

JSNA: Adult obesity

Introduction

Obesity represents the point where weight gain poses a serious threat to health. The World Health Organisation (WHO) has described obesity as an epidemic in the developed world and is a major risk factor for many chronic diseases including Type 2 diabetes, cardiovascular disease (CVD), hypertension, stroke, and certain types of cancer. However, diabetes is the condition that will see the greatest increase in the future if obesity levels continue to rise¹.

In the UK, levels of obesity have increased consistently over the past 20-30 years. Key determinants of this increase include physiological factors, changing eating habits, physical activity levels, and an increase in sedentary working and social lifestyles, and psychological influences which occur at the individual and societal level.

Obesity is a complex condition with no single or easy solution. Few interventions have been successful at reducing obesity levels across society although some international examples show promise. This means that new interventions will need to be introduced and their impact closely monitored. These will require multidisciplinary approaches, the stimulation of effective behaviour change and the establishment of new social norms. The engagement of everyone, especially parents, is essential if we are to reduce the impact of overweight and obesity on health.

The annual cost of diseases related to overweight and obese was £81.3million in Bolton. This will increase to £86.9million in 2015 and this financial burden is set to rise significantly in the future².

Implications for commissioning

Bolton's Healthy Weight Strategy 2012-2017 forwards a top ten recommendations for tackling obesity locally³:

1. Restrict the number and sittings of new takeaways;
2. Introduce an award scheme to improve the health offer of existing catering establishments;
3. Improve breastfeeding initiation and maintenance rates;
4. Implement a HEYS award (Healthy Early Years Setting Award) in Bolton;

¹ World Health Organisation (2013)
<http://www.who.int/topics/obesity/en/>

² Foresight (2007) *Tackling Obesity: Future Choices*, Foresight.

³ Bolton MBC (2013) *Bolton's Healthy Weight Strategy*, Bolton MBC.

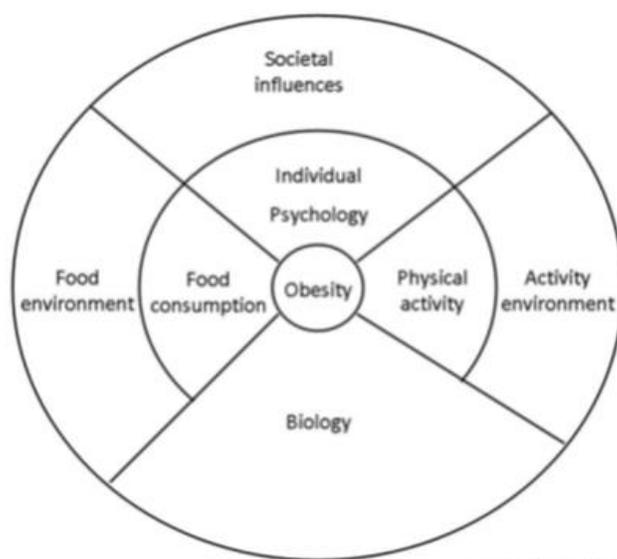
5. Ensure a specific focus on active play and physical activity for children aged under 5 and families;
6. Ensure there is a strategic approach to improving physical activity levels across the borough and physical activity interventions are delivered alongside health eating ones;
7. Galvanise support for the 'Farnworth Project' – a multi-agency targeted approach to tackling obesity in an area;
8. Proactively follow up children identified as overweight and obese through the National Child Measurement Programme;
9. Ensure weight management services for obese pregnant women are commissioned;
10. Formally commission a weight management service for those aged 5-7 years in the borough.

For recommendations specific to organisations, commissioners, and services in Bolton, as well as those related cross-cutting themes, please see the full Strategy – available here: <http://bit.ly/12lXw0d>

Who's at risk and why?

Non-modifiable risk factors for obesity are gender, age, and ethnicity. However, all adults across all demographic groups are at risk of obesity as prevalence increases nationally and locally.

The diagram below is taken from the Foresight Report on obesity and shows how the major risk factors relate to obesity in an individual. As mentioned above, biology is a major un-modifiable risk factor, but issues of food consumption, individual psychology, and physical activity can be modified at the macro level.



Source: Foresight systems map, 2007

Other key issues:

1. Disabled population: those with disabilities are at great risk of obesity because of the restrictions they face upon their lifestyles;
2. Pregnancy: obesity in pregnancy mirrors that of the population as a whole but maternal death is strongly related to this factor, particularly for the super-obese (BMI greater than 40) that make up around 3% of the population – this proportion has more than doubled over the past decade;
3. Mental illness: there is an additional need in terms of people with mental illness who are more likely to lead unhealthy lifestyles, become obese, and take little exercise as a direct result of the symptoms and treatment associated with their illness.

The level of need in the population

Impact on life expectancy

Obesity has a significant impact upon morbidity, especially Type 2 diabetes which negatively influences healthy life expectancy.

Mortality

Obesity increases the risk of many diseases including CVD and cancer – the two biggest killers in Bolton.

Prevalence

From the *Bolton & Wellbeing Survey 2010* obesity is higher in Bolton women than Bolton men – 20.3% of women compared to 18.4% of men. In total this equates to around 39,500 adult residents. However, this is likely to be an underestimation due to the self-reporting method of height and weight which is prone to error. Model based estimates claim a slightly higher figure, suggesting there could be up to 47,600 obese individuals in Bolton. From these modelled estimates, obesity in Bolton is average for the Greater Manchester conurbation.

Locally, over our three most recent health surveys the prevalence of obesity has increased significantly – and this reflects national and regional trends. The increases have been greater in Bolton men, who are more likely to be overweight but women are more likely to be obese.

There is an inequality gradient for obesity in Bolton with the most deprived having the highest prevalence of obesity. This maps geographically across the borough where obesity is at its highest levels in Deane & Middle Hulton, Central Farnworth, and Townleys.

The Asian Pakistani, Black, and White Other ethnicities have the highest rates of obesity in Bolton. Those disabled in Bolton are far more likely to be obese than the general population.

Key JSNA Indicator Sheets

- BEHAVIOUR AND ACCESS TO SERVICES: BMI Obese
- BEHAVIOUR AND ACCESS TO SERVICES: 5-a-day
- BEHAVIOUR AND ACCESS TO SERVICES: Physical Activity
- CHILD AND MATERNAL HEALTH: National Child Measurement Programme – Reception
- CHILD AND MATERNAL HEALTH: National Child Measurement Programme – Year 6
- DISEASE AND ILL HEALTH: Diabetes

Current services in relation to need

NHS Bolton spends relatively more than other similar CCGs and performs better than its peers in terms of diabetes-related mortality, but does have a higher than average prevalence of diabetes. This indicates higher levels of need for diabetes services and a need to improve performance in prevention. NHS Bolton's Strategic Plan includes interventions to prevent diabetes through scaling up obesity services as well as identification of at-risk patients.

The community weight management team deliver a 10 week programme called 'Rite weight' for overweight adults (BMI 25-29.9) without co morbidities. This is delivered out in the community and in the workplace through the Clock-on-2-Health scheme. The workplace programme is supported by the Get Active team.

The adult clinical dietetics service accepts referrals for patients with a BMI greater than 30 or who are overweight and have co morbidities. Appropriate patients are offered a place on the 'Fresh Start' programme and/or one-to-one sessions with a dietician.

The specialist weight management service is set up to see patients with a BMI of 40 and above with or without co morbidities and is a multi-disciplinary team comprising of a lead clinician with an interest in weight management, a specialist weight management dietitian, psychologist, and physical activity coordinator. It provides a gateway to bariatric surgery and is through referral only.

The Get Active team deliver a wide range of physical activity opportunities to those aged 45 and above across Bolton.

The Sport and Active Living Service aims to increase participation in sport and physical activity locally for young people, adults, and older people. This is achieved by delivering training and accreditation programs for individuals and clubs, developing a workforce to meet the needs of communities in Bolton, and increasing support to those who find it difficult to access sport and physical activity opportunities.

Cost effectiveness

As highlighted above the costs to NHS Bolton of obesity are significant. In 2010 the estimated annual costs to Bolton NHS of diseases related to overweight and obesity was £81.3million, this will rise to an estimated £86.9million in 2015. The related cost to other departments is also significant, for instance it costs £1,000 per child to have a tooth extraction under general anaesthetic. Approximately 60 are conducted every month at a cost of £60,000, which is equivalent to £720,000.

A measure of the success of our local Healthy Weight Strategy is to stop costs increasing and includes a target to keep the costs at the existing level (2010 81.3million per annum) until 2015 and below the estimated cost level projected for 2015 (86.9 million).

Projected service use and outcomes

The Foresight Report predictions estimate that by 2015 36% of men in England will be obese and 28% of females. By 2025, Foresight estimates this will have increased substantially to 47% and 36% respectively.

Substantial increases are also expected in the older adult population. There will be 1,537 extra people (a total of 13,323) in 2020 who over 65 and are obese than there are in Bolton at present (an estimated 11,786). Following this increase in obesity, diabetes prevalence will also increase substantially. Furthermore, the number of people aged 85 and over and who are obese is expected to almost double in Bolton over the same period.

Evidence of what works

Bolton's Health Matters has created a collection of evidence and intelligence to ensure best practice in decision within this area. To view this collection, please click here:

<http://bit.ly/11t8EqJ>

Community views and priorities

For NHS Bolton's Strategic Plan we undertook a series of qualitative and quantitative exercises to understand public and patients' views. From this, obesity was identified as the fourth most important health issue to tackle. The most important was the prevention of long-term conditions, many of which obesity influences.

Talking food taking action (Young People's enquiry) – The Community's views

Our Life, a regional advocacy organisation sought the views of communities about the food environment using a deliberative engagement process. The communities which they engaged with raised the following issues:-

1. There are more fast food places that sell unhealthy food and the popular places are not healthy/easier access to junk food;
2. Adverts on TV mostly advertise junk food, that is most appealing;
3. Unhealthier options often look more appealing because of packaging;
4. The cost of healthy food is more expensive than unhealthy food/some families have a budget and may be able to afford more junk food than healthy food/offers on in shops, mostly in frozen and processed foods;
5. It's difficult to know what's actually healthy and what's not with all the labelling;
6. Laziness/willpower/got to be close/convenience/It's easier to cook pizza and chips than it is something healthy;
7. Peoples culture/Special occasions (which can be frequent) = more junk food eaten and pop and alcohol drunk/influence of family and friends, bad habits from family and friends also all family could be uneducated and unaware of how to be healthy.

Healthy Weight Strategy meeting July 2010– The Professionals' views

A wide range of stakeholders were invited to the strategy meeting reflecting the breadth and complexity of the agenda. A life-course approach was taken and stakeholders were asked to map a day in the life of a Boltonian identifying what the challenges and barriers to maintaining a healthy weight are, and what the top priorities should be to tackle these. The following were identified.

The under 5s:

1. Investment in the obesity agenda particularly focusing on the early years e.g. health visitors;
2. Breastfeeding;
3. A campaign to reduce screen time i.e. TV/Computer.

Those aged 5-18 years:

1. Enhanced Healthy Schools model - a package of support with a wide range of opportunities/activities including school travel plans, after school clubs (prevention), extended school programme, bike ability etc. Parental involvement and education is vital;
2. Active Parks at the weekends. Play grounds. Free swimming for the under 16s and over 65s;
3. Interventions in place for very obese;
4. Advertising legislation.

Adults:

1. Accessibility and affordability of fresh fruit and vegetables;
2. The importance of breakfast and how the workplace can positively support this;
3. A cultural, physical and social environment that supports healthy weight.

Equality impact assessments

No recent local equality impact assessments have been carried out that we are aware of. If you are aware of any such work locally please let us know at [Bolton Health Matters](#)

Unmet needs and service gaps

Work has already started around implementing the Let's Get Moving Care Pathway and the 2012 Olympic Legacy plan. To maximise the potential of these opportunities there is a need to engage as many partner organisations as soon as possible, with particular reference to the 2012 Olympics Legacy which is a unique opportunity to drive up physical activity and sporting participation. To halt the rise in obesity, physical activity must be delivered alongside healthy eating particularly with reference to the local weight management services. Currently these two areas of health improvement are not fully coordinated.

There is an opportunity to improve links between Get Active, the Sports and Active Living Service and the food and health/weight management service through the development of the emerging Wellness Service which must be maximised. Due to the spending cuts being universally applied across the Council there is a risk that budgets for this service could be reduced, thus impacting on the coordinated action to reduce obesity. These cuts have

already been seen with the end of the National Free Swimming Programme for the under 16s and over 65s. In the short term this will continue to be funded in Bolton for under 17s and over 60s.

There is a need for public sector leisure facilities to be exemplars for healthy eating and physical activity for staff and visitors alike. Bolton One, the new Health, Leisure and Research Centre, opened in April 2012 so there is an opportunity for this to lead the way. In addition, if contracts were to be renegotiated with Serco, one of the terms of the contract should be that Leisure Centres are exemplars for healthy eating and active travel.

Bolton has a large South Asian community (10.3%) and this population group has susceptibility for obesity and Type 2 diabetes. Research has shown that once socioeconomic deprivation is taken into account (and its associated factors such as parental knowledge, confidence, and time) the differences between ethnic groups may not be great. However, appreciation of cultural issues is vital for appropriate management of obesity, as well as successful prevention.

NICE guidance⁴ recommends the specialist weight management of patients from BME populations with a BMI of 37.5 and above with or without comorbidities (as their risk is higher). This is a current gap in the pathway in Bolton.

Maternal nutrition is an important determinant of an unborn baby's future health. Eating unhealthy during pregnancy can predispose babies in the womb to obesity and cardiovascular diseases after they are born as they grow into adulthood. In addition, the lifestyle habits of parents strongly influence those of their children. There is currently a gap in Bolton of commissioned obesity services for pre-conception, maternity, post-conception, and teenage parents (this should include overweight).

Another gap persists in Bolton in services for people who are overweight/obese with poor mental health or low levels of wellbeing. It is essential therefore that weight management services are designed to ensure that psychological factors are addressed and services take a more holistic approach.

Demand for the adult specialist weight management service outweighs provision. Post intervention there are no maintenance programmes for those who have completed the specialist weight management service or had bariatric surgery.

The National Obesity Observatory (NOO)⁵ reports there to be 250 fast-food outlets in Bolton. The NOO demonstrate a strong association between the fast-food outlet to population ratio

⁴ National Institute of Clinical Excellence (2010) *Obesity: Guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children*, NICE.

⁵ National Obesity Observatory (2013)
<http://www.noo.org.uk/>

of a local authority and the prevalence of obesity. In Bolton the crude rate of fast-food outlets is 93.8 per 100,000 population. This is just higher than is average for Bolton's statistical peers.

Recommendations for further needs assessment work

Assessment and regular monitoring/analysis of the Public Health Outcomes Framework indicators linked to adult obesity are necessary. These are: 2.6 Excess weight in 4-5 and 10-11 year olds; 2.11 Diet; 2.12 Adult obesity; 2.13 Physically active and inactive adults; 2.17 Recorded diabetes; 4.4 Mortality from all CVD <75s.

A review of weight management pathways for overweight and obese children, adults and pregnant women should be undertaken to ensure services are developed and available to effectively meet existing and future need.

Review the weight management services to ensure they meet the needs of people with disabilities.

Key contacts

Bryony O'Connor – Health Improvement Specialist (Nutrition and Obesity)