not all be accommodated in consultant posts four years later. The NHS required ready trained doctors to come in at the middle level, do the work for four years, and then return to their own countries without demanding consultant placements.

With doctors coming from European Community countries the demand for such middle grade cover from developing countries is now falling. Even now, however, doctors on the scheme are preferred to doctors coming over from mainland Europe because they have a better knowledge of English and have had more specialised training (three years is the minimum, five to eight years is the norm) when they start in this country. Besides this, doctors from Europe do nothing to help "achieve the balance" as they have a right to demand consultant posts in Britain.

Once this role of doctors on the training scheme is acknowledged, efforts can be made to improve the chances offered to them here—mainly by increasing the number of visiting registrar posts.

The training provided under the scheme is exactly the same as for local graduates. Aspiring candidates must realise further that this training, although sound, is achieved at a very British pace—such that a British doctor trains for eight years while postgraduate training in most other countries takes four years. As regards the relevance of such training, it is up to individuals to translate it to the needs in their own countries. It would be pretentious for the royal colleges to assume to tailor this training to the needs of each overseas doctor's country of origin.

J PULIYEL
Tutor

Department of Paediatrics,
University Hospital of South Manchester,
Manchester M20 8LR

1 Richards T. The Overseas Doctors Training Scheme: failing expectations. *BMJ* 1994;308:1627-31. (18 June.)

International fellows in general practice

EDITOR,—Tessa Richards highlights some of the failures of the Overseas Doctors Training Scheme.¹ For a number of reasons the Royal College of General Practitioners has not so far participated in this scheme. The college has, however, responded to the needs of several countries that are attempting to reorient their systems of primary health care to serve more adequately the needs of the population. It has done this through the appointment of international fellows, in most instances jointly with the ministry of health of the country concerned. These fellows are appointed for some years and during that period will visit the country on two or three occasions each year both to participate in teaching and to advise on future developments.

Recently the college has agreed to establish a system of accreditation for hospital and community training schemes in other countries. Unlike some other medical specialties, general practice or family medicine is in many respects culture specific. The college believes that the interests of the population are better served by helping other countries to help themselves, rather than by encouraging large numbers of doctors to spend some time in Britain learning the British way of general practice and seeking to obtain a qualification which is in many respects irrelevant to their own country's needs. This is very much in line with the comment of Sir Ian Todd in Richards's article.

The college does, however, recognise that for a small number of experienced, highly motivated potential future leaders in family medicine in overseas countries a period of appropriate postgraduate training in general practice in the United Kingdom would be suitable. It is therefore discussing with the General Medical Council and other interested parties the best way in which these doctors' needs can be served.

We can rightly be proud of the system of general

practice and family medicine in Britain. We have some responsibility to try to ensure that its best features are made available in an appropriate way to countries that wish to emulate us.

DOUGLAS G GARVIE
Chairman, International Committee

Royal College of General Practitioners,
London SW7 1PU

1 Richards T. The Overseas Doctors Training Scheme: failing expectations. *BMJ* 1994;308:1631-4. (18 June.)

Plight of refugee doctors

EDITOR,—The two articles discussing the intricacies of postgraduate training for overseas doctors in Britain provide a clear account of the many problems that arise.^{1,2} We wish to draw attention to the plight of doctors who are in Britain as refugees, who are not mentioned in either article. We realised the enormous adversity faced by this group when we took part in an orientation programme for refugee health workers at a college in north London.

Many of the doctors in the group were highly qualified and experienced in their own countries and are now faced with a series of seemingly insurmountable hurdles before they can hope to practise their profession in Britain. They are often burdened with great personal losses, and their hopes of returning to medicine soon turn to despair. Books, tuition, and entry fees for the Professional and Linguistic Assessment Board's test are difficult to obtain. The required clinical placements are few. For older doctors in particular, the prospects of finding work once they have been registered are small. As refugees these women and men do not have an option of returning to their homeland or moving to another country. Much talent may be going to waste because the system weighs heavily against their making a contribution in their adopted country.

More creative schemes are required to employ some members of this disenfranchised group of doctors. Can the profession rise to this challenge?

JOE ROSENTHAL
Lecturer in general practice
SURINDER SINGH
Lecturer in general practice

Department of General Practice and Primary Care,
Royal Free Hospital School of Medicine,
London NW3 2PF

1 Lowry S, Cope H. Postgraduate training for overseas doctors in Britain. *BMJ* 1994;308:1624-7. (18 June.)

2 Richards T. The overseas doctors training scheme: failing expectations. *BMJ* 1994;308:1627-31. (18 June.)

Screening for cystic fibrosis

Screening before pregnancy is preferred

EDITOR,—The paper by Sean Livingstone and colleagues produces further evidence that the antenatal context provides a pragmatic answer to the debate about a model for cystic fibrosis screening.¹ We wish to make two comments about the paper.

Firstly, the authors suggest (in table II) that a majority of women, whether entering the trial or not, preferred screening during pregnancy. This is not borne out by the results they present since, although small numbers are involved, 60.5% of the non-participants preferred screening before pregnancy, compared with 46% of the participants. A previous survey of pregnant women found that 98% preferred screening before pregnancy and 69% would accept carrier screening during pregnancy.² There is actually substantial interest in pre-pregnancy screening. This is significant because the acceptability of screening to the general population is likely to alter with the

improving clinical picture for cystic fibrosis' as well as gene therapy.

Secondly, the authors conclude that although pre-pregnancy screening "permits some reproductive choice" those choices are unlikely to be pursued. The experience from screening programmes for Tay-Sachs disease and thalassaemia are given as evidence. We doubt this for two reasons: the evidence, particularly from Tay-Sachs carrier screening, that carriers exercise reproductive choice by their choice of partner, and also because the examples quoted are particular to ethnic minority groups that were well informed and highly motivated so that genetic information was understood and used in making decisions. Cystic fibrosis is the first recessive gene that can be screened for in the white population, in which the knowledge of the disease and the motivation to avoid it are limited. The models are very different and one should be careful about generalising from one disease to another, especially when there are different social and cultural influences.⁴

The model of cystic fibrosis screening proposed by Livingstone and colleagues may be feasible but it limits reproductive choice for couples. Pre-pregnancy screening should not be dismissed since reproductive choice is preserved and there is evidence that it is preferred. If any lesson is to be taken from the successful ethnic minority screening programmes it is that population awareness and motivation are achieved only with appropriate public education programmes. The model for cystic fibrosis population screening, if that is what we want, needs wide debate since it may well provide a blueprint for subsequent genetic screening programmes.

JULIAN D A COOPER
Registrar in public health medicine

Wakefield Healthcare,
Wakefield WF1 1LT

ANTONY J FRANKS
Senior lecturer and consultant in public health medicine
University of Leeds,
Leeds

1 Livingstone L, Axon R A, Gilfillan A, Mennie M, Compton M, Liston W A, *et al*. Antenatal screening for cystic fibrosis: a trial of the couple model. *BMJ* 1994;308:1459-62. (4 June.)

2 Botkin J R, Alemagno S. Carrier screening for cystic fibrosis: a pilot study of the attitudes of pregnant women. *Am J Public Health* 1992;82:723-5.

3 Britton J, Knox A J. Screening for cystic fibrosis. *Lancet* 1991;338:1524.

4 Green J M. Practicalities of carrier screening: attitudes of recent parents. *J Med Genet* 1992;29:313-9.

Antenatal testing has higher yield

EDITOR,—Genetic centres offer testing for cystic fibrosis heterozygosity to relatives of affected individuals. Usually such programmes respond to consultants' requests. Super and colleagues proposed a proactive approach, taking screening into the population to the relatives of index cases.¹ In their trial they tested 1563 relatives and partners of subjects in 129 index families and identified 15 heterozygous couples (1%). By extrapolation to 10000 relatives and partners, 100 heterozygous couples would be detected and 25 affected fetuses found. It was claimed that this is equal to the number of children with cystic fibrosis born annually in their region.

Inspection of the data shows the fallacy of the argument. Among relatives tested no fewer than 427/1122 (38%) were carriers. Thus the study concentrated predominantly on close relatives. In the next phase, as the cascade moves to more distant relatives, the proportion of carriers detected will inevitably drop. It is misleading to extrapolate the figure of 1% for heterozygous couples found in the easy part of the programme to more difficult parts.

Furthermore, it cannot be assumed that all heterozygous couples would be planning pregnancies or would seek prenatal diagnosis and act on the results. Of the 15 heterozygous couples