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 cervices by visual inspection, particularly as inspection may not be sensitive and specific enough to detect early cancer owing to the range of aberrant normal cervices. 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.

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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]

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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 O to stage IIA.

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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 ischaemia[1] 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 sotalol[9] 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.

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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-