health education increased the uptake of screening among Asian women in Leicester, McAvoy and Raza found that written material sent by post was ineffective.³ It is labour intensive to educate women to accept screening services.

Secondly, medical staff need training to differentiate normal and abnormal cervixes by visual inspection, particularly as inspection may not be sensitive and specific enough to detect early cancer owing to the range of aberrant normal cervixes. Many false positive diagnoses may result and undue anxiety be caused if definitive diagnoses cannot then be made owing to lack of resources.

Finally, direct inspection of the cervix is possible only in health centres with a room, couch, proper lighting, and speculums. Facilities and equipment are likely to be inadequate owing to lack of finance. Developing countries should invest in the health of the population instead of fighting wars and shift their priorities towards the health and social welfare of people.

Direct visual inspection of the cervix to detect early cervical cancer may be useful in some centres but is not viable for population screening of women in developing countries.

MYINT MYINT SOE

Community and Mental Health Unit,
West Lane Hospital,
Middlesbrough,
Cleveland TS5 4EE

- 1 Singh V, Sehgal A, Luthra UK. Screening for cervical cancer by direct inspection. *BMJ* 1992;304:534-5. (29 February.)
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SIR,—Veena Singh and colleagues' paper purports to show that visual inspection of the cervix may be a useful screening method for cervical cancer.¹

Screening has been defined as "actively seeking to identify a disease or pre-disease condition in people who are presumed and presume themselves to be healthy"—that is, they are asymptomatic.² Most of the women "screened" in Singh and colleagues' study, and all of those found to have cervical disease, had symptoms. The symptoms were those that may arise from an early cervical cancer—for example, vaginal discharge, irregular bleeding, and backache. Cervical cancer would have been included among the differential diagnoses for such women.

Clarifying the differential diagnosis by clinical examination and investigation does not constitute screening. The paper is further confused by the grouping of carcinoma in situ with invasive disease. This report provides no further evidence over the authors' earlier paper of a role for visual inspection as a screening test for cervical disease.³

MALCOLM GRIFFITHS

Royal Berkshire Hospital,
Reading,
Berkshire RG1 5AN

- 1 Singh V, Sehgal A, Luthra UK. Screening for cervical cancer by direct inspection. *BMJ* 1992;304:534-5. (29 February.)
- 2 Holland WW, Stewart S. *Screening in health care*. London: Nuffield Provincial Hospitals Trust, 1990.
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AUTHORS' REPLY.—We agree with Malcolm Griffiths that screening should involve only asymptomatic women. But this definition cannot be applied for Indian women as the prevalence of gynaecological morbidity in these women is extremely high (>50%), even among those not seeking medical attention.¹ Thus any screening programme for early detection of cancer needs to be started among women who are attending for primary health care, such as those attending maternal and child health services for minor complaints.

It is not correct to say that symptoms such as vaginal discharge, irregular bleeding, and backache are due to early cervical cancer as vaginal discharge is extremely high (>80%) among Indian women because of a high prevalence of infections of the reproductive tract (U K Luthra, personal communication).¹ Likewise, irregular bleeding (>40%) may be due to dysfunctional uterine bleeding.¹ The women attending the maternal and child health services presented with symptoms of short duration. In contrast, Indian women with cervical cancer with the same symptoms had had them for a long time (over three years).²

This study, of a fairly broad group of women, replicated the results of our earlier study, which was carried out in a highly selected population with dysplasia.³ Further, we did not group carcinoma in situ with invasive cancer in our paper. What we tried to highlight was the clinical staging pattern of cancer detected among the screened population. It ranged from stage 0 to stage IIA.

VEENA SINGH
ASHOK SEHGAL
USHA K LUTHRA

Institute of Cytology and Preventive Oncology,
Maulana Azad Medical College Campus,
New Delhi 110002,
India

- 1 Bang RA, Bang AT, Baitule M, Choudhary Y, Sarmukaddam S, Tale O. High prevalence of gynaecological diseases in rural Indian women. *Lancet* 1989;ii:85-7.
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Treatment of hypertension in older adults

SIR,—The suggestion by Martin J Kendall that lipophilic, but not hydrophilic, β blockers are able to reduce the incidence of sudden death in hypertensive patients and patients with ischaemia¹ should be treated with a great deal of circumspection. This notion was first proposed by Ablad *et al*, whose work in rabbits showed that lipophilic metoprolol, but not hydrophilic atenolol, crossed the blood-brain barrier and "switched on" vagal activity, which raised the threshold to ventricular fibrillation under acutely ischaemic conditions.² These findings are quite the opposite to those of Meesmann.³

But what of humans? Certainly atenolol greatly increases parasympathetic activity,⁴ significantly suppresses life threatening ventricular arrhythmias in the acute postmyocardial infarction period,⁵ and is still the only β blocker significantly to reduce mortality when given within 12 hours of myocardial infarction.⁶ Atenolol has been assessed in only one small trial of late intervention after myocardial infarction,⁷ where it behaved similarly to propranolol in reducing mortality by over 50% in those who continued receiving treatment, as does hydrophilic acebutolol.⁸ The non-significant 18% reduction of mortality after myocardial infarction by hydrophilic sotalol⁹ may be due to its pro-arrhythmic potential arising from its class III anti-arrhythmic property.

As regards primary prevention of myocardial infarction in hypertensive patients, there is, as Martin Kendall points out, evidence that lipophilic propranolol has a modest benefit in middle aged subjects (particularly non-smoking men). However, his reference to the heart attack primary prevention in hypertension (HAPPHY) study suggesting that metoprolol benefited patients whereas atenolol had an adverse effect is quite out of order. The HAPPHY steering committee concluded that any apparent differences between atenolol and metoprolol were perfectly consistent with the play of chance.¹⁰ For the record, death rates in the HAPPHY study were less in patients

receiving atenolol than in patients receiving metoprolol (6.93 v 7.89 deaths per 1000 patient years); however, death rates in the diuretic arm randomised against atenolol were inexplicably lower than those in the diuretic arm randomised against metoprolol (5.46 v 9.89 deaths per 1000 patient years).¹⁰

In elderly patients there is now no debate that diuretics should be first line therapy for primary prevention of stroke and myocardial infarction (unless the patient has had a recent infarction or has angina, in which case a β blocker is appropriate). Atenolol based treatment, though preventing strokes, has not been shown to prevent myocardial infarction in elderly hypertensive patients. This is almost certainly a β blocker class effect; the Swedish trial in old patients with hypertension,¹¹ which showed no significant decrease in myocardial infarction, used three different β blockers—pindolol, metoprolol, and atenolol. This lack of benefit of β blockers in elderly patients may be due to haemodynamic circumstances (larger hearts and low vascular compliance, in the absence of overt ischaemia) not suited to first line β blockade.

Martin Kendall's recommendations that hypertensive patients with angina should be treated with lipophilic β blockers is surprising as the anti-ischaemic efficacy of atenolol is at least as good as that of propranolol.¹²

So, in conclusion, there is not a scrap of scientific evidence in humans to suggest that a lipophilic β blocker should be preferred to a hydrophilic β blocker for "cardioprotective" purposes.

J M CRUICKSHANK

Wilmslow Park,
Wilmslow,
Cheshire SK9 2AY

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Extensible bandages

SIR,—Charles McCollum's editorial on extensible bandages criticises a widely used, performance based classification system for these products on the grounds that it is misleading and potentially dangerous.¹

The complex test on which the classification system depends was developed over several years by a working party comprising technical repre-

sentatives from manufacturers of bandages and people from within the NHS experienced in testing and evaluating these materials. Essentially the method was designed to identify the range of pressures that each class of bandage may be expected to achieve and maintain under normal conditions of use, taking account of the elastomeric properties and other characteristics of the bandage that will influence both its performance and clinical acceptability.

Contrary to the impression given by McCollum, the relation between sub-bandage pressure and limb circumference was also considered and has been discussed at length in numerous articles, one of which he referenced.² Wall charts and handouts describing the classification system and illustrating graphically the effect of changes in limb size on bandage pressures have been produced and widely circulated around the regions. These charts, which have been well received by medical and nursing staff, enable a practitioner to identify at a glance which of the various classes of bandages will provide the required level of compression for a leg of a specified diameter. Similarly, the drug tariff contains a simple table that relates limb circumference to sub-bandage pressure for those products recently made available on prescription that meet the performance criteria described within the test method.

McCollum, who is an enthusiastic advocate of the four layer bandage system, suggests that a multilayer bandage is safer than a single layer of a high compression bandage as errors in applying a weaker bandage would average out in multiple layers. Errors can also, however, be additive, and it could be argued that multiple layers of bandages applied with excessive tension may combine to produce unacceptably high compression in some circumstances.

The dangers associated with the incorrect selection or use of a high compression bandage have been recognised and emphasised repeatedly in the past. It is not logical, however, to criticise or ban a useful therapeutic agent simply because the possibility of misuse exists. Rather, practitioners should be carefully instructed in both the theory and practice of bandaging so that they may take full advantage of the many benefits of the sophisticated new products now available.

STEVE THOMAS

Surgical Materials Testing Laboratory,
Bridgend General Hospital,
Bridgend,
Mid-Glamorgan CF31 1JP

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Oesophageal cancer in Britain

SIR,—K K Cheng and N E Day draw attention to the disturbing increase in oesophageal cancer in the United Kingdom.¹ Because of the increasing importance of this disease, in 1990 the Medical Research Council's Cancer Therapy Committee set up a working party to conduct a programme of multicentre randomised clinical trials to investigate various aspects of treatment that seem promising in uncontrolled studies.

Intake to the first of these randomised trials has just started. The trial is based on increasing evidence from phase II studies that oesophageal cancer may respond well to cisplatin based combination chemotherapy.^{2,4} It is comparing surgery with and without preoperative chemotherapy, which consists of two courses of cisplatin 80 mg/m² on day 1 plus fluorouracil 1 g/m² on days 1 to 4 (total dose 4 g/m²) with three weeks between the courses. Cisplatin and fluorouracil are two of the most active single agents in both squamous

carcinoma and adenocarcinoma and are effective in combination. It is intended to randomise 800 patients with resectable squamous carcinoma, adenocarcinoma, or undifferentiated carcinoma of the upper, middle, or lower third of the oesophagus or cardia but not patients with postcricoid tumours.

The main end point of the trial is survival, and the design is simple to encourage collaboration. Potential participants can obtain details and copies of the protocol (OE02) from D J Girling at the address below.

R J DONNELLY

Chairman, MRC Oesophageal Cancer Working Party,
Cardiothoracic Centre,
Liverpool L14 3PE

D J GIRLING

Secretary, MRC Oesophageal Cancer Working Party,
MRC Cancer Trials Office,
Cambridge CB2 2BB

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Treating minor problems in accident and emergency departments

SIR,—Though I agree that patients who attend accident and emergency departments with problems better dealt with in general practice are not time wasters, I would resist any move to base general practice care in accident and emergency departments.¹

It is often more time consuming to divert patients away from an accident and emergency department than it is to see them. Just as the development of deputising services has encouraged patients to make greater use of out of hours services and increase their expectations beyond that which many general practitioners regard as reasonable,² so a policy of seeing all casual attenders who present at accident and emergency departments may already have led to difficulties in providing a quality service to those with genuine acute need.

It is no surprise that patients who attend an accident and emergency department with problems suited to primary care believe that they have brought their problem to the right place, particularly if they are investigated by junior doctors using facilities available only in hospital. This department recently studied young men with problems related to injuries sustained during sport that required minimal or no treatment. Responses to a questionnaire suggested that 38% considered that they needed urgent treatment, 43% believed that their general practitioner would be unavailable, and half considered that care by their general practitioner would be inappropriate for their injury. Only a third of the patients saw coming to see a doctor as the main purpose of their visit: half stated that it was for an x ray examination.

Most accident and emergency departments will see patients with minor recent trauma without question, and the very title of accident and emergency suggests to the public that all injuries resulting from accidents are dealt with whether or not they constitute an emergency. Patients with non-traumatic musculoskeletal pain often present as emergencies. The dividing line between primary care in general practice and in accident and emer-

gency departments is blurred in this and many other examples. Cooperation between consultants in accident and emergency and general practitioners in defining locally acceptable practice and exploiting opportunities to educate those patients misusing the service will ultimately lead to improvements for patients and doctors alike. If doctors find it difficult to define what is appropriate will it not confuse the public further if accident and emergency departments and out of hours general practice services are in the same place?

I G KENDALL

Leicester Royal Infirmary,
Leicester LE1 5WW

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Contraception for the under 16s

SIR,—Victoria Gillick implies that those who provide contraceptive advice and services to the young are not concerned with the sexual behaviour and reproductive health of teenage girls.¹

As one who provides such services I say that we are very concerned indeed and endeavour to see that young people do not suffer, both in terms of unwanted pregnancies and sexually transmitted diseases and, more broadly, in their personal and sexual relationships. The vast majority are already sexually active when they consult us and often present at their first visit for emergency contraception or because they are worried that they are already pregnant.

We all deplore many things that we see around us, and teenage sex (particularly among those who are under age) may be one of them. By all means, Mrs Gillick, alter society so that these things do not occur, but until you reach that goal please encourage us in our work of trying to minimise the undesirable consequences of sexual activity among young teenagers.

ANNE TURNER

Bath District Health Authority,
Bath BA2 5RP

1 Gillick V. Contraception for the under 16s. *BMJ* 1992;304:845. (28 March.)

MRC's association with Sugar Bureau

SIR,—We were concerned to learn that the Medical Research Council is organising a workshop on dental caries in association with the Sugar Bureau.

The aim of the Sugar Bureau is to promote the products of the sugar industry and thus has nothing to do with an independent organisation financing and deciding on priorities in scientific research. As the Committee on the Medical Aspects of Food Policy recently concluded that the evidence incriminating sugar in the aetiology of caries indicates that consumption of sugar should be reduced to no more than 10% of total dietary energy¹ it is not surprising that the Sugar Bureau is willing to provide the resources. But is the Medical Research Council so short of funds that it is willing to be associated with any organisation? Will it next be cosponsoring a workshop with the tobacco industry on the aetiology of lung cancer, or with the Dairy Council on the causes of heart disease? Will its next collaboration in this field be with the Cocoa, Chocolate and Confectionery Alliance?

We have no idea who chose the speakers for this conference and have no quarrel with the list of speakers, for they are all recognised authorities in the subject. Nevertheless, we think that it is naive of the Medical Research Council to imagine