# Section of Epidemiology and Preventive Medicine

President D D Reid MD

Meeting February 23 1967

# Health of Immigrants [Abridged]

**Dr W D Dolton¹** (Health Department, City of Bradford)

# Social Factors and the Health of Immigrants

This paper draws particular attention to social factors in the causation and manifestation of disease in immigrants. In the past whole families have migrated, often under religious or political pressure. Today motivation is usually economic and the wage earner, therefore, arrives first and unaccompanied. The health of immigrants is discussed in their order of arrival in recent years in the United Kingdom; first the men, then the women and children. Although children born to immigrants in this country are not themselves immigrants they may experience similar problems and are also discussed.

### Adult Males

Europe, Ireland and the Commonwealth have provided the bulk of immigrants in recent years. Although only 2% of the population are Commonwealth immigrants half of them are to be found in ten large cities where, in certain wards, they may exceed 50% of the electoral roll. Overcrowding is common in immigrant settlements. The unaccompanied male prefers minimal amenities at ten shillings a week in a house in multiple occupation; this allows him to send money home to his dependants. The effects of overcrowding on mental and physical health have been known for many years, particularly in relation to child health and infectious disease transmission.

Unattached males are always at special risk of venereal disease. In 1965 half the cases of gonorrhœa treated in England and Wales were in immigrants. Four out of every 10 new cases of early infectious syphilis were also in immigrants. The remedies are social and medical. Socially the arrival from overseas of women partners for the

<sup>1</sup>Present address: Divisional Health Office, Oulton Lane, Rothwell, Leeds

men helps to reduce the venereal diseases. Medically, contact tracing and therapy must be thorough. In practice it is more effective to reduce the pool of infected contacts than to attempt to change the social pressures which lead to promiscuity.

The symptoms of mental ill health are influenced by culture. In the West Indian, bodily strength is equated with manhood. The depressed individual who is concerned with his physical strength complains of aches and pains, burning in the eyes, low back pain, feeling of strange sensations going up into the head and inability to go to work (Hashmi 1966). In the Asian, manhood is often equated with sexual potency. 'Jiryan' is common (Carstairs 1958), the complaint being of power being sapped from the body and sexual weakness with continuous loss of semen. This neurosis may be misdiagnosed by the English practitioner as venereal disease rather than anxiety state.

Although sometimes inappropriate to our country there is often rigid adherence to traditional diet and clothing. In order to conform with religious practices there is, in Bradford, a food-canning factory run by and for Asians. It is for religious reasons, too, that poultry may be kept in undesirable places in order to ensure that the animal is killed according to the faith. The basis for the practice, which in Britain is regarded as unhygienic, of keeping live animals in the home is, in the tropics, a hygienic one – to ensure fresh meat in a hot climate.

An increasing number of patent medicines manufactured overseas are now being sold in this country. Many are claimed to be aphrodisiacs and some contain scheduled poisons. A certain number of Asian patients have drug-resistant tuberculosis. Occasionally and unwittingly this may be due to self-medication, antituberculous drugs being included in some cough mixtures sold in the bazaars of their native country.

Machinery, whether on the road or in the work place, is an unfamiliar hazard to peasant peoples. As fewer than 20% of West Pakistanis and 3% of East Pakistanis can read and write, even clear warnings in their own language about the dangers of moving machinery are of little value.

Malaria, leprosy, filariasis, the tropical anæmias and typhoid fever are uncommon. The prevalence of leprosy among immigrants appears to be about 1 per 2,000 in the city of Bradford. There are about 350 known cases in the country at the moment. The remote possibility of transmission of malaria and filariasis by blood transfusion should perhaps be borne in mind.

#### School Children

The flood of adult males ceased with the Commonwealth Immigrant Act, 1962. Mothers and children have, however, been arriving at everincreasing rates. In the last two years about 24 immigrant children aged 5-15 have been examined each week by the Bradford School Health Service prior to school entry. In addition to a general examination including vision and hearing they are specially examined for anæmia, tuberculosis and intestinal parasites.

Simple iron deficiency anæmia is more common in the immigrant child than in those born of immigrant parents in this country. About 1 in 10 of those from Asia have a hæmoglobin of less than 10 g/100 ml. Many hæmoglobinopathies occur almost exclusively in the negro races. Thalassæmia is found in many Asian countries (Beard & Signy 1965).

Country children are more often worm-infested than town children, the overall rate being one in five (Archer et al. 1965). Most have no symptoms but treatment is given on the presumption that any worm is detrimental to health. Dwarf tapeworm (2.8%) has been seen predominantly in the children from Gujarat, whipworm from the West Indies, while roundworm has a more uniform distribution. Hookworm has been the most frequent helminth (7.2%) and has been found in children born in Bradford who have never left Britain. Such cases only occur with gross breaches of the rules of hygiene and are usually found in a child with pica where infected soil has been eaten.

Work in Bradford (Stevenson 1962), confirmed elsewhere (Springett 1964), indicates that in adults tuberculosis is about 30 times more common in Pakistanis, 7 times in Indians and 3 times in Caribbean and Irish than in the British-born population. The very high rate of nonpulmonary

tuberculosis, some 100 times the local rate, has been of particular interest. Almost exactly half the 3,000 children examined have been Heaf positive and about 1 in 10 have reacted strongly (Rowland & Bell 1966). We suspect that the high number of reactors (indigenous population 11% positive at average age 13) indicates a high degree of nonspecific sensitivity. A recent child death from miliary tuberculosis, after BCG vaccination, has emphasized the importance of yet more research into the disease in immigrants.

A recent development affecting both physical and mental health of children has been the mosque school. Children leaving English school at four o'clock attend for instruction in their native culture, religion and language from 5 to 8 p.m.

# Womenfolk

Pregnancy brings most immigrant women into contact with the medical profession. More than half the illegitimate babies are now born to immigrants. For many Caribbeans marriage is contemplated only after a long period of stable cohabitation. Apart from interracial misunderstanding the real danger of this situation is to the unsupported mother and her child, an unregistered child minder deputizing for a loving grandmother while the mother goes out to work to support herself and her child.

There is public concern at the high birth rate of immigrants. The reunion of fertile couples is a real but only temporary factor. The fertility rate expresses more accurately the true position – in the year before the 1961 census the rates were only 14% higher than average in women born in India, Pakistan and Ceylon, 22% above average in those born in Northern Ireland, 35% in those born in the Irish Republic, while women born in the West Indies had a fertility rate of 73% above average.

They need not, however, have more than a fair share of maternity beds. While 95% were confined in hospital in Sheffield in 1965 (Parry 1966), in Bradford the proportion is no higher than in English-born women. Anæmia and tuberculosis are common in pregnant Asian women. In a recent series a third of the women had a hæmoglobin of less than 10 g/100 ml which, in a third of these, was associated with hookworm infestation.

It would seem wise for routine chest X-rays to be continued for all Pakistani and Sinhalese women. The recent death from miliary tuberculosis shortly after delivery of a woman with a negative chest X-ray only five months previously emphasizes the acute course of this disease in the Asian. The system of purdah is uncommon but is practised in some English cities (Dahya 1965).

#### Infant Health

In 1965 48 per thousand children born to Asian parents in Bradford died in the first year of life as against 24 per thousand born to the white population. During the year the rates for the social classes were I & II, 12; III, 18; IV & V, 30. A social class breakdown of the immigrant rate is unfortunately not available. In 1966 the infant mortality rate among Asian babies fell to 33.8 per thousand; a figure similar to that in Birmingham in 1964 (Millar 1964). The rate for children of Asian parents in Bradford was 33.3 per thousand and for West Indians 26.5 per thousand, which compared favourably with a rate of 40.6 per thousand recorded for English social classes IV & V. This confirms clinical experience that immigrant mothers are much concerned with infant welfare. The death rate of babies born to immigrant men and low-class English girls is little short of appalling; considerable numbers, too, come into the care of the Local Authority.

Despite almost total adoption of Western artificial feeding habits (cf. West Indian customs, Martin 1965), infant feeding practices cannot be blamed for deaths of Asian infants from bronchopneumonia and gastroenteritis (Aykroyd & Hossain 1967). Rickets, long mainly associated with dark skins, is a possibility and occurs in any under-privileged child where industrial smoke attenuates the sunlight. Paraffin heaters, a regular feature of West Indian lodgings, are a known fire hazard. It is possible that the upper respiratory tract infections to be found in many West Indian children are due to the high humidity resulting from the water vapour the heaters produce. A hazard to little boys of the Muslim culture is circumcision.

# REFERENCES

Archer D M. Bamford F N & Lees E (1965) Brit, med. J. ii, 1517 Aykroyd W R & Hossain M A (1967) Brit, med, J. i, 42 Beard M J & Signy A G (1965) Postgrad. med. J. 41, 624 Carstairs G M (1958) Lancet i, 1217 Dahya Z (1965) Race 6, 311 Hashmi F (1966) Immigration: Medical and Social Aspects, Ciba Foundation Report, Ed. G E W Wolstenholme & M O'Connor. London; p 48 Martin C R A (1965) Med. Offr 114, 113 Millar E L M (1964) Ann. Rep. med. Offr Hlth Birm. Parry W H (1966) Med. Offr 116, 163 Rowland A J & Bell G A (1966) Publ. Hlth (Lond.) 80, 179 Springett V H (1964) Lancet i, 1091 Stevenson D K (1962) Brit. med. J. i, 1382

#### Dr H E Thomas

(West Heath Hospital, Birmingham)

#### **Tuberculosis in Immigrants**

The plan of this paper will be to consider briefly in general terms the factors that affect tuberculosis among immigrant groups, to review the evidence we have from local city surveys, from national surveys and from drug-resistance surveys and then to assess the conclusions of these findings.

# General Problems

Considering the problem of migration and tuberculosis in general terms, it is likely that there will be a higher rate of this disease among migrant groups, even if they move between areas with similar incidence. Migrant groups contain a higher proportion of young adults who are associated with higher morbidity rates; change of environment may bring some into contact with tuberculosis for the first time and, in general, the conditions of housing of migrants are inferior.

If migration occurs from an area of low tuberculosis rates to one of high rates, then, in addition to these factors, there is an enhanced risk of a high proportion of primary infections with its attendant risk of subsequent post-primary disease. If migration occurs from areas of high tuberculosis rates to areas with low rates, then, unless there is a screening process, the migrant group is likely to carry with it a high level of tuberculosis which will become evident soon after the migration. One would expect, therefore, that tuberculosis would be more prevalent in any migrant group. I shall now consider some of the factual evidence in this country.

# Local City Surveys

Surveys of the problem of tuberculosis in immigrants have been reported by Springett from Birmingham (1964, 1966), by Stevenson from Bradford (1962), by Nicol Roe from Uxbridge (1959), and by Aspin from Wolverhampton (1962). These surveys have yielded similar findings, so I will limit myself to Birmingham as an illustration of how they have helped in the evolution of our knowledge of this problem.

From the beginning of 1956, Dr Springett arranged that, for every notification in the City of Birmingham, the tuberculosis health visitor should endeavour to ascertain the place of birth of the individual notified. Criticism has been levelled at the use of 'place of birth' as a criterion for classification, but this was chosen as being the most suitable, since it is recorded at a Census and,