Bolton's HealthMatters

JSNA: Physical activity

Introduction

The link between physical activity and health is firmly established. There is clear evidence that regular activity has both preventive and beneficial effects on many contemporary chronic conditions such as cardiovascular disease, cancer, musculoskeletal conditions, obesity, diabetes, and mental health.

In order to derive health benefits, the recommendation from the Chief Medical Officer is for adults to complete at least 150 minutes of moderate intensity activity in bouts of 10 minutes or more – a recommended way to approach this is to do 30 minutes on at least 5 days a week. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or combinations of moderate and vigorous intensity activity[1]. However, as a nation England has very low levels of physical activity with two thirds of men and three quarters of women reporting less activity than guidance recommends. The reasons for this are complex and present a long-term challenge that must involve Public Health, local authorities, voluntary organisations, and the private sector.

From a Public Health perspective, moving people from a sedentary lifestyle to one of moderate activity will produce the greatest reduction in risk of ill health. Nationally, physical inactivity has been estimated to cost £8.2 billion a year; this includes the direct costs of treating major behaviour-related chronic illnesses and the indirect costs of sickness absence. These costs are predicted to increase significantly in the future.

Implications for commissioning

Ensure the possibilities of Get Active and the Sports and Active Living Service linking in with the food and health team and weight management services are exploited within framework of the emerging Wellness Service.

Ensure there is continued investment for the free swimming programme locally.

Ensure a specific focus on active play and physical activity for the under-5s and families.

Galvanise support for the 'Farnworth project' - a multi-agency targeted approach to tackling obesity in an area. Further promote parks and green spaces to children and families through delivery structures such as Healthy Schools using the 'Farnworth Project' as an exemplar.

[1] Department of Health (2011) *Physical Activity Guidelines*, Department of Health. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_127931

NICE Guidance PH2[2] focuses on four methods for getting adults to be physically active. These are brief interventions (advice delivered by GPs and other health professionals), exercise referral schemes, pedometers, and walking/cycling schemes. These are implemented in Bolton but will benefit from further development and evaluation. It is unrealistic to expect a one-off intervention to produce changes at the population level, interventions need to be sustained over the longer term and supported and encouraged.

Bolton's planning strategies should maximise opportunities for physical activity when developing the built environment in line with NICE guidance:

- Ensure planning applications for new developments always prioritise the need for people to physically active as a routine part of their daily life;
- Ensure pedestrians, cyclists, and users of other modes of transport that involve physical activity are given the highest priority when developing or maintaining streets and roads;
- Plan and provide a comprehensive network of routes for walking, cycling, and using other modes of transport involving physical activity;
- Ensure public open spaces and public paths can be reached by foot, by bicycle, and other modes of transport involving physical activity.

Through the 'Clock-on-2-Health' programme further develop increased physical activity in the workplaces of Bolton:

- Employers should be encouraged to develop an organisation-wide plan to introduce and monitor a multi-component programme to support employees to be more physically active;
- Encourage employees to walk, cycle, or use another mode of physical activity to travel to and from work;
- Help employees to be physically active during the working day, for example, by encouraging them to take the stairs or walk to external meetings.

Further develop ways to involve patient participation in more active lifestyles, in particular for people in Bolton with disabilities and mental health problems.

The Greater Manchester Public Health Practice Unit[3] concluded that messages to increase physical activity should focus on the positive benefits of activity rather than the negative consequences of inactivity and be practical about the activities that are available ensuring

[2] National Institute for Clinical Excellence (2006) *Four commonly used methods to increase physical activity*, NICE.

[3] Threlfall, A. (2010) *Physical activity targets and ways to help increase physical activity across Greater Manchester*, Greater Manchester Public Health Practice Unit.

they are accessible, affordable, acceptable, and appropriate. The same study also concludes that for Greater Manchester as a whole to reach its physical activity target, it is necessary for physical activity to become embedded in the daily routines of more local adults. These adults are currently faced with a range of barriers to activity and focus should be on practical steps to remove these barriers at a local level and promote facilitators of active travel and active recreation.

Do not rely on single one off interventions but develop a set of actions and interventions that taken together are likely to increase the level of walking in the local population. Walking has been described as an almost perfect exercise for population level change in physical activity.

Who's at risk and why?

In general those in more affluent socioeconomic groups are more likely to participate in physical activity than more deprived groups. This is also affected by factors associated with socioeconomic deprivation such as the correlation of low education attainment with levels of inactivity and the fact that individuals living in more deprived areas have more restricted access to opportunities for leisure activities and sports participation. Vulnerable populations in Bolton such as the frail elderly, those with mental health problems, and those with disabilities are at greater risk of leading a sedentary lifestyle.

The majority of barriers to physical activity are well known in the literature and include the built environment, people's perception of risk, social peers, having a health problem, previous inactivity, lack of money, lack of facilities, family pressures, and weather.

The level of need in the population

Impact of life expectancy

The World Health Organisation (WHO) reports[4] that physical inactivity is amongst the ten leading causes of death in developed countries and is responsible for significant proportions of disability-adjusted years.

Mortality

The level of coronary heart disease (CHD) risk associated with inactivity is equivalent to smoking and it is estimated that inactive and unfit people have at least double the risk of dying from CHD compared to those more active. As well as being associated with this major

[4] World Health Organisation (2013) *Physical Activity*, WHO. http://www.who.int/topics/physical_activity/en/

killer for Bolton, physical activity is also a protective factor against many chronic diseases and conditions.

Prevalence

For those doing five times 30 minutes of physical activity a week, men in Bolton are more active, but the female rate for those participating in sports in Bolton has been increasing in recent years. The most recent figure shows that 21.0% of Bolton women participate in active sports compared to 23.7% of Bolton men; whilst the male rate remains higher this is much closer than seen in the past.

Five of Bolton's statistical peers (there are 15 in total) display higher levels of sports participation, but this is a significant improvement on the previous release of this data where nine of our peers performed better.

Age affects sports participation in Bolton. For those aged 16-34 years, 36.8% participate in sports compared to 19.7% of those aged 35-54 years, and the lowest proportion for those aged 55 and over is just 12.7%.

Ethnicity is another key determinant of participating in sports in Bolton with those of White Ethnicity and Black ethnicity showing the highest proportions – both over 40%. This compares to the lower sports participation seen in the Asian Indian and the Asian Pakistani populations (the latter the lowest of all major ethnic groups in Bolton). Furthermore, sports participation in the non-White population overall in Bolton is decreasing.

There is a considerable difference between socioeconomic groups in Bolton with those in the least deprived fifth of the population being much more physically active than their lesser deprived peers. The pattern maps onto the geography of Bolton where the more affluent parts of the borough to the North (Smithills, Bromley Cross) and the West (Horwich, Bradshaw, Westhoughton) report the highest rates of physical activity.

While there is no statistically significant difference between the heterosexual and lesbian, gay, and bisexual (LGB) communities of Bolton regarding physical activity, the disabled population of Bolton show some of the lowest rates of physical activity we have found in Bolton.

For years 1-13, 76% of Bolton schoolchildren participate in at least 120 minutes of curriculum PE. For the whole of England the average is 82%. With the exception of Liverpool and Knowsley Bolton schools have the lowest PE participation in the North West. Several of our immediate neighbours boast over an 80% participation rate (Wigan 81%; Oldham 84%; Bury 85%; Blackburn with Darwen 86%). Bolton's low participation rate is almost certainly a result of very low rates in older children, especially years 10-11 (44%) and years 12-13 (14%). There is however only a small difference between boys and girls across

all years (years 1-13) in Bolton – 75% participation in PE for girls compared to a 77% participation for boys.

Key JSNA Indicator Sheets

BEHAVIOUR AND ACCESS TO SERVICES: Physical Activity

Current services in relation to need

The Get Active programme employ a team of full time community staff workers to encourage and support people to undertake more day to day physical activity in Neighbourhood Renewal Strategy (NRS) Areas, particularly focused at residents aged 45 years and over. This targeted approach aims to reduce the levels of sedentary behaviour in the areas most in need.

Get Active also employs a member of staff to develop 'Cycle4Health' rides across Bolton.

The Active Bolton website provides a unique resource allowing both health professionals and individuals to identify suitable physical activity opportunities across Bolton. The Get Active programme also includes a physical activity directory for frail older people.

The 'Change4Life' framework includes research and recommendations to increase levels of physical activity amongst children and their families.

There is free swimming in Bolton for all under 16s and over 65s.

There are free adult swimming lessons across Bolton through the 'Swim Bolton' programme.

A mental health referral physical activity pathway has been established in response to the low levels of physical activity known to exist in this vulnerable population.

In addition there are a wide range of activities available in Bolton that include over 50s guided walks, beginners sequence dancing, chair-based exercise, yoga, aerobics, pilates, line dancing, and salsa classes. There are also clear website lists of activities by area/type with cost.

NHS Bolton and Bolton Council commissioned a review of physical activity practices across Bolton. This work included a series of interviews with stakeholders and a visioning event attended by partners from the local authority, Serco (provider of many of Bolton's leisure services), voluntary and community sector, as well as other interested parties. The result has been the formulation of a vision which identifies clear recommendations for the development of a new concept of Active Bolton to be put into place in Bolton by 2013.

Cost-effectiveness

In cost-effectiveness analysis there is often considerable uncertainty associated with the findings as a result of the assumptions and parameters used, therefore caution must be taken when considering the results.

Brief interventions in primary care for physical activity[5] are exceptional value for money at between £20 and £440 per QALY (Quality Adjusted Life Years). This is significantly below the £30,000 threshold per QALY set by NICE to determine whether an intervention is cost effective. These brief interventions prove more cost effective than statins in preventing CHD.

The health and economic benefits of implementing active travel in the built environment far outweigh the costs – by up to 11 times. Depending on the development to the infrastructure costs range from £90 to £25,000 per QALY.

A workplace health promotion consultation reviewed by NICE cost a total of £57,000 and saved £484,944 in NHS net costs. Similarly, a workplace walking programme reviewed by NICE cost a total of £56,000 and saved £311,547.

Lewis et al[6] found that free swimming was cost-effective, at £103 per QALY. The authors of a Government review into the Free Swimming Programme[7] recommends that local authorities should continue to offer free swimming, targeting swimmers in deprived areas or non-swimmers.

On a broader scale, mass media campaigns have been found to be the most cost-effective of six interventions compared in a cost-utility analysis. As an example, a seven week BBC mass media campaign increased adults' chances of being physically active by nearly 17%.

Projected service use and outcomes

The 2012 London Olympic Games offers a great impetus to push for an increase in physical activity at the population level. Nationally, there are two targets linked to the Olympics: the first is to get one million more people doing sport three times a week by 2013 and the Legacy Action Plan which includes a two million target but will measure change across sport, active recreation, and active travel. Greater Manchester has a target linked to this; that is, the areas estimated contribution to the two million target (combining sport and physical

[5] National Institute for Clinical Excellence (2006) *Four commonly used methods to increase physical activity*, NICE.
[6] Lewis, C. et al (2010*) Prevention Programmes Cost-Effectiveness Review: Physical Activity*, Liverpool Public Health Observatory.
[7] Government and Public Sector (2010) *Evaluation of the Impact of Free Swimming*, PricewaterhouseCoopers LLP.

activity) is approximately 96,981 (rounded locally to 100,000). Greater Manchester's contribution to the first one million target (just sport) has been similarly simplified to 50,000. Bolton's contribution to this is for an extra 5,250 people involved in sport and 10,500 extra people involved in sport and other types of physical activity combined. If this is achieved, local services must be prepared to cope with future demand.

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

Community views and priorities

Qualitative analysis of comments made by residents of Bolton's NRS Areas during research for a Health Needs Assessment Report[8] found that physical activity in particular (along with healthy diet) came through strongly in people's views of what health is, what they had to do to be healthy, and what support they and their communities needed to stay healthy.

People overwhelmingly mentioned physical activity and diet as things to do to be healthy. People who had described health as the absence of illness also made these comments, only a very small number of people said health was "no disease".

The report concludes that there is a gap between peoples' aspirations to adopt 'healthier' behaviours and them taking action to do so; this can be explained by their lived situations, and understood in terms of the effect of those situations on their mental wellbeing and its constructs such as self-esteem, self-efficacy, and aspiration – each of which were shown as being relevant to the efficacy and appropriateness of interventions designed to improve health.

Specific to physical activity, the vast majority of local facilities mentioned for improving health were sports or leisure centres and other physical activity facilities; furthermore, classes were most frequently mentioned as things that would improve the health of respondents' communities. Very many people were unable to name any local facilities, and said they didn't know what they would want to improve community health. Other groups (e.g. Asian elders, Quebec Hall) that provide more than physical activity were mentioned, but tended to operate in just one area, and were perhaps not so visible as a large well-advertised leisure centre so were not mentioned so frequently.

Time and cost came through overwhelmingly as barriers to people doing more physical activity in Bolton's NRS Areas.

[8] Griffiths, B. et al (2012) *Concerning Health Matters: Voices from 3 NRS Areas*, NHS Bolton.

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

The deprived areas around the Town Centre have by far the lowest levels of physical activity in the borough as well as the highest prevalence of most morbidities and mortalities due to chronic illnesses.

Physical activity in the South Asian community of Bolton is very low and over recent years the proportion of this group participating is sports locally has been reducing. The South Asian community of Bolton also has some of the highest levels of chronic conditions (especially diabetes) that can gain particular benefits from physical activity.

Models demonstrate that Bolton's actual level of sports participation is below the expected level.

The obesogenic environment presents barriers to those wishing to lead a more active lifestyle in Bolton.

Recommendations for further needs assessment work

Assessment and regular monitoring/analysis of the Public Health Outcomes Framework indicators linked to physical activity are necessary. These are: 2.12 Adult obesity; 2.13 Physically active and inactive adults.

Assess the impact of interventions upon levels of physical activity and associated outcomes (obesity etc.) in order to identify priorities.

From the *Bolton Health & Wellbeing Survey* we have equality group data for adult physical activity, but we need to know more about children's activity between different population groups in Bolton.

More needs assessment work must be done concerning the integration of local programmes for food intake and physical activity and how they relate to, and can be expected to affect, the major outcome - obesity.

We must improve how we measure levels of physical activity in the *Bolton Health & Wellbeing Survey* to reflect the recent changes in guidance. We must also seek to investigate how people currently achieve their physical activity in Bolton and which activities are preferred – it is especially important here to identify difference between key equality groups in order to inform local strategy and direct interventions.

Key contacts

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