National Assembly for Wales

Children and Young People Committee

CO 43

Inquiry into Childhood Obesity

Evidence from : Gwent Childhood Obesity Forum and Aneurin Bevan Health Board

Background

We welcome the opportunity to contribute to the above inquiry. We strongly support the National Assembly for Wales having the debate about this important population health issue and providing the leadership to reduce the incidence and prevalence of obesity in children.

Obesity is an important population health problem

The following table describes the relative risks for some diseases in obese individuals: obesity confers a several hundred percent greater absolute risk for some already common diseases.

Greatly increased risk (Relative risk much greater than 3)	**Moderately increased risk** (Relative risk 2-3)	**Slightly increased risk** (Relative risk 1-2)
• Type 2 diabetes • Insulin resistance • Gallbladder disease • Dyslipidaemia (imbalance of fatty substances in the blood, eg high cholesterol) • Breathlessness • Sleep apnoea (disturbance of breathing)	• Coronary heart disease • Hypertension (high blood pressure) • Stroke • Osteoarthritis (knees) • Hyperuricaemia (high levels of uric acid in the blood) and gout • Pyschological factors	• Cancer (colon cancer, breast cancer in postmenopausal women, endometrial [womb] cancer) • Reproductive hormone abnormalities • Polycystic ovary syndrome • Impaired fertility • Low back pain • Anaesthetic risk • Foetal defects associated with maternal obesity

Note: All relative risk estimates are approximate. The relative risk indicates the risk measured against that of a non-obese person of the same age and sex. For example, an obese person is two to three times more likely to suffer from hypertension than a non-obese person.

The next table describes the 'Population Attributable Fraction' of obesity in some common diseases – ie the proportion of each disease which could be prevented if obesity was eliminated. Obviously elimination of obesity is unrealistic, but as the relationship between obesity and disease risk is generally proportional it does suggest that substantial reductions in the burden of disease could be made with reductions in obesity:

Disease	Population Attributable Fraction Men (%)	Population Attributable Fraction Women (%)
Angina pectoris	15.0	17.2
Colon cancer	30.6	30.7
Gall bladder diseases	15.0	17.2
Hypertension	26.0	45.4
Myocardial infarction	9.9	36.6
Osteoarthritis	16.5	9.4
Ovarian cancer	n/a	15.4
Stroke	6.2	7.2
Type 2 Diabetes	48.0	75.3

The cost of obesity to the NHS in Wales has been documented in a 2011 report **Error! Reference source not found.**for Welsh Government**Error! Reference source not found.**[1] . Obesity was estimated to cost the NHS in Wales over £73 million per annum, with hospitalisation costs at around £3.5 million per annum. Assuming costs for ABHB residents are pro rata for population (although obesity rates in ABHB are slightly higher than the all Wales levels), the overall costs to the NHS for obesity in ABHB is around £14.6 million, and for hospitalisation in ABHB residents is around £700,000.

Being overweight or obese in childhood has negative consequences for health in both the short term and the longer term. Although many of the most serious consequences may not become apparent until adulthood, the effects of obesity can be identified in obese children and adolescents. For example, type 2 diabetes, previously considered an adult disease, has increased in overweight children. Other health risks of childhood obesity include early puberty, eating disorders such as anorexia and bulimia, skin infections, asthma and other respiratory problems. Some musculoskeletal disorders are also more common, including slipped capital femoral epiphysis (SCFE) and tibia vara (Blount disease).

In addition to the physical harms to children, the emotional and psychological effects of being overweight are often seen as the most immediate and serious by children themselves. They

[1] Phillips C J., Christie Harper, Jaynie Rance, Angela Farr (2011) Assessing the costs to the NHS associated with alcohol and obesity in Wales http://wales.gov.uk/about/aboutresearch/social/latestresearch/alcoholobesity/?lang=en

include teasing and discrimination by peers; low self-esteem; anxiety and depression. Obese children may also suffer disturbed sleep and fatigue.

Overweight and obese children are more likely to become obese adults, with the associated higher risks of morbidity, disability and premature mortality in adulthood as mentioned. Physical activity and eating behaviours as well as social norms of overweight and obesity run in families and communities and habits learned and developed during childhood can continue through to adulthood. Once established, obesity is notoriously difficult to treat, so prevention and early intervention are very important.

There is a need to focus on approaches and interventions throughout the life-course, i.e. pre-conception to healthy ageing, to prevent lifelong chronic conditions and, to reduce the consequences of existing conditions prevalent and increasing in the population attributable to obesity. Maternal, parental and early years populations should be an important focus if we are to break the cycle and reduce inequalities in health.

Obesity is a disease of multiple causes requiring multi-faceted action

'Obesity' is defined as a Body Mass Index of 30 or more kg/m^2, and 'overweight' is defined as a BMI between 25 and 29.9 kg/m^2. In children, both NICE and SIGN recommend that BMI adjusted for age and gender should be used as a practical estimate of overweight. Despite limitations of measurement, risk of ill health increases with BMI in most populations.

Being overweight or obese is a direct result of energy imbalance – where calories taken in as food and drink exceed those expended in daily living and activity. However, the reasons for that energy imbalance (ie excess calorie consumption and/or reduced energy expenditure) can be cultural, complex, sometimes uncertain, and sometimes be directly related to physical or psychological pathology (or medical treatment) in an individual.

The Government think tank Foresight (2007) listed the factors causing obesity and their interrelationships as: societal influences, food supply and availability, individual psychology and biology, and the physical activity environment. The key findings of the Foresight report Tackling Obesities: Future Choices (2007)[2] were listed as:

- Most adults in the UK are already overweight. Modern living ensures every generation is heavier than the last – `Passive Obesity'.
- By 2050 60% of men and 50% of women could be clinically obese. Without action, obesity-related diseases will cost an extra £45.5 billion per year.
- The obesity epidemic cannot be prevented by individual action alone and demands a societal approach.

[2] Foresight. 2007 Tackling Obesities: Future Choices: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publichealth/Healthimprovement/Obesity/DH_079713

- Tackling obesity requires far greater change than anything tried so far, and at multiple levels: personal, family, community and national.
- Preventing obesity is a societal challenge, similar to climate change. It requires partnership between government, science, business and civil society.

Despite many efforts across the range of policy areas by the different organisations at national, regional and local level, these findings are still relevant. We still require coordinated simultaneous effective action on obesity which cross government policy areas. In addition, models of health promotion action such as Beatie's model (1991) or the Ottawa Charter (1986) emphasise the need to take action across different levels including: personal counselling, community development, reorienting services and creating supportive environments. The All-Wales Obesity Pathway from WG accounts for this approach and places responsibility on the Health Boards and partners to ensure action at a number of levels of obesity, broadly in accordance with NICE Guidance, and across a range of policy areas and interventions.

1. The extent of childhood obesity in Wales and any effects from factors such as geographical location or social background:

Wales has higher levels of adult and childhood obesity compared to other similarly developed countries. Childhood obesity in Wales is measured on an annual basis by the Welsh Health Survey. The most recent statistics[3] show that in 2011, 35% of children were classified as overweight or obese, including 19% obese children[4]. This shows:

- For both boys and girls at 11 years, 13 years and 15 years the prevalence overweight or obese according to self reported measures is higher in Wales than average across participating countries.

- Amongst 15 year olds the prevalence of overweight or obesity in Wales was among the top 4 of 39 countries in girls and the top 8 for boys.

According to the feasibility study for measuring childhood heights and weights in Wales across seven local authority areas, the children resident in the most deprived fifth of LSOAs had higher overweight and obesity levels than their counterparts resident in the least deprived fifth of LSOAs, and these differences were statistically significant[5].

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[3] Welsh Health Survey (2012), http://wales.gov.uk/topics/statistics/headlines/health2012/120919/?lang=en, [accessed 25 April 2013].

[4] Using a classification system based on the 85th and 95th percentiles of the 1990 UK BMI reference curves, and not comparable with estimates produced on a different basis or with adult estimates.

[5] Public Health Observatory for Wales (2010), *Measuring Childhood heights and weights in Wales*, National Public Health Service for Wales and the Wales Centre for Health.

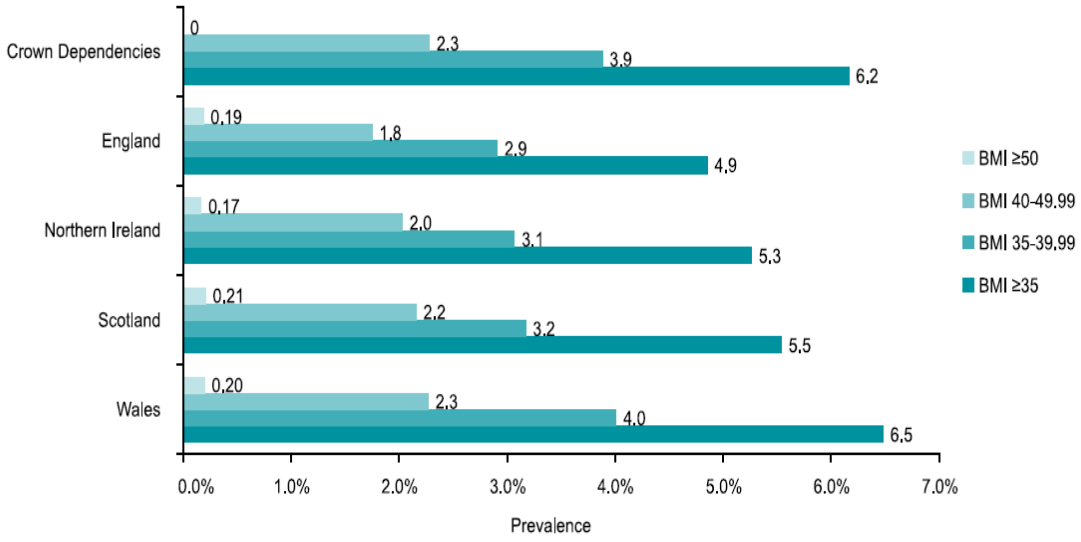
In addition to current measures, we would recommend funding of a second Child Measurement Programme cohort. This will allow:

- Better understanding of how we are doing in relation to childhood obesity
- Understanding of the impact of school age environments and interventions focussed on that age
- Comparisons with Europe through the Childhood Obesity Surveillance Initiative
- Understanding of cohort effects

This would ideally be on a population basis as with current reception year measures, allowing for greater granularity, clear cohort follow-up and epidemiological and research opportunities to both explore cause and effect in relation to obesity and change over time.

It is not clear that this surveillance measure will allow us to identify patterns at small area level which would be more useful for local action and targeted intervention – particularly at the unit of the school or school cluster. Local data were collected in Torfaen in 2009 for the Hearty Lives Torfaen (HLT) programme suggesting almost 25% of Torfaen children weighed at school entry were overweight or obese.

The chart below shows Maternal Obesity in the UK is highest in Wales for all BMI categories.



Source: CMACE 2010

Obesity has a negative impact on the life chances of young people, with poor school attendance, poor attainment, reduced employment prospects fuelling the cycle of deprivation. The funding of a multidisciplinary treatment service for obese children and young people should be prioritised.

2. The measurement, evaluation and effectiveness of the Welsh Governments programmes and schemes aimed at reducing the level of obesity in children in Wales specifically:

Health related programmes including Change4Life, MEND

MEND

It is clear that there needs to be provision of evidence based interventions for weight management in children and their families who are overweight and obese. Whilst there is no current rigorous analysis of the effectiveness of MEND available, the components of the programme are based on the evidence of effectiveness: include information on diet, physical activity and behaviour change and be family oriented. The recent PHW Health Improvement review paper indicates a potential to dis-invest in the programme but this will leave a considerable gap in provision at a time where the need continues to increase. It is right that Public Health Wales continue to ensure they are commissioning/providing the most effective service available for this population and local partners would welcome the opportunity to be involved in steering future programmes.

From a local perspective, whilst we are clear that there are considerable difficulties in delivering MEND to the maximum children within the provision agreed, we feel these are technical issues in the way that funding is allocated. There is no "up-front" payment, indeed payment is on result of delivering a course. It is challenging to support such a risk in these straightened financial times. Making considerable investment in planning for courses which do not, ultimately run, means that teams are put at financial risk. A review of the funding mechanisms for the MEND programme, for example, an up front allocation would support more robust recruitment, retention and ultimately reduce individual children's obesity risk.

In ABHB we have had the benefit of experience with both the Welsh Government/PHW funded MEND programmes (2009 -2012 age 7-13 and since March 2012 5-7 and 7-13) and MEND programmes provided as part of the BHF funded Hearty Lives Torfaen (HLT) project. The HLT experience has been quite different in that as part of the BHF funding we were able to employ a community dietician to work embedded in the Flying Start team with responsibility for co-ordinating all aspects of delivering MEND programmes funded by BHF grant in Torfaen.

As part of the HLT programme we have also been able to offer the MEND 2-4 programme (not available via the WG/PHW grant). The likelihood of remaining obese in adulthood is increased if a child is obese at the age of 5. The MEND 2-4 programme offers early intervention to establish healthy eating and prevent obesity and has proved easier to engage families in. It has enhanced joint working between members of the Flying Start team facilitating the wider role of the dietician to improve early years nutrition. Anecdotally our experience has been that targeting MEND, with appropriate funded staffing, achieves better recruitment and retention.

It should be recognised that the current range of MEND programmes available through the Public Health Wales grant do not cover under 5's and those over 13 years of age. The ABHB Dietetic Service receives a significant number of referrals for obese children of all ages, many of whom cannot be accommodated within the available MEND programmes. Currently the only service we are able to offer them is a clinic appointment system with a dietician. This does not provide them with the multidisciplinary care and level of support necessary to achieve and maintain healthy weight. It must be recognised that there will need to be a range of specialist weight management services as the needs of an obese 4 or 5 year old are very different to those of a 15 year old weighing over 125Kg.

Change4Life

Change4Life is an interactive multi-media campaign based on sound social marketing principles which can help to change population behaviour. Aiming to reach large segments of the population through targeting families and adults at different stages of life, Change4Life encourages positive action on a number of relevant health behaviours including alcohol, food and fitness. This programme is being evaluated to understand who and how many people it is reaching but it will always be difficult to attribute behaviour change or health improvement outcomes to such a wide reaching programme. For reasons mentioned previously no single project will have the capability to change obesity levels alone; as part of a multifaceted approached Change4Life has potential to support prevention of obesity and associated co-morbidities.

Programmes related to nutrition in schools including Appetite for Life,

Improving food in school plays an important contribution to the obesity agenda but as long as children have access to unhealthy options outside the school gates A4L cannot reach its potential impact on obesity. Lots of children have decided to avoid school canteens in favour of bringing in non compliant food from home and local shops so the number of children benefitting from improved food in school may be decreasing and the problem of consuming high fat and high sugar foods with little nutritional benefit remains. There needs to be more of a focus to get the whole school approach adopted e.g. encourages a stay on site policy, healthy lunchbox policy, improved canteen facilities etc. Packed lunches remain a big problem in primary schools, with often poor nutritional choices and there is little that can be done about this with staff being reluctant to challenge parents.

The effectiveness of A4L will only be fully realised when it is finally legislated and schools have to fully comply with the standards

Improving the quality of food and drinks available on school sites directly influences choice, but there are wider opportunities which should be explored including using the expertise of Appetite for Life Dieticians to further develop curriculum based activities in food and nutrition skills.

We have been fortunate in Gwent to have some dietetic input to the Appetite for Life initiative in three boroughs, but with the end of the grant funding and inclusion of Appetite for Life funding in the cash allocation to local authorities only Torfaen County Borough Council has opted to continue to employ the skill and expertise of a dietician.

If school food is to form part of the school inspection process it is important that a dietician forms part of the inspection team.

Dining facilities and length of lunch breaks need to be addressed and protected as an increasing number of schools are shortening their lunch breaks and are incapable of seating the number of pupils requiring lunch. In order for schools to provide lunches that meet the nutritional requirements this needs to be addressed. Shortened lunch breaks and lack of seating capacity encourage the 'grab and go' culture which does not support the development of healthy eating practices and couldn't be further away from the seated, leisurely meal time exemplified in mainland Europe.

Cross cutting programmes for example leisure and sport related programmes (Creating an Active Wales); planning policy:

There are a plethora of strategies and policies which at National level which set standards or recommendations or guidelines for multi agency action. They include:

- UNICEF Baby Friendly Initiative in Wales
- National Obesity Pathway (+ examples of good practice table)
- Appetite for Life action plan (2008)
- Creating an Active Wales
- AQF - Child Poverty Targets (3, five-year olds with dental caries; 11, young people with dental caries and; 13, childhood obesity)
- Child Poverty Strategy for Wales
- Food and Fitness Implementation Plan for Children and Young People
- NSF – Children Young People and Maternity Services
- NICE – Obesity (QRG1 – LAs)
- NICE - Obesity (QRG2 – NHS)
- NICE – Weight Management before during and after pregnancy
- NICE – PA CYP
- NICE – PA, four commonly used methods
- NICE – PA and the environment
- NICE – Physical activity in the workplace
- NICE – Nutrition for pregnant women

- NICE – Primary prevention of CVD
- NICE - Falls
- NICE – Mental wellbeing and older people
- NICE – Back pain
- NICE – Secondary prevention of MI
- A framework for School Nursing Service in Wales
- Healthy Schools guidance
- A framework for School Nursing Service in Wales
- Foresight Report
- Food and Well Being in Wales
- Quality Food for all in Wales Strategic Action Plan
- Play Policy Implementation Plan
- Walking and Cycling Action Plan
- TAN 16 Guidance
- Change4Life
- NICE – Promoting and creating built or natural environments that encourage and support physical activity
- Midwifery 2020
- Review of Health Visiting Services in Wales

There is much work undertaken across many of these areas but there are many gaps in their systematic and coordinated implementation.

Creating an Active Wales is a good strategy but local response has been very variable. CAAW requires further drive at national level in order for it to regain momentum the governance section needs updating sine changes to local partnership arrangements.

3. The barriers to reducing the level of childhood obesity in Wales;

There is no real unifying obesity strategy across Wales to help prevent and treat childhood obesity. There are patches of programmes in different localities which are not accessible to all.

In ABHB dieticians have met with teachers, head teachers, physical education teachers, leisure staff, dragon sports etc to encourage referrals to Mend. This has achieved limited success. They have difficulty talking about weight to children and families which is such a sensitive issue. Obesity has not yet become 'everybody's business'.

There is more provision on prevention than for those who are overweight. Some leisure activities are cost prohibitive for many families to sustain.

There is not a widespread appreciation of the level of physical activity a child, even a very young child should take each day – new UK CMO's guidelines for early years AND children and young people.

Programmes and projects which are running have not been sustained or successful because they have not had sufficient buy-in at the senior level across organisations. Unless a provider is effective at evaluating the service and communicating to the right stakeholders the programmes are not sustained whether they are effective or not.

Currently children with obesity are referred to secondary care where the outpatients will screen and treat the complications. The frequency of follow up will be insufficient unless dedicated clinics are established. There should be more support for children in primary care, where the GP or practice nurse could review the child's weight and health behaviour and instigate brief intervention or refer to community weight management services where appropriate. Resources are required for a multidisciplinary clinic which offers psychology/dietetic/clinician and physical activity components.

We are struggling to achieve level one of the obesity pathway; it gets patchier to nonexistent as one progresses to level 4.

The media has been unhelpful in its presentation of blame for the obesity problem. We need to develop an intelligent dialogue which considers the needs of all individuals and we need to develop the skills of all health and social care professional so that they are confident in discussing this sensitive topic in a productive manner. There is a problem that parents do not recognise their children as overweight and even when identified by the child measurement programme (CMP) as overweight express disbelief and reject the fact. The CMP will identify many children in Wales as overweight, it will be a wasted opportunity to not help these families. This is exemplified by a lack of uptake to Mend; despite greater efforts from ABHB school nurses to refer to Mend 5-7, the families have not wanted to attend. This may reflect part of the problem that families do not acknowledge they need support.

Many young parents lack the basic skills of food preparation and cooking and depend on convenience foods, snacks and takeaways to the extent that their young children are unfamiliar with healthy home cooked meals.

4. Whether any improvements are needed to current Welsh Government programmes and schemes and any additional actions that could be explored.

The existing evidence, guidance and strategy currently available should be synthesised and incorporated in to a single strategic plan for Wales. The component parts of the plan should then be reflected in the overlapping policies and strategies of government departments as well as organisational plans.

The Public Health Bill will be able to add some strength to the national strategy and particularly have a greater influence national and UK issues.

The Academy of Royal Medical Colleges report 'Measuring Up' (2013) makes 10 recommendations, many of which could be applied in Wales. One of which *'skilling up' the wider early years workforce to deliver basic food preparation skills to new mothers and fathers, and to guide appropriate food choices which will ensure nutritionally balanced meals"*

Industrialise the scale of the childhood weight management programme and make sure we get the most effective model.

Consider expanding the National Exercise Referral Scheme programme to include teenagers who are obese. This would support and engage those who do not participate in school sport and feel embarrassed and lack motivation to become physically active independently.

Consideration of the emotional aspect of eating need to be built in to the childhood weight management programme.

Adult weight management programmes should be steered to target parents of pre-school children.

Additionally, the scale of the obesity problem is vast. Managing this crisis is costly; there is no doubt about this. But, we cannot, as a small nation, so reliant on the wellbeing of our population, ignore the urgency of this subject. Obese individuals have poor personal outcomes; their health suffers and this is costly to the NHS, their educational attainment often suffers and this impacts on their life chances, and ultimately on the wealth of our nation. We want a population with a high level of health literacy who understand their risks, who can make informed choices, and seek out one or more of a range of evidence based, accessible solutions to support them to reach their potential.