

Stockport JSNA

joint strategic needs assessment

JSNA Digest - Obesity

December 2007

JSNA - Digest for Obesity

This digest aims to provide information on the key lifestyle issue of obesity; describing current patterns within Stockport and anticipated future trends, using the best available local and national data, although it should be noted that is though that local source under-estimate the true levels of obesity.

Obesity is responsible for more than 9,000 premature deaths per year in England and is an important risk factor for a number of chronic diseases such as heart disease, stroke, some cancers, and type 2 diabetes.

- Obesity is responsible for:
 - o 5% of deaths from coronary heart disease in men and 6% in women
 - o 14% of cancer deaths in men and 20% in women are attributed to obesity
- Raised cholesterol is responsible for:
 - 45% of deaths from coronary heart disease in men and 47% of deaths from coronary heart disease in women.

Obesity is also associated with poor mental wellbeing, being linked in particular to low self esteem and social isolation. The current expectation nationally is for rates of obesity to continue to increase. Nationally there is particular concern about the rise of childhood obesity and the implications of such obesity persisting into adulthood.

Current Prevalence - Childhood obesity

2005/06 SCHOOL NURSE HEIGHT AND WEIGHT – RESIDENT IN:						
BMI Category		Bramhall & Cheadle	Heatons & Tame Valley	Marple & Werneth	Stepping Hill & Victoria	Stockport
Reception	Not overweight / obese	85.6%	81.1%	84.3%	82.0%	82.9%
	Overweight	9.3%	9.6%	11.2%	10.3%	10.0%
	Obese	5.1%	9.3%	4.6%	7.7%	7.1%
	Sample Size	589	614	394	884	2,606
	Not overweight / obese	74.6%	70.2%	68.4%	71.1%	71.3%
Year 6	Overweight	11.9%	15.4%	12.7%	14.7%	13.7%
	Obese	13.5%	14.3%	19.0%	14.2%	15.1%
	Sample Size	646	615	490	875	2,748
TOTAL	Not overweight / obese	79.8%	75.7%	75.5%	76.6%	76.9%
	Overweight	10.7%	12.5%	12.0%	12.5%	11.9%
	Obese	9.5%	11.8%	12.6%	10.9%	11.2%
	Sample Size	1,235	1,229	884	1,759	5,354

Source: Stockport PCT

Complete and robust data is only available for one year and, therefore, trends are difficult to identify. Stockport has a fairly low rate of childhood obesity compared to the rest of Greater Manchester, but 11% of the population are still obese, a further 12% of children are overweight. Rates of obesity are much higher for year 6 as compared to reception aged children. Analysis has showed that rates are highest in areas ranking in the second most deprived quintile.

Using the information collected in the child height and weight programme we can estimate that there are **6,800 obese children aged 0-17 years** in the area.

National data however suggests that this data may under-represent the levels of obesity in children, in 2004 19% of 2-15 years olds were found be obese and when extrapolated to Stockport this gives an estimate of **8,950 obese children aged 2-15**.

Current Prevalence – Obesity in adults

The adult lifestyle survey asked respondents to self-report their height and weight so an estimate of body mass index (BMI) could be calculated; there are concerns about the reliability and robustness of analysis of BMIs which is based on self-reported data and therefore the following finding should be treated with caution and seen as a likely underestimate of the issue. The survey indicated that 47.1% of adults in Stockport were overweight (i.e. with a BMI greater than 25) and 12.6% were obese (i.e. with a BMI greater than 30). Rates of overweight and obesity increased with age; more than half of respondents aged 65+ being either overweight or obese compared to only 20.9% of the population aged 18-24 years. Rates of obesity tend to peak in the late middle age and decline in the older age groups. Extrapolating these findings to the Borough's population the survey suggests that there are 27,100 obese people aged 18+ in the area.

2006 ADULT LIFESTYLE SURVEY – AGED 18+ RESIDENT IN:						
Obesity	Bramhall & Cheadle	Heatons & Tame Valley	Marple & Werneth	Stepping Hill & Victoria	Stockport	
Not overweight or obese	54.7%	51.9%	53.8%	51.3%	52.9%	
Overweight only	35.1%	33.7%	34.2%	34.7%	34.5%	
Obese	10.3%	14.4%	11.9%	14.0%	12.6%	
Sample Size	2,406	1,813	1,592	2,406	8,573	

Source: Stockport PCT

National data from the Health Survey for England, however, suggests that this data may under-represent the levels of obesity in adults, in 2004 23.7% of 16+ years olds were found be obese; a rate almost double that found in the local survey. When the national age-sex specific rates are applied to the 2004 population for Stockport we reach an estimate of **52,450 obese people aged 16+** in the area.

At all ages the proportion of people who are overweight or obese increased with deprivation, a pattern which is mirrored by national data but which is less clear than for some of the other lifestyle factors, for example smoking.

2006/07 QOF PREVALENCE – ALL AGES – GP REGISTERED IN:						
On Register of Obesity	Bramhall & Cheadle	Heatons & Tame Valley	Marple & Werneth	Stepping Hill & Victoria	Stockport	
Obesity – number	4,532	6,284	3,845	6,677	21,338	
Obesity – rate per 1,000	53.6	79.3	70.1	87.7	72.4	

Source: QMAS

Data from GP registers suggest that more than **21,000 obese people of all ages** are registered with a Stockport GP (wherever they live), 7% of the total list, however these figures are likely to be an underestimation, partly due to the low levels of measurement.

Health Impacts

Perhaps the most dramatic impact has come in the area of **diabetes**. Already it is estimated there are over two million diabetics living in the UK (only around half of whom will have had the disease diagnosed) and that figure is projected to rise by 50% to three million by 2010. This increase represents a massive and growing threat to public health, given that typically the gap between onset and diagnosis of the disease is 9-12 years. Currently there are more than **10,000 diagnosed diabetics** registered with GP practices in Stockport.

Deaths linked to obesity shorten life by on average 9 years; in 1998 an in-depth study found that nationally obesity was responsible for more than 9,000 premature deaths and more than 30,000 deaths in total. In Stockport, applying the national obesity attributable mortality agesex risk rates, we can estimate that **obesity caused 55 premature deaths** (11% of the total) in the Borough and 185 (6%) deaths for all ages.

The British Heart Foundation estimates that around 5% of **CHD** deaths in men and 6% in women are due to obesity, these rates would be even greater if the large number of overweight adults was also considered. Similarly around 14% of **cancer** deaths in men and 20% in women are attributed to obesity; with breast, endometrial, oesophageal and colonic cancers being especially associated. According to Professor Julian Peto, for the Institute of Cancer Research, obesity is "far and away the most important avoidable cause" of cancer in non-smokers.

Anticipated Future Trends

Brief description of population change

The total population of Stockport (281,000) is expected to remain stable until 2011, however there are anticipated to be significant changes to the structure of this population. Stockport is an **aging borough** with the numbers and proportions of people aged over 65 and in particular those aged over 85 growing rapidly over the next 5 years. It is anticipated that there will be an extra 2,500 people aged 65+ (an increase of 5.6%).

Conversely it is anticipated that the younger population will continue to decrease, by 2011 it is projected that there are likely to be 4,000 fewer children and young adults aged under 20 years in the area, a fall of 5.9%. Evidence is emerging however that birth rates in the borough are increasing, and if this trend is sustained, projections of population will need to be revised.

Population change impacts on the numbers of obese people

Current estimates, based on the child height and weight programme suggest that 11.2% (6,800) of Stockport's population aged 0-17 years are **obese**. Given the anticipated decreases in child populations to 2011, if this level of obesity were to continue there could be almost **400 fewer obese children in five years time**. National data however, suggests that the levels of reporting in Stockport may be underestimating the burden of obesity, if national trends were followed there would currently be **8,950** obese children aged 2-15 years in the area and numbers would be expected to decrease by **450** in the next five years, however there is evidence that the numbers of births may be increasing and therefore this current anticipated drop in numbers may not happen.

Current estimates, based on the adult lifestyle survey suggest that 12.6% (27,100) of Stockport's population aged 18+ are **obese**. Given the anticipated increases in adult populations to 2011, if this level of obesity were to continue there could be an additional **400 people aged 18+ with a BMI greater than 30 in five years time**. National data however, suggests that the levels of reporting in Stockport may be underestimating the burden of obesity, if national patterns from 2004 were maintained in Stockport there would currently be **52,400** obese adults aged 16+ in the area and numbers would be expected to increase by **900** in the next five years.

Projections of trends in levels of obesity

In the previous section we estimated the changes in numbers of obese people in Stockport over the next five years if levels stayed the same and only the demographics changed. This, however, is unlikely to be the pattern experienced as past data shows that levels of obesity are rising rapidly. A recent national study by the Foresight Unit of the Government Science office, 'Tackling Obesities – Future Choices', uses trend data from 1994 to 2004 to predict future levels of obesity.

The foresight report uses a different measure of childhood obesity than other national reports, instead focusing on the International Obesity Task Force (IOTF) cut-off as its measure. In Stockport the obesity prevalence from the childhood height and weight screening programme using this measure was just 3.5%; compared to a national estimate of 8% for males aged under 20 years and 10% for females aged under 20 years. In the future the obesity levels for the under 20's are predicted to increase to around 15% by 2025, and to approximately 25% by 2050. Extrapolating to Stockport this would equate to **6,250 obese children aged under 20 in 2004**, **9,300 obese children aged under 20 in 2025** and **15,450 obese children aged under 20 in 2050** (using 2029 population projections). This means an increase of 3,050 children between 2004 and 2025 and a further increase of 6,150 between 2025 and 2050 — and if, as emerging trends seem to show, the total child population begins to grow again these levels could increase further.

For adults the foresight report suggests that by 2015, 36% of males and 28% of females will be obese; by 2025, these figures are estimated to rise to 47% and 36% respectively and by 2050, 60% of males and 50% of females could be obese. Applying these estimates to the projected population of Stockport this would equate to **74,100 obese people aged 16+** in **2015**, **96,650 obese people aged 16+** in **2025** and **130,750 obese people aged 16+** in **2050** (using 2029 population projections). This means an increase of 21,600 adults between 2005 and 2015, an increase of 22,600 between 2015 and 2025 and an increase of 34,100 between 2025 and 2050.

Key Prevention Messages

The two key public health messages for preventing people from becoming obese are to maintain a healthy diet, particularly by eating **5 portions of fruit or vegetables** a day and to undertake 30 minutes of moderate **physical activity** on at least 5 days over the course of a week. Figures from the both the adult and child and young people's lifestyle surveys are not encouraging.

For '5-a-day' only a fifth (20%) of the population managed to achieve this level of consumption, and the average in Stockport is lower than levels found in national studies. Intake of fruit and vegetables is lowest in the 18-24 years population group, all other age groups (i.e. children, adults and older people) have similar levels of consumption; with 40-59

year olds eating the most. More females than males eat five or more portions of fruit and vegetables per day; however, this still amounts to less than a quarter of females eating their 5-a-day. The proportion of individuals consuming five or more portions of fruit and vegetables per day increases with affluence for all age groups.

For **physical activity** children fared better than adults, only a quarter of adults undertook the recommended five or more 30 minute sessions of moderate physical activity each week, and a fifth reported completing less than one session a week; there are no clear patterns relating to deprivation. Children are more likely to be physically active with almost 60% of 10-15 year olds reporting that they exercised for more than 7 hours a week and fewer than 10% of children failed to exercise for more than 2 hours a week.

Services

There is currently no comprehensive 'obesity' service in Stockport, instead a range of smaller scale services exist to help people who are already obese, services which are used by a small minority of the obese population. These include the:

- **Sports Trust services**, such as the 'Big Club', a targeted exercise class including swimming and gym sessions, open to people with a BMI over 30 who are self referring. The service is operating at full capacity at present with four full sessions per week.
- **'Keep it off for good' scheme** is a joint project to tackle lifestyle change for people with BMI over 30, organised between PCT and Council; the service will see 224 participants this year.
- PARIS Physical Activity on Referral in Stockport, a scheme commissioned by the PCT and run by Sports Development, offering referral process from primary care teams in the disadvantaged parts of Stockport. 500 patients per year receive assessment and tailored programmes of activities within Sports Trust facilities and other venues and activities such as walking; about half referrals are for obesity.
- Weight watchers on prescription is a new scheme piloted by the PCTs Food and Health team for targeted groups such as pregnant women.
- **Prescribing of weight loss drugs** is part of mainstream primary care support includes pharmaceutical treatments for those who have tried other weight loss mechanisms.
- Weight Management advice and groups are given and run by primary care teams offering routine weight management advice to patients; six practices have benefited from Innovex to increase the support offered.
- Commissioning arrangements are currently being drawn up for bariatric surgery in line with NICE guidance.
- Many people use private weight management providers such as Weightwatchers, Slimming World and other commercial organisations to help them lose or manage their weight. Local uptake is not known.

Summary

- Levels of obesity are increasing rapidly, in Stockport 11.2% of children and 12.6% of adults are currently known to be obese, but this is though to be an under-estimate.
- Rates nationally are almost double those seen in Stockport.
- Obesity has many serious impacts on health, and analysis has shown, based on national estimates, that around 185 people in Stockport died as a result of obesity.
- National evidence suggests that obesity prevalence is going to continue to increase, by 2050 as many as 50% of all adults could be obese.