

eries, mostly associated with multiple pregnancies, but no overall increase in congenital abnormalities.¹³

Couples worldwide are prepared to make enormous personal sacrifices to have the chance of having a child. In many European countries the governments directly or, through health insurance, indirectly, provide some assisted conception. While the glamour of test tube babies should not detract from the need to provide a fully comprehensive infertility service, surely it is time that there was better provision of assisted conception in Britain, where Edwards and Steptoe pioneered in vitro fertilisation.

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Refugee health

Requires a comprehensive strategy

The numbers of refugees and asylum seekers have increased dramatically over the past 20 years. The current conflict in Bosnia alone is estimated to have created one and a half million refugees, the most in Europe since the second world war. Even so, the largest refugee populations originate from the countries of Africa and Asia, and only 5% of them seek asylum in the industrialised world.¹ But 5% of the world's 15 million refugees is still a great many.

In 1991 western Europe registered 540 000 asylum seekers—nearly twice the figure for 1989 and more than three times that for 1987. Germany has been the main destination: last year it attracted a record 256 000 asylum seekers, who included ethnic Germans from eastern Europe and the former Soviet Union. While the United Kingdom scores low on the list of west European destinations for asylum seekers (coming ninth), flows have increased dramatically. Between 1988 and 1991 the number of refugees arriving in the United Kingdom rose by 500%. Last year the Home Office recorded 44 000 applications for asylum, including a growing proportion from unaccompanied refugee children; the numbers are still increasing.² With the open borders policy of the single European market coming into effect at the end of this year, illegal economic migration may confuse the picture and swell the numbers seeking entry into the United Kingdom.

London is the main destination for refugees to the United Kingdom with more than 90% of all asylum seekers settling there. In 1989 the now disbanded London Strategic Policy Unit estimated that there were 127 930 refugees in London, but exact numbers are difficult to obtain because no accurate source of statistics exists at local level. A recent study in two north London regions gave an estimate of 116 000 refugees living mostly in the inner city districts.³ Although such numbers are not overwhelming, refugees present the health and social services with particular challenges out of all proportion to their number.⁴ Not only do many of them suffer from the stress of insecurity and the effects of persecution, both physical and psychological, but they also encounter difficulties of access to services because of language problems and unfamiliarity with British systems. In addition, they face the health consequences of unemployment and poverty.

Dick has provided a useful classification of the health problems of refugees,⁵ which should also help to define the appropriate responses. Where people lived before becoming refugees (whether in the country or towns) is relevant to their nutritional status and their illnesses. Previous lifestyle and culture will shape the refugees' acceptance and expectations of health care in their new environment. The causes of upheaval, whether political conflict or famine, or both, will have implications for health. Children and elderly people are the most vulnerable, but women refugees also carry a disproportionate share of the problems of displacement.⁶ They invariably are responsible for the children; have often been sexually abused in prison, in flight, or as part of torture; and are often faced with greater responsibilities owing to the breakdown in traditional family and community structures.

The effects of displacement on the mental health of refugees may be profound. Many asylum seekers, already traumatised, are subjected to a hostile reception from the authorities or even detention at the port of entry. The problem is often then exacerbated by a long wait for a decision on their application for asylum. The Home Office takes an average of 53 weeks to deal with such applications, but many people have to wait for 18 months and sometimes for longer than two years.⁷

Several factors have been identified as important in the development of mental illness in displaced people.⁸ These include language difficulties, family separation, hostility from the host population, social isolation, and traumatic experience before displacement. A past history of violence may be particularly important in the life histories of refugees with serious somatic and psychological problems,⁹ yet few health professionals in this country are trained to care for such conditions. Failure to recognise and treat such patients early enough can lead to long term psychological problems.¹⁰

The specific health needs of refugees require a comprehensive strategy for health and social services that assembles accurate statistics on refugees at the local level, ensures that refugees have equality of access to services, and provides training for staff in refugees' health. The participation of

refugees themselves in all of these activities is essential.¹¹ Such a response by the health service will require intersectoral coordination, extra funding, and, above all, commitment. In today's economic and political climate none of this is easy, but ignoring the refugee crisis will not make it go away.

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Controlling leprosy

Multidrug treatment is not enough alone

A paper in this week's journal on the ocular complications of leprosy in a Romanian leprosarium reminds us of the appreciable morbidity of the disease—much of it avoidable (p 240). Will the World Health Assembly's goal of eliminating leprosy as a public health problem by 2000 soon make this paper of little more than historical interest?

The past decade has witnessed the most dramatic changes in the control of leprosy since dapsone was introduced 40 years ago. In particular, the introduction of short course multidrug treatment (with rifampicin, dapsone, and clofazimine) has had far reaching effects on the structure and strategy of leprosy control programmes.² In 1985 the World Health Organisation formulated three main objectives for controlling leprosy. These were to interrupt transmission of infection; to cure patients and, where possible, fully rehabilitate them; and to prevent deformities from developing.³ Multidrug treatment has since been promoted as the main tool to achieve these objectives. Though undoubtedly an advance, this emphatic promotion overlooks other important trends and influences in the control of leprosy.

Short course multidrug treatment has led to a dramatic fall in caseload in countries where leprosy is endemic because large numbers of patients have been discharged who would previously have remained on treatment registers for many years, if not for life.^{4,6} It is important to recognise that these falls in "prevalence" do not themselves indicate falls in incidence. Indeed, no data are yet available to show that treatment of cases of leprosy reduces incidence.

On the other hand (and accepting caveats that observed trends may reflect changes in case finding and case definition), dramatic falls in the incidence of leprosy (or case detection rates) have been documented in many countries for more than a decade.⁷ As these falls began in most countries long before the introduction of multidrug treatment at least two other factors should be considered. Firstly, much evidence exists that the incidence of leprosy falls with improving socio-economic standards,⁸ and the recent falls in incidence are likely to be related, at least in part, to these important, though ill defined, influences. Secondly, BCG vaccination has consistently been shown to protect against leprosy,⁹ and recent investigations have shown that it imparts greater protection against leprosy than against tuberculosis.¹⁰ Furthermore, studies suggest that BCG vaccine imparts protection against multibacillary ("many bacilli," lepromatous) as well as against paucibacillary ("few bacilli," tuberculoid) disease.^{10,11} This is important in so far as cases of multibacillary disease act as

sources of infection and their prevention should thus reduce transmission and ultimately the overall incidence of disease in the community.⁸

Current evidence shows that multidrug treatment is highly effective in reducing bacillary load and thereby ridding patients of *Mycobacterium leprae*.¹² Furthermore, the shortened course and the requirements for supervising the monthly doses of rifampicin have greatly reduced the problem of compliance. Patients with leprosy may still, however, develop disability due to nerve damage during or after chemotherapy. Because of the early discharge of patients systematic surveillance after treatment has been recommended to detect early signs of reaction and relapse.¹³ Various studies have shown that, in patients with paucibacillary disease, cellular hypersensitivity (type 1) reactions occur mainly within the first year after the end of treatment, whereas relapses are more likely to occur three to four years later.^{14,15} Reactions affect mainly nerves of the hands, feet, and face—thus resulting in disabilities,^{16,17} which are preventable if treated early.¹⁵ Corticosteroids have long been used to treat reactions, and there is current interest in improving these regimens and in using cyclosporins and similar drugs.¹⁸

The World Health Assembly's resolution defined elimination as a prevalence of under one case per 10 000 population. Prevalence, however, is not the only indicator important for public health. Without a reduction in incidence the problems of case finding, diagnosis, and registration will remain. And if disabilities are not reduced the disease's burden will remain. For these reasons multidrug treatment should not be regarded as the sole agent for controlling leprosy. This is particularly important in so far as recent data suggest a slight fall in the proportion of people with leprosy worldwide currently taking this treatment, reflecting the logistic problems of extending the policy to places that are difficult to reach.¹⁹ A possible solution is to shorten regimens still further. The recent finding that ofloxacin is bactericidal against *M leprae* has provided an opportunity to strengthen the effectiveness of multidrug treatment and further reduce its duration.²⁰ Clinical trials of an ultrashort regimen based on a one month course of ofloxacin have recently been initiated by WHO, but several years will elapse before their results become available.

For now, it seems that, whatever its duration, multidrug treatment is relevant mainly to achieving the second of WHO's objectives for leprosy control programmes—that is, curing and rehabilitating patients. According to recent results