

## Regional Health and Morbidity Variations in the United Kingdom

In December 1999, the Townsend Centre for International Poverty Research at Bristol University published 'The Widening Gap', which was an examination of spatial differences in wealth and health across the United Kingdom. One of the findings of this report was that in 1999 there were considerable variations in morbidity (defined as ill health due to any cause) between the regions of the UK. The data was presented by Parliamentary Constituency.

Figure 1 gives some of the results of this report. The 16 worst constituencies for morbidity were found to be concentrated in urban areas. Eight were located in Glasgow, three in Manchester and the rest in northern England, the only exception being Southwark North and Bermondsey, in London. The areas of low morbidity were mainly in suburban areas, rural areas or in coastal holiday resorts. Most of the areas with the lowest levels of morbidity were located in the south of England. However, there were pockets of low levels of morbidity in other areas of the UK.

### Explaining regional variations in morbidity - the West Midlands of England

The reasons for this geographical distribution can be explained by an examination of one particular region of the United Kingdom. The West Midlands conurbation, a sprawling urban area which stretches from Birmingham in the south east to Wolverhampton in the north west, whilst not containing any of the 28 worst or best parliamentary constituencies for levels of morbidity, has within it a pattern of geographical variations in health similar to the United Kingdom as a whole.

Figure 2 shows one measure of morbidity, emergency admissions rate for stroke, in 2006-2007 for the West Midlands region. This measure refers to hospital casualty department admissions of patients who have suffered a stroke (a disruption of blood supply to the brain). The map shows

Figure 1: Health data for selected parliamentary constituencies, 1999

Data is shown as 'SIR<65', which is an illness ratio relating to people under 65, which uses rates of limiting long-term illness

Constituency (worst figures)	SIR<65 Figure
Southwark North and Bermondsey	124.6
Glasgow Shettleston	109.7
Tyne Bridge	106.3
Glasgow Anniesland	103.0
Greenock and Inverclyde	94.1
Manchester Central	88.6
Glasgow Govan	86.1
Glasgow Pollok	84.9
Glasgow Baillieston	80.4
Salford	73.0
Glasgow Maryhill	72.6
Manchester Blackley	69.9
Glasgow Springburn	67.9
Liverpool Riverside	62.9
Glasgow Kelvin	54.9

Constituency (best figures)	SIR<65 Figure
Woodspring	30.0
South Norfolk	35.7
Buckingham	38.0
Chesham and Amersham	38.2
Sheffield Hallam	39.1
Witney	39.4
South Cambridgeshire	41.1
West Chelmsford	42.0
South Suffolk	46.0
Northavon	47.9
Esher and Walton	51.6
Wokingham	53.2
Romsey	54.3
United Kingdom (average figure)	63.3

Source: Bristol University

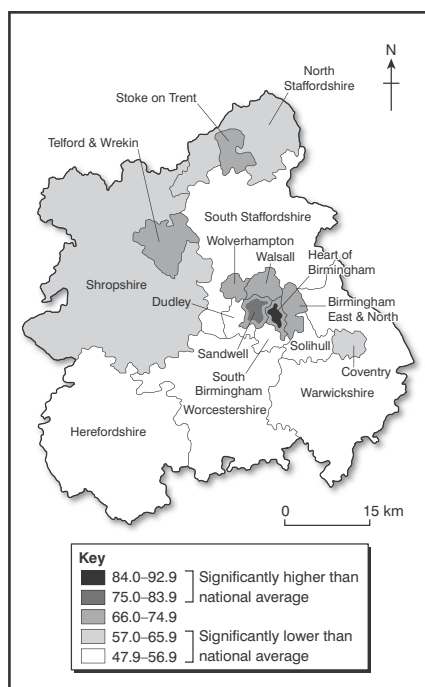
wide variations between areas. Some have a rate of admissions which is significantly lower than the national average, like the mainly rural counties of Herefordshire and Worcestershire, whilst there are two areas which are significantly above the national average. These areas are Heart of Birmingham, and the Metropolitan Borough of Sandwell, which is located in the area called the Black Country to the north west of Birmingham.

### Deprivation and morbidity

Heart of Birmingham and Sandwell are affected by deprivation (Figure 3). Deprivation exists when a person's

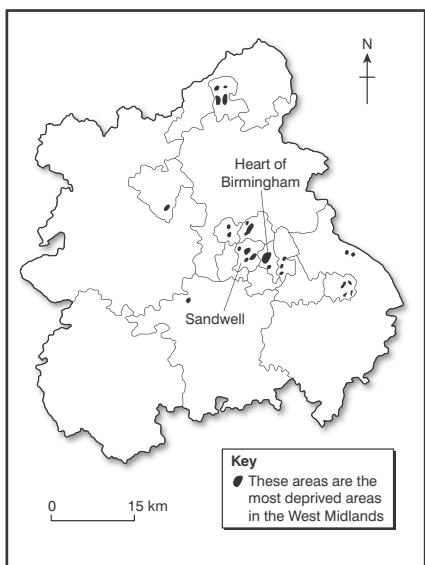
overall quality of life or living standards are below a level which is considered reasonable by society. In the UK, the Government uses a combination of a range of measures to determine deprivation, which includes statistics relating to health, education, access to housing, income, employment and child poverty. The Townsend Centre study found that there is a direct correlation between deprivation and morbidity. Average household incomes in the worst health areas are 70% those of the best health areas. There are 3.6 times as many people not working in the worst health areas compared with the best health areas. Areas suffering

Figure 2: Emergency admissions rate in the West Midlands, 2006-07



Source: Department of Health

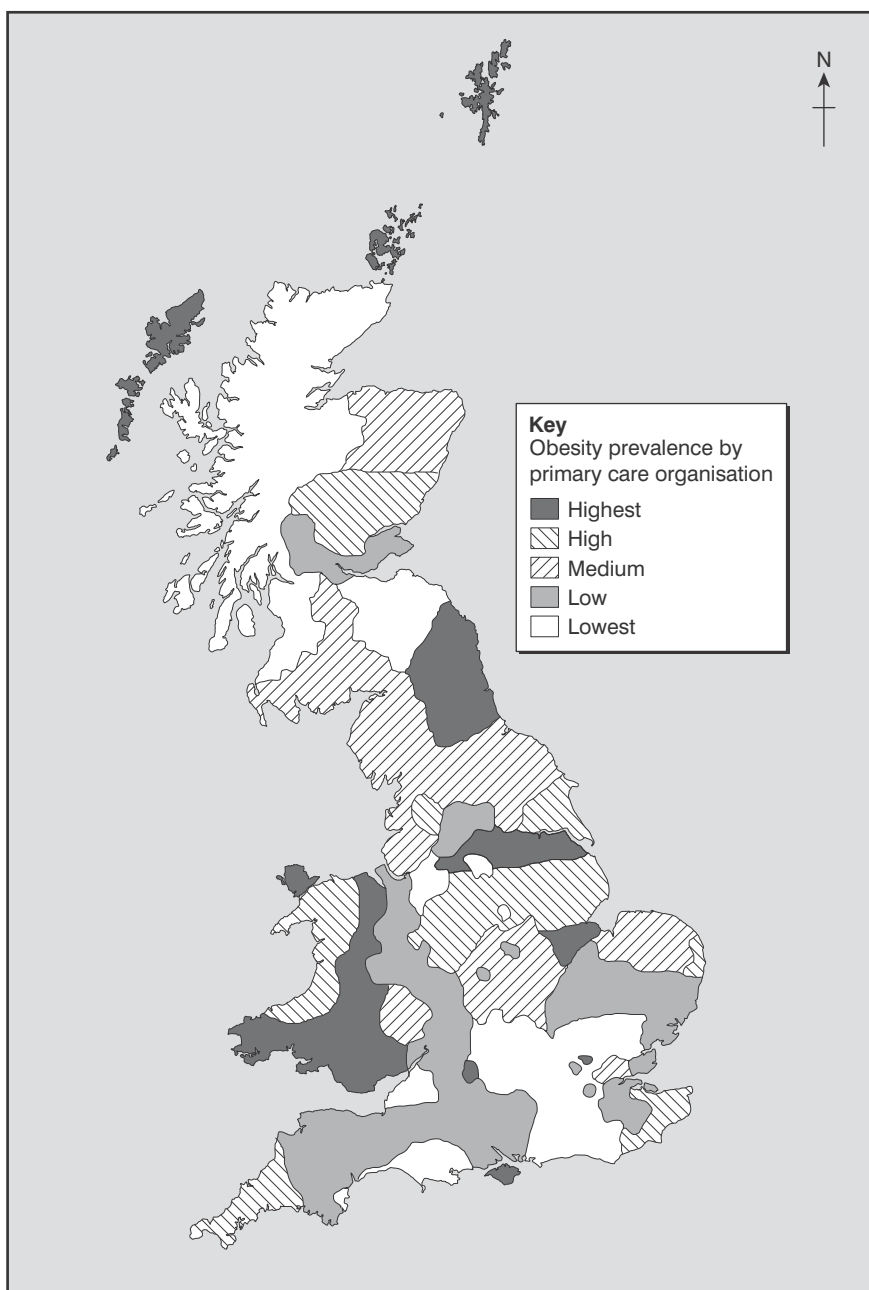
Figure 3: Areas experiencing multiple deprivation in the West Midlands, 2007



from deprivation and poor health have GCSE failure rates more than 1.5 times higher than the areas of best health. In the areas of poor health, smoking, alcoholism, abuse of drugs and obesity are much more prevalent than in areas of good health.

Obesity is considered an important contributor to high levels of morbidity. If a person is obese they have extra body fat which has built up to such an extent that it may cause health problems. Levels of obesity

Figure 4: Obesity prevalence by primary care authority in Britain



Source: The data for Figure 4 is produced by Dr Foster Research. More detailed information can be found at [www.drfoosterhealth.co.uk/features](http://www.drfoosterhealth.co.uk/features).

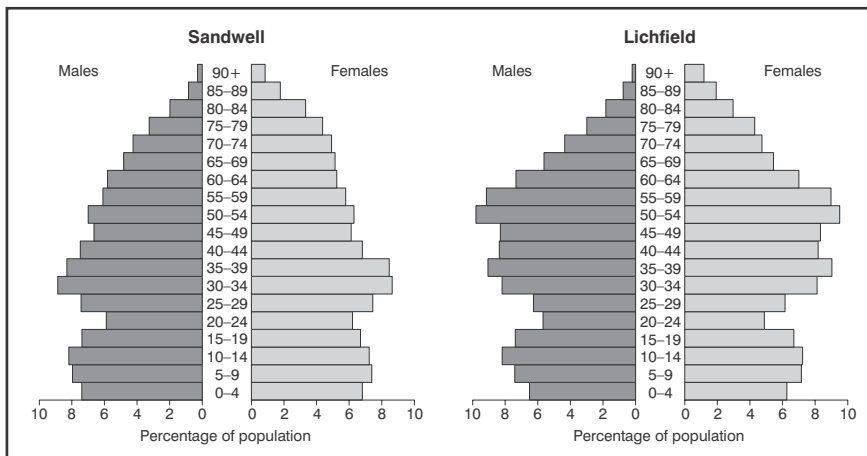
are a particular cause for concern, as obesity can lead to increased risk of heart disease and stroke. Figure 4 shows obesity levels in Britain. In Britain, one in four people are now considered to be obese and the trend is increasing. Current trends suggest that by 2050, 60% of men, 50% of women and 25% of children will be obese. There are regional variations in levels of obesity, which are similar to patterns of morbidity and deprivation, with much of the south east of England having lower rates of obesity than places in Wales and in northern England, as shown in Figure 4.

### Inner city areas

Sandwell suffers particularly from deprivation. It was the ninth most deprived district in England and the fourth worst outside London, according to the 1991 census.

Areas like Heart of Birmingham and Sandwell which suffer from high deprivation are often inner city areas. All the worst constituencies in Figure 1 are inner city areas. Many of these areas have long been deprived in relation to other areas. They have seen a rapid decline in employment in recent years, largely due to the closure of primary and manufacturing industries. In Heart of Birmingham and Sandwell

Figure 5: Age-sex population pyramid for Sandwell and Lichfield, 2001



Source: Office of National Statistics

these industries were coal mining and metalworking and chemical industries. Often these industries created unhealthy working environments and a legacy of ill-health in the unskilled and manual workers who worked in these industries. Diseases like asbestosis (a type of cancer) were the result of the use of asbestos as a building material, mainly in factory buildings but also in public buildings like schools. Many of the houses which were built for workers in inner city areas were of poor quality and lacked adequate heating for example. This led to problems of damp which were not conducive to good health.

Moreover the decline of these industries has led to high rates of unemployment and a decline in incomes. This has meant that people have less money to spend on improving their quality of life, for example by using leisure facilities to help maintain their fitness and health. Private companies providing leisure facilities will be unlikely to locate in these areas. Local authorities in such areas often have less money to spend on providing and improving leisure facilities as well, because the areas are poor and there are many demands on their spending.

Inner city areas can be unpopular places to live with a low quality of environment and high crime rates. One of the consequences of this is that health authorities can find it difficult to attract general practitioners to work in inner cities, which has meant that existing doctors have to deal with more patients. This has made it more difficult for them to cope with health needs, leading to increased morbidity. Inner cities are often places where migrants who are new to the United Kingdom end up living when they

first arrive. These migrants may have difficulty in communicating in English, so it is more difficult for doctors to diagnose their health problems, which also can lead to increasing morbidity.

### Migration away from inner city areas

Some inner city areas can be places of out-migration, where more people are moving out than moving in. The types of people who move tend to be those who are well qualified and looking to find employment, and who wish to move to suburban or rural locations where they feel the quality of life will be better. This pattern of migration affects the population structure of an area – the characteristics of a population in terms of its age and sex. It is usually shown by a population pyramid. Figure 5 shows the age structure of Sandwell's population in 2001. Sandwell has above-average percentages of people in the majority of the age groups above 60 years of age where morbidity is highest, compared with the UK as a whole. Between 1981 and 1991 there was a 60% increase in the number of people over 85 years of age in Sandwell. The population pyramid for Lichfield, a small town in Staffordshire, is shown in Figure 5. It would be expected that Lichfield would have lower levels of morbidity as it shows generally lower than UK averages for percentages of people in the older age groups.

It needs to be remembered, however, that not all inner city areas suffer high levels of deprivation. Some people prefer to live in inner city areas. Much public and private money has been spent in inner city areas to improve quality of life. As well, care has to be taken not to brand all older people as

being unhealthy. In the UK, levels of morbidity of people over 60 vary a great deal, with many people in this age group enjoying good health.

### Improving health care in deprived areas

Over many years much public money in the UK has been spent on different types of initiatives to regenerate deprived areas. Traditionally these initiatives have been concerned with improving the transport infrastructure of deprived areas as well as the environment. It was hoped that by doing this, private companies would be more likely to locate in these areas. This would create jobs and so residents' living standards would be improved, as well as their health, and levels of deprivation would be reduced.

However in recent years new regeneration initiatives have been introduced in inner city areas which are aimed directly at improving people's lifestyles, especially in relation to health.

In the West Midlands as a whole, the Government has tried to focus on reducing the problem of obesity by improving education relating to healthy eating. It has introduced the National Schools Fruit and Vegetable Scheme, which provides every schoolchild aged between four and six with a free piece of fruit every school day. The '5 A DAY' programme aims to teach pupils about the importance of a healthy diet, including eating five portions of fruit and vegetables a day. This is particularly important as research in the West Midlands suggests that only one-fifth of children eat this amount. There is also a Healthy Schools Initiative, which encourages schools to work to achieving a set of standards which can lead to the winning of awards. Regional coordinators have also been appointed to encourage greater understanding of obesity issues in schools and to support healthy eating.

### Sandwell MBC – a case study of the implications of poor health on the provision of health care systems

Primary care trusts are geographically based. They are the National Health Service organisations responsible for the care that people first require when they have a health problem. Trusts



work with local authorities and other agencies to provide health and social care appropriate to the needs of an area. In the early 1990s the Sandwell Primary Care Trust decided to adopt a new approach to providing primary health and social care services in Tipton, one of the most deprived areas in Sandwell. The broad aim was to try and improve the lifestyles of residents, so as to reduce morbidity rates. The Trust joined forces with a large local general practice and a community development project which were both looking for new premises. The aim was to improve local access to a number of health and social care services by providing a new healthcare and community centre where a wide range of these services would all be under one roof, and so more accessible to residents. This centre was the Neptune Health Park, a part of which is shown in Figure 6. As well as the facilities mentioned above, the Health Park now has a community café (which serves healthy meals), a pharmacy, an optician and a citizens advice bureau. A Sure Start Children's Centre is located on the Park. Sure Start is a Government programme which aims to deliver the best start in life for every child. It does this by coordinating initiatives to improve pre-school education, childcare, health and family support.

Another development next to the Health Park is a new housing estate called Neptune Park. In part of this the developer has built a housing development called 'Swallow Fields' of one- and two-bedroom flats. The development is specifically designed for people over 55 who suffer from health and mobility problems. The scheme aims to help these people live independently, by employing a lifestyle coordinator who can support the health and wellbeing of residents. The development also has community facilities and emergency alarms. As a result, residents should be able to enjoy an improved, healthier lifestyle.

Much of the funding for this Park came from the Tipton City Challenge urban regeneration programme, a Government-funded organisation working to regenerate the economy and quality of life in Tipton.

### Improving health and fitness

Other examples of regeneration schemes to improve people's health in inner city areas involve efforts to

Figure 6: Neptune Health Park



improve fitness. The Sandwell PCT has established a Physical Activity team which has set up an initiative called 'Sandwell Stride' to encourage older people to improve their fitness by walking for half an hour a day, five days a week. Sandwell Stride has developed a series of health walks across the Borough. People who take part in these walks can qualify for free meals at the PCT-sponsored Community Cafes which serve healthy food. Along the same lines, the PCT has introduced a 'Walk 2 Beijing' initiative for adults. Participants take part in a health assessment where their blood pressure, waist-hip ratio and body mass index (a measure of obesity) are measured. Then people are issued with a step counter and record sheet so they can record the number of steps they take daily. Three months later the health assessments are repeated and if people have achieved an improvement in one of their assessments, they can qualify for up to £40 worth of vouchers which can be used in local high street shops

and supermarkets. The PCT hopes that the total number of steps covered by all participants will be equivalent to the distance between Sandwell and Beijing in China.

As in the rest of the UK, smoking is a major contributor to morbidity in Sandwell, as it leads to increased rates of heart disease and lung cancer. In response to this, the PCT has introduced the Sandwell Stop Smoking Service which offers free advice and help to smokers. One of the main groups that this initiative has targeted is young smokers, because this is a significant group. In Sandwell in 2003, 11% of 11-15 year old were smokers.

All these initiatives are aimed at persuading people to improve their lifestyles, which will hopefully reduce their levels of morbidity. Such initiatives are becoming increasingly common all over the UK.

## Focus Questions

1. 'A North-South divide exists in the UK in terms of levels of morbidity'. To what extent do you agree or disagree with this statement?
2. Explain how each of the following can contribute to high levels of morbidity:
  - (a) income level
  - (b) occupation type
  - (c) education
  - (d) environment and level of pollution
  - (e) the age of a population.
3. Look at Figure 5. Describe the age structure of the population in both Sandwell and Lichfield. Say why high levels of morbidity are likely to be more common in Sandwell than in Lichfield.
4. Referring to examples, describe what can be done to tackle problems of morbidity.