Parental awareness was high

EDITOR,—We wish to report the results of an observational study that a group of us undertook recently as part of our community medicine attachment. We chose the topic of measles immunisation because it was a current issue.¹ There had also been public concern that the campaign contained information contradicting that given in the previous measles, mumps, and rubella campaign, launched in October 1988. At that time the parliamentary secretary for health, Mrs Edwina Curry, stated that "It [measles, mumps, and rubella vaccine] provides life-long protection against all three infections with a single jab."² A third point of interest was the controversy surrounding the rubella component of the vaccine.

The aim of our project was to discover whether parents of 4-16 year old children were aware of the current measles immunisation campaign, understood and accepted the information provided, and were prepared to have their children immunised. This was undertaken with a questionnaire administered during an interview.

Questionnaires were answered by 190 parents; 185 of the 190 were aware of the current publicity, with 110 of 189 identifying school leaflets as their first source of information. The predicted epidemic was identified as the reason for the campaign by 143 of the 190. Previous immunisation and previous measles infection were recognised as not exempting a child from the campaign by 139 and 129 parents respectively. Altogether 163 of 181 stated that they would allow their children to be immunised, although only 82 of the 190 identified the correct constituents of the vaccine. Parents aged over 40 were more likely to refuse the vaccine (7/31 (23%) of those over 40 refused v 11/151 (7%) aged 40 and under; $P=0.02$). There was no variation in uptake between ethnic groups (uptake was 90% (143/159) among white children v 91% (20/22) among non-white children).

Awareness of the impending epidemic correlated with uptake (uptake was 94% (128/136) among children whose parents were aware of the epidemic v 78% (35/45) among children whose parents were not; $P=0.003$). Knowledge about the vaccine's content did not correlate with uptake (uptake was 94% (73/78) among children whose parents correctly identified the vaccine's components v 87% (90/103) among children whose parents responded incorrectly). Knowledge about the irrelevance of previous immunisation and previous measles infection both correlated with uptake (uptake was 97% (131/135) among children whose parents responded correctly v 70% (32/46) among children whose parents responded incorrectly regarding previous immunisation; it was 97% (120/124) among children whose parents responded correctly v 75% (43/57) among children whose parents responded incorrectly regarding previous infection; $P<0.001$ for both analyses).

We therefore conclude that most parents were aware of the measles immunisation campaign. Most of them understood and accepted the information given to them (except with regard to the vaccine's content). Furthermore, in the light of the government's aim to immunise 95% of the target population, our study showed that more than 90% of parents were willing to have their children immunised. Thus, as Elizabeth Miller discussed, a periodic mass campaign to combat future epidemics in industrialised countries may be a feasible alternative to a two dose schedule.

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1 Miller E. The new measles campaign. *BMJ* 1994;309:1102-3. (29 October.)

2 Illman J. Painful choice of risks. *Guardian* 1994 Oct 12.

Ethnic variation in epidemiology of hip fracture

EDITOR,—A study that we and colleagues performed recently in the west midlands¹ confirms the hypothesis of S J Calder and colleagues that fractures in Asians may partly be due to vitamin D deficiency.² In our community based study a group of elderly Asians was compared with control groups of elderly and young white subjects and young Asians. Low 25-hydroxycholecalciferol concentrations were common in both the old (22/39) and the young Asians (7/19) but not in the white subjects (2/36). 25-Hydroxycholecalciferol concentrations were significantly lower ($P<0.0002$) in the elderly and the young Asians than the white controls, while the parathyroid hormone concentrations were significantly higher ($P<0.0005$) in the elderly Asians than in the young controls.

Analysis of abnormal parathyroid hormone and 25-hydroxycholecalciferol concentrations indicated a high risk of osteomalacia (high parathyroid hormone and low 25-hydroxycholecalciferol concentrations) in 26% of the elderly Asians compared with 5% of the elderly white subjects and none of the young controls. Calcium, phosphate, and alkaline phosphatase values were normal in all subjects. Among the Asians, vegetarianism was not related to lower 25-hydroxycholecalciferol concentrations. Symptoms suggestive of osteomalacia were common ($P<0.05$) in elderly Asians compared with their white counterparts.

Bone disease in Asians may be due to osteomalacia, as the findings of these studies suggest, or to bone loss due to chronic low grade hyperparathyroidism consequent on vitamin D deficiency.³ More research is needed, looking at risk in ethnic subgroups and at appropriate modes of intervention.

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1 Solanki T, Hyatt RH, Hughes EA, Kemm JR, Cowan RA. Are elderly Asians at a higher risk of vitamin D deficiency and osteomalacia? *Age Ageing* (in press).

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3 Chapuy MC, Durr F, Chapuy P. Age related changes in parathyroid hormone and 25-hydroxycholecalciferol levels. *J Gerontol* 1983;38:19-22.

Clinical scores in the differential diagnosis of acute stroke

EDITOR,—Robert F Logan and colleagues¹ suggest that the clinical scores validated in Italy² might be useful in assessing patients with stroke who present too late for reliable computed tomography. They recommend, on population health grounds,

Numbers (percentages) of patients with stroke surviving one day or 30 days according to different criteria

	Intracerebral haemorrhage	Cerebral infarction	Total
All patients with definite diagnosis	58 (12)	439 (88)	497
Patients surviving one day:			
All patients	47 (10)	438 (90)	485
Excluding those who had:			
Lost consciousness or were drowsy	24 (7)	343 (94)	367
Allen score >4	21 (6)	356 (94)	377
Allen score >0	12 (4)	281 (96)	293
Patients surviving 30 days:			
All patients	31 (7)	394 (93)	425
Excluding those who had:			
Lost consciousness or were drowsy	20 (6)	332 (94)	352
Allen score >4	16 (5)	331 (95)	347
Allen score >0	8 (3)	261 (97)	269
New dependence	13 (5)	253 (95)	266

that antithrombotic secondary prophylaxis be given to patients surviving 30 days even if there was a 50% chance of the original stroke being haemorrhagic. These arguments do not, however, help in deciding an individual patient's treatment when the risk of haemorrhage must be minimised.

By this time after the stroke there may be insufficient information, particularly on acute blood pressure, to complete a Sriraj or Allen score. We therefore used data from the Oxfordshire community stroke project³ to estimate retrospectively the risks of including patients with intracerebral haemorrhage according to simpler exclusion criteria (table). When patients with an acute impairment of conscious level, or new dependence (grades 3-5) on the Oxford handicap scale⁴ at one month, are excluded the risk of including patients with intracerebral haemorrhage is reduced to less than 6%.

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1 Logan RF, Poulton SM, Severs MP. Clinical scores in the differential diagnosis of acute stroke. *BMJ* 1994;309:807-8. (24 September.)

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Stroke units

EDITOR,—Having recently established stroke services in south Ayrshire, we support Martin Dennis and Peter Langhorne's views on stroke units.¹ Although the use of assessment and treatment protocols is to be encouraged, we question their efficacy when implemented outside a specific stroke unit. Our acute stroke unit manages 90% of patients with acute stroke in south Ayrshire. Half of these are admitted direct, but because of short-stays of beds the other half are initially admitted to general medical beds and transferred to the unit later, during the first three days of their admission. Basic investigations have commonly not been completed in these patients who are transferred, who have often been inappropriately prescribed antithrombotic and antihypertensive treatment despite the widespread availability of the acute stroke protocol. The protocol is commonly not followed by junior medical staff admitting patients to the acute stroke unit unless overseen by nursing staff. Protocols are of value only if their implementation is rigorously overseen. Nursing staff with sole responsibility for patients with stroke are in an ideal position to ensure this and guide and

support junior medical staff in their initial management of patients with acute stroke.

As Dennis and Langhorne highlight, patients with stroke in acute facilities compete for nursing time with patients who are seen to have more urgent need. They also compete for medical, physiotherapy, and occupational therapy time. Rehabilitation of patients with stroke is time consuming and should include education and emotional and psychological support for the patients and their carers. For these reasons the use of resources by patients with acute stroke in most acute facilities is inadequate, and improvements in stroke care can realistically be achieved only by correcting deficiencies and targeting resources at the patients and their carers.

We believe that high quality care of patients with acute stroke and their carers can be achieved only by establishing acute and rehabilitation stroke units. Deficiencies in resources should be addressed to allow these units to function optimally.

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1 Dennis M, Langhorne P. So stroke units save lives: where do we go from here? *BMJ* 1994;309:1273-7. (12 November.)

Written material for non-English speaking patients

EDITOR,—We welcome D J Tuffnell and colleagues' efforts to improve communication with patients from ethnic minorities but wish to point out that there is no such language as Miripuri.¹ People from Mirpur predominantly speak Punjabi but read and write in Urdu. We agree that written information in Urdu can be helpful. Unfortunately, our experience of hospital literature in Urdu is that it is often unnecessarily difficult. Therefore it is important that if audiotapes are used the same mistakes are not repeated.

Virtually every health authority employs doctors from different ethnic backgrounds, yet these doctors are rarely involved in the preparation of strategies for communicating with patients from ethnic minorities. Communication with such patients would improve considerably if suitably qualified medical staff helped to prepare literature and audiovisual tapes.

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1 Tuffnell DJ, Nuttall K, Raistrick J, Jackson TL. Use of translated written material to communicate with non-English speaking patients. *BMJ* 1994;309:992. (15 October.)

Intercultural consultations

Language is not the only barrier

EDITOR,—Jeannette Naish and colleagues challenge the commonly held belief that the factors that deter non-English speaking women from attending their general practitioner for cervical screening are the same as those that deter English speakers,

according to previous studies.¹ Recruiting women through posters or invitation is likely to produce an interested group willing to share their beliefs. When the reasons for not accepting or complying with a service are being studied the beliefs of those people who do not attend are particularly valuable. Unfortunately, Naish and colleagues do not comment on whether the women who gave their views in this study had attended for smear tests.

The critical evaluation of services by users has been encouraged in Western consumer led societies. The expression of feelings (of criticism) is thought to be of value in the West. In many traditional Eastern cultures this is often considered to be "outsoken," and social deference among women is still regarded as desirable.^{2,3}

When views on a valued service, such as hospital appointments or admissions, are sought, people report more decisively their dissatisfaction with practical and concrete aspects of the service, such as food, car parking facilities, and waiting times and are more equivocal about the abstract aspects of the service, such as communication and emotions.⁴ Group meetings run by health workers with outside observers present are likely to reproduce this phenomenon, particularly among cultures where social deference is valued.

Naish and colleagues comment on the cultural behavioural differences between the ethnic groups but not on the effect that this may have had on their expression of views about smear tests. We cannot assume that language and the administrative system were the predominant barriers to the uptake of cervical screening by women from these ethnic minority groups, only that they were the barriers that these interested women were willing to discuss in these circumstances. Clearly these language and administrative barriers need attention, but further exploratory work with women is necessary before they can be assumed to be the limiting factors to attendance for smear tests.

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1 Naish J, Brown J, Denton B. Intercultural consultations: investigation of factors that deter non-English speaking women from attending their general practitioner for cervical screening. *BMJ* 1994;309:1126-8. (29 October.)

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Multilingual literature is useful

EDITOR,—We support the approach used by Jeannette Naish and colleagues to reach ethnic minority women and to overcome their reticence with regard to compliance in the cervical screening programme.¹ We have encountered this lack of response continuously over the past 25 years in our widespread population screening programmes, which used up to seven mobile units in the days before "age registered calls" existed.

We approached leaders of ethnic communities—who were often men—to get their agreement to speak to their womenfolk, to issue our leaflets in their language, and to introduce speakers of the language, but the authors' attempts to recruit enthusiasts in focus groups seems an excellent approach. We have successfully used similar focus groups to reach other sections of the community, such as homeless women and those in hostels and bed and breakfast accommodation, before setting up one of our mobile health screening sessions.

Our main approach has always been to produce suitably constructed and illustrated literature in a range of languages. An early version of our leaflet

"Calling all Women" was translated into Urdu and Hindi in 1966 as at that time these were languages of the main immigrant groups. This leaflet has been updated over the years, and the most recent edition, produced in colour and presented in 10 languages, was launched at the House of Commons, together with our new video, "Breast Awareness is for Life," on 1 November.

As a national charity we continue to approach the local health authorities and arrange to improve their local response by use of such literature. The correct language idioms for imparting such sensitive information are essential, and much revision by experts is necessary to achieve the maximum impact and response; this is time consuming and costly.

The new edition of our leaflet "Calling all Women" is available in English, Hindi, Gujarati, Bengali, Punjabi, Urdu, Turkish, Vietnamese, Cantonese, and Somali.

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Prescribing exercise in general practice

EDITOR,—Exercising the body is a way to exercise the mind, it seems. Derek Browne's response¹ to our editorial² vindicates our argument that exercise promotion in general practice must be evaluated rigorously; we look forward to seeing the outcome in Brockenhurst. Such evaluation is essential to guide exercise promotion. Without it there is the danger of yet another runaway train steaming through primary care, using up resources that might be better spent and causing confusion en route.

Marion E T McMurdo confirms this confusion by not distinguishing between the trials on selected groups of older people, which show the importance of exercise promotion for the health of frail elderly people, and trials of prescribing or promoting exercise in the community.³

Felicity Green and Janet Lord regard the paucity of good scientific evidence for much medical practice as an argument against vigorous study, but we take the opposite view.⁴ Randomised controlled trials of complex activities are difficult to perform but not impossible, as McMurdo and colleagues have shown.⁵ The high prevalence of morbidity in older populations makes the impact of intervention easier to identify in relatively small samples, allowing one less excuse for avoiding controlled trials as a rigorous form of evaluation.

The evaluation of the scheme in Stockport deserves wide dissemination and publicity but may not offset the conclusions reached by Biddle *et al* in their recent review of exercise promotion schemes in primary health care.⁶ The schemes reviewed seemed successful in that they were popular with patients, general practitioners, and leisure centres, but their effectiveness in achieving sustained increases in activity could not be measured for lack of rigorous attempts to do so. Few schemes targeted people at high risk of heart disease, and selection of participants was ad hoc. Overweight middle aged women predominated in most programmes, and the main benefits seemed to be psychosocial.