difficult, is one based on the balance of probabilities.

More research is required and should focus on the general concept of work related disorders rather than be confined to the upper limb. If health promotion is to mean anything it should mean that going to work tends to engender fitness. This is why unemployment is considered to be bad for society in general and individual workers in particular. A more positive attitude should be taken towards work, and this should be embodied in the concept that to work is to keep fit. No one would suggest that all pain at work was caused by the work itself: it may be caused by sports injuries acquired over a weekend or be part of intercurrent disease. Hence the importance of the therapeutic test of altering circumstances at work to see if the symptoms remit.

With the implementation of the European Community's regulations for workers the medical professions and ergonomists will have to cooperate if pains are to be prevented. Staff working in district rheumatological, orthopaedic, and remedial services should work more closely with occupational physicians and ergonomists. Perhaps it is time for a combined medicoergonomics society.

J M PORTER

Department of Human Sciences,
Loughborough University of Technology,
Loughborough,
Leicestershire

PETER BUCKLE

Robens Institute,
Surrey University,
Guildford

J C ROBERTSON

Wessex Regional Rehabilitation Unit,
Odstock Hospital,
Salisbury SP2 8BJ

1 Barton NJ, Hooper G, Noble J, Steel WM. Occupational causes of disorders in the upper limb. *BMJ* 1992;304:309-11. (1 February.)

Open access mammography

SIR,—J J Curtin and M A Sampson's paper is a welcome confirmation that an open access mammography service for general practitioners is not clinically necessary.¹ Many hospitals, including mine, already have a policy that denies open access to mammography. Nevertheless, I am sceptical about the authors' estimate of the potential savings inherent in not providing open access mammography. The authors omit to mention the extra burden that is, as a result, placed on breast clinics.

In Curtin and Sampson's study 184 of the 361 patients referred from general practitioners had breast pain or a family history of cancer or were about to start hormone replacement therapy; arguably, none of these is an indication for mammography, though examination and firm reassurance in such cases are essential. If mammography as a form of reassurance is unavailable a good proportion of these patients will, in my experience, be referred to a breast clinic, and the eventual cost may in fact be greater.

The solution may not be to deny access to mammography but instead to combine better education for general practitioners with limiting the service to those aged over 40 and allowing freer access to national screening centres for those over 50.

A E YOUNG

St Thomas's Hospital,
London SE1 7EH

1 Curtin JJ, Sampson MA. Need for open access non-screening mammography in a hospital with a specialist breast clinic service. *BMJ* 1992;304:549-51. (29 February.)

SIR,—J J Curtin and M A Sampson proved that the incidence of mammographic abnormality in women referred direct from general practitioners was low

compared with that in women referred to the breast clinic. They justifiably infer that general practitioners are selecting out the high risk patients for the breast clinic, but their conclusion that "This has rendered our open access mammography service virtually useless" is not supported by their findings.

They state that if the open access service were to be withdrawn, the general practitioners would safely manage most of the patients they now refer for mammography without the need for further investigation. This is an alarming assumption, implying as it does that general practitioners are frivolously referring patients for mammography knowing that nothing is really wrong with them. The results simply show that the patients could have been managed expectantly given prior knowledge that the mammogram would appear normal. Sadly, even members of the Royal College of General Practitioners are not blessed with this degree of foresight.

It is important to remember that the two groups of patients in their study do not account for all the women who present to general practitioners with breast symptoms. Almost certainly a fairly large number of women are already managed without the need for further investigation or opinion. Those who are sent for mammography may well have symptoms or signs which are less worrying than those referred direct to the clinic; nevertheless the general practitioner has decided that he or she is sufficiently concerned to ask for a mammogram. If open access is not available general practitioners will simply send such women to the clinic.

I look forward to the next paper from Northwick Park detailing the results of withdrawing their open access service. Based on these figures I predict that referrals by general practitioners to the breast clinic will increase by at least 50% and may well double.

R F BURY

Leeds General Infirmary,
Leeds LS13 3EX

1 Curtin JJ, Sampson MA. Need for open access non-screening mammography in a hospital with a specialist breast clinic service. *BMJ* 1992;304:549-51. (29 February.)

Neonatal mortality in Germany since the Chernobyl explosion

SIR,—In an important paper on first day neonatal mortality R K Whyte¹ mentions our work on (first week) neonatal mortality in the south of Germany, which was heavily contaminated by fallout from the explosion at the Chernobyl nuclear reactor,² and suggests further research in this country. In fact, the available data in southern Germany after the Chernobyl explosion up to 1990 do show a disturbance strongly reminiscent of that in the neonatal mortality in the United States after the atmospheric weapons tests in Nevada around 1950 (Whyte's figure 3): the falling slope of the line through the logarithms of the mortality (given per 1000 live births) is reduced by a factor of five right at the time of the accident (figure). In the less contaminated north the slope is not appreciably altered; rather it maintains its value from 1976 to 1990. From Whyte's data a renewed increase in the

slope might be expected about 15 years after the accident—that is, with the beginning of the next millenium. We should try to follow this up.

E and L Kruger of the Munich Association for Environment and Health came to similar conclusions.

JENS SCHEER

Physics Department,
University of Bremen,
2800 Bremen 33,
Germany

1 Whyte RK. First day neonatal mortality since 1935: re-examination of the Cross hypothesis. *BMJ* 1992;304:343-6. (8 February.)

2 Luning G, Scheer J, Schmidt M, Ziggel H. Early infant mortality after Chernobyl. *Lancet* 1989;ii:1081-3.

Patients with secondary polycythaemia as blood donors

SIR,—C A J Wardrop discusses the possibility of using blood taken from patients with secondary polycythaemia in the same way as that from volunteer donors.¹

The blood transfusion service in Britain relies on donations given freely by volunteers and provides blood products of the highest quality. This depends primarily on the altruistic nature of those donating blood. Self deferral by potential donors who have engaged in high risk activities is a vital part of the screening procedure, and our success reflects the value of highly motivated volunteer donors and well trained blood transfusion staff. Patients requiring a therapeutic venesection are not volunteers; the motivation for self deferral is therefore lacking. In addition, many of these patients have been prescribed drugs—for example, antibiotics or anti-coagulants—that may be potentially harmful to recipients of their blood.

The assured quality of the identification, collection, storage, and transportation of donated units is vital to the provision of safe products. Such high standards would be difficult to achieve in therapeutic settings. To maintain the quality of our service we will continue to rely solely on the generosity of healthy volunteer donors.

P S M RAWLINSON

P FLANAGAN

Yorkshire Blood Transfusion Service,
Leeds LS15 7TW

1 Wardrop CAJ. Any questions. *BMJ* 1992;304:499. (22 February.)

Pregnancy and fasting during Ramadan

SIR,—In an editorial Awad H Rashed commented that pregnant women are excused fasting during Ramadan.¹ A study in Nottingham during Ramadan in 1989 showed that many pregnant women chose to fast with their families during Ramadan rather than make up the time later. Of the women attending the antenatal clinic during Ramadan, 34 were identified as Muslims. They were asked if they were fasting and, particularly, if they had consumed anything since dawn that day. Twelve of the 34 were fasting. There was no significant difference in either the patients' age or the duration of the pregnancy between those who were and were not fasting.

The apparent differences in understanding of who was exempt from fasting were recognised by the local Muslim centre; when sending out a calendar indicating the dates and times of the fast the centre reminded people that some groups, including pregnant women, were exempt (but that these groups would have to make up for this by fasting later). We were helped by one of the local leaders, who provided a statement, written in