossain MM. The bimodal mortality pattern of acute renal failure in children. *Renal Failure* 1993;15:55-9.
- 4 Murphy AV. Personal view. *BMJ* 1988;296:1124.
- 5 Hossain MM, Muinuddin G, Hassan T. Epidemiological approach to acute renal failure in children of Bangladesh. *Bangladesh Journal of Child Health* 1992;16(3-4):73-9.

Developing a standard dataset for the NHS

Read codes' primary use is clinical

EDITOR,—N Smith and colleagues identify imperfections in the Read codes.¹ They do not, however, give due consideration to the fact that the codes were developed primarily as a means of entering clinical data into a computer in general practice, facilitating the development of an electronic record of certain aspects of patients' care. The codes were not developed as a tool for delivering health care information to central, academic, public health, or managerial bodies.

The codes have been used successfully in general practice for some years and have helped the foundation of clinical computing in primary care. This success was illustrated by a survey of computing in general practice in 1993, which showed that nearly two thirds of practices actively used the computer to some extent during the consultation and that use of the computer as a clinical record was increasing.² Indeed, this has been recognised to be of such value that a recent report on reducing bureaucracy in general practice called for a speedy legitimisation of computerised records.³ While I have every sympathy for the researchers in finding that the codes did not fit with their definitions, thus requiring them to redefine aspects of their study, they should appreciate that the windfall benefit of access to clinical data through computerisation is not at the core of clinical computing in general practice. Nor is this access likely to become universal without considerable investment in training clinicians to use the codes and in upgrading all systems in general practice to accept them.

Furthermore, some caution is justified. The success of the codes has been partly due to their relative simplicity and ease of use. Subsequent versions of the Read codes will address many of the issues raised by the authors.⁴ A huge thesaurus of clinical terms and qualifiers would almost certainly have overheads in terms of slowing terminals considerably or requiring upgrades to hardware. Slow, unusable systems will be detrimental to the development of clinical computing.

In conclusion, it must be borne in mind that the Read codes were developed to support the maintenance of a computerised clinical record and adopted as such by the joint computing group of the Royal College of General Practitioners and General Medical Services Committee. Any other research, audit, information, or managerial project support is a secondary bonus. The emphasis must remain on clinical use, with any other use being supported as a byproduct.

PAUL BRADLEY
General practitioner

Lache Health Centre,
Chester CH4 8HX

- 1 Smith N, Wilson A, Weekes T. Use of Read codes in development of a standard data set. *BMJ* 1995;311:313-5. (29 July.)
- 2 NHS Management Executive. *Computerisation in GP practices, 1993 survey*. London: HMSO, 1993.
- 3 NHS Executive. *Summary of the efficiency scrutiny into bureaucracy in general practice: patients not paper*. London: HMSO, 1995.
- 4 NHS Executive. *Read codes version 3*. London: HMSO, 1995.

Version 3 of Read codes addresses many difficulties

EDITOR,—N Smith and colleagues highlight some weaknesses in the Read codes.¹ Unfortunately, it is not clear to casual readers that the criticism is valid only for the 4 byte and 5 byte sets of version 2. Version 3 has been available for the past 12 months and addresses these limitations.

One of the main structural limitations of a simple coding scheme, such as the International Classification of Diseases, the Symmetrical Nomenclature of Medicine (SNOMED), or earlier Read codes, is that the hierarchy depends on the code itself. This means that (for Read codes) the hierarchy could not be deeper than four or five levels. Version 3's hierarchy is carried in a simple table and does not depend on the code itself. This means that there is no limit to the number of levels and hence no need to "flatten" the hierarchy to make it fit and that the same concept (Read code) can appear in different parts of the hierarchy.

The need for detail has, as Smith and colleagues mention, led to the development of qualifiers—that is, extra pieces of information (laterality, approach, anatomical site, severity, etc) that can be added to the main term. The qualifiers that are relevant to any given main term are presented to the user for selection. Far from complicating use, this allows the main terms to be less complex, simplifying the screen display. The user need add only detail that is relevant to the patient. The use of qualifiers also facilitates much greater consistency across the whole term set—one of the criticisms in the article.

A similar approach, of linking two separate Read codes together, will be adopted for record heading terms such as "family history," "current problem," and "past history." This will, for example, allow any disorder to be tagged as family history.

The content of version 3 will continue to be refined over the next 12 months. The new section on smoking and tobacco consumption has been widely piloted and will be released this month. This topic was addressed by the health related behaviour working group, which consulted widely with public health doctors, general practitioners, and health promotion experts. The group also looked at alcohol consumption, exercise, sexual behaviour, and drug use. These sections make use of qualifiers to allow the exact consumption to be recorded as a number with appropriate units. This avoids constraining the users to predefined bands, which are likely to change over the years.

CHRIS PAYNE

Director of Read code development

NHS Centre for Coding and Classification,
Loughborough,
Leicestershire LE11 2TG

- 1 Smith N, Wilson A, Weekes T. Use of Read codes in development of a standard data set. *BMJ* 1995;311:313-5. (29 July.)

Treatment for cancer pain

EDITOR,—Like M Zenz and T Zenz,¹ we appreciate the recent paper by François Larue and colleagues² for opening up a discussion on the undertreatment of cancer pain. Perhaps, however, the topic should be referred to as maltreatment of cancer pain.

Zenz and Zenz make the point that legislation for uniformity in the European Union could threaten the freedom to prescribe strong opioids in Britain. The implicit assumption here is that

regulation keeps opioid prescribing down and that deregulation would increase it. It is also a popular view that patients receiving hospice-type care in Britain are heavily dosed with morphine.

We have published the results of a survey of 1007 patients (970 with malignancy) receiving specialist palliative care—that is, care under the direction of hospice-type services or community teams—in the Trent region.³ Altogether, 469 patients were already taking an opioid analgesic at the time that they were referred; far from inevitably leading to an increase in opioid consumption, the addition of specialist palliative care led to an increase in only 41% of patients. In 43% the dose remained unchanged during the period they received specialist palliative care (mean 265 days, median 107 days). In 16% the opioid dose was reduced after referral, and in 6% opioids were stopped altogether. Furthermore, only 45% of patients were receiving a strong opioid (morphine or stronger). For those receiving hospice day care and home care from independent Macmillan-type nursing teams (31% and 39%, respectively, of our unselected sample) the mean (median) consumption among those taking opioids was 149 (60) mg and 144 (60) mg morphine equivalent per 24 hours, respectively.

We would encourage greater uniformity of legislation relating to the prescribing of opioids in Europe, preferably in line with the British model. As our data show, freedom of prescribing, when coupled with ready access to specialist palliative care, should not be seen as automatically leading to uncontrollable increases in morphine consumption per patient. The growth of specialist palliative care—which needs an acceptable universal definition—may bring about increased opioid consumption in the population as a whole, but it does so by improving individual patients' access to the drugs and by better pain control as a result. For this reason, we see the problem of cancer pain at the population level as one of maltreatment since both undertreatment and overtreatment with opioids are to be deprecated.

SAHMEDZAI
Professor

D J BROOKS
CRC lecturer

Palliative Medicine Section,
Surgical and Anaesthetic Sciences,
University of Sheffield,
Royal Hallamshire Hospital,
Sheffield S10 2JF

- 1 Zenz M, Zenz T. Treatment for cancer pain in France. *BMJ* 1995;311:387. (5 August.)
- 2 Larue F, Colleau SM, Brasseur L, Cleeland CS. Multicentre study of cancer pain and its treatment in France. *BMJ* 1995;310:1034-7. (22 April.)
- 3 Brooks DJ, Gamble W, Ahmedzai S. A regional survey of opioid use by patients receiving specialist palliative care. *Palliat Med* 1995;9:229-38.

General practitioners' role in emergencies

EDITOR,—J N Rawlinson's letter about the role of deputising doctors in emergencies is unfairly critical of both general practitioners and their deputies.¹ General practitioners cannot be expected to be available to their patients at all times regardless of the urgency of the situation, and inevitably there will be times when patients are seen by a partner, locum, or deputy. Moreover, there simply are not enough hours in the day to stay to care for someone who is newly bereaved: after offering sympathy, explanation, and advice about necessary formalities there is little else one can do, and other work is always waiting. I would be interested to know how much care and counselling is offered by the doctors in Rawlinson's accident and emergency unit. With the old man's daughter and a concerned neighbour present at the incident that Rawlinson cites, it was not unreasonable for the deputising doctor to leave.

Secondly, Rawlinson comments on the cardio-