

Gym for Free: The short-term impact of an innovative public health policy on the health and wellbeing of residents in a deprived constituency in Birmingham, UK

Fatemeh Rabiee, Anne Robbins and Maryam Khan

Faculty of Health, Education & Life Sciences, Birmingham City University, Birmingham, UK

Abstract

Background: This paper describes the process, impact and outcomes of an innovative health policy project entitled Gym for Free in Birmingham, UK.

Objectives: To explore the short-term effectiveness of the pilot scheme in relation to access, utilisation, perceived benefits and sustainability.

Design: Cross-sectional study using survey and focus group interviews.

Setting: Community-based physical activity intervention programme.

Methods: Data were collected using a validated questionnaire ($n = 257$) and focus group interviews ($n = 9$). Descriptive and inferential analyses were conducted where appropriate. Focus group interviews were recorded, transcribed and analysed thematically.

Results: Findings showed that the pilot scheme increased the uptake of exercise particularly for women in an economically deprived inner city area. The use of leisure facilities also increased markedly ($p < .05$). Thus, the Gym for Free scheme was a step towards addressing health inequality by increasing access to and widening participation in exercise with multiple physical, mental and emotional benefits.

Conclusion: Based on the findings of this pilot research project, Gym for Free won numerous national awards for its policy innovation, and, through the support and advocacy of the research team, was extended so as to be available to the whole population of Birmingham, between 9 a.m. and 5 p.m., 7 days a week.

Keywords

Health and wellbeing, health policy, inequalities, physical activity, widening participation

Corresponding author:

Fatemeh Rabiee, Faculty of Health, Education & Life Sciences, Birmingham City University, Birmingham, B15 3TN, UK.

Email: fatemeh.rabiee@bcu.ac.uk

Introduction

Exercise plays a major role in the prevention and management of obesity and cardiovascular disease through its impact on physiological and psychological wellbeing (Department of Health [DoH], 2004; Mowforth and Daniel, 2007; Rabiee, 2007; Stanner, 2005; Warburton et al., 2007; World Health Organization [WHO], 2010). Regular exercise can help improve mood, self-esteem, confidence and quality of life. It may also assist in preventing depression and anxiety and reducing stress levels, binge drinking, comfort eating and obesity (DoH, 2011; Hassmen et al., 2000; Reid et al., 2000; Scully et al., 1998; Singh and Subhashni, 2013; Stanner, 2005).

One of the key public health goals in the UK is that of establishing the habit of regular exercise in a population in which this is not a norm. Only a minority of the population currently achieves the Chief Medical Officers' minimum recommendations for physical activity, 150 minutes of moderate activity per week; women are less likely than men (26% vs 19%) to engage in regular exercise (DoH, 2011; Health and Social Care Information Centre, 2013). Individual lifestyle choices are widely recognised as affecting people's health and risk of premature death (WHO, 2002). As a result, there has been a plethora of policies (Auerbach et al., 2011; DoH, 2003, 2004, 2005a, 2009, 2010a, 2010b; Reid et al., 2000) and resultant interventions that have sought to address this. Outcomes, however, have often been disappointing, and the effectiveness of the interventions questionable as they often fail to recognise the underlying influences that constrain and shape individual health choices and behaviours (Auerbach et al., 2011). While some success in behavioural change has been achieved among those in higher socio-economic groups, this is not the case for those of lower social groups, some of whom are five times more likely to engage in unhealthy behaviours such as smoking, excessive alcohol use, poor diet and low levels of physical activity (Donnelly and Harvey, 1996; Health and Social Care Information Centre, 2012). Exercise levels among members of minority ethnic groups and lower socio-economic groups are particularly low (DoH, 2011). The challenge for policy-makers, public health commissioners and the Local Authorities is how to change this situation.

UK Government health policy (DoH, 2000a, 2000b, 2005a, 2010a, 2010b) articulates closely with the World Health Organization's (WHO) recommendations concerning multi-agency approaches. Within the UK, the National Health Service (NHS) and local authorities have complementary roles to play in not only giving people advice but also providing the support needed to improve their health. The Gym for Free pilot scheme was an example of this type of joint initiative between one Primary Care Trust (PCT) and the local authority in Birmingham, the second largest multicultural city in the UK.

The scheme started without any feasibility or needs assessment. There was a perception among local professionals that cost could be a barrier to the uptake of leisure facilities. To test this perception, the Heart of Birmingham PCT transferred £500,000 towards free access to leisure facilities for adults in one economically deprived constituency in the city for 6 months. Access remained free if adults used this service a minimum of four times per month.

The Ladywood Constituency in Birmingham was selected for the pilot scheme based on its deprivation index, being one of the most deprived constituencies not only in Birmingham but in the UK as a whole (Birmingham City Council, 2011). The health profile of the area showed a significantly high prevalence of mental ill-health, alcohol attributable hospital admissions, mortality from causes considered preventable among those under the age of 75 years, and preventable deaths from cardiovascular disease. A high percentage of children lived in poverty and many aged 4–5 and 10–11 year olds are overweight (*Birmingham Public Health Report, 2011*).

At the time of this research, there was no literature that explored the impact of free schemes or reduced cost of leisure facilities. This pilot evaluation project therefore set out to examine the

short-term impact of such services on the perceived health of the target population and the participants' views about cost. Its objectives were the following:

1. To assess the frequency of individual uptake of the Gym for Free scheme;
2. To ascertain the experience of changes to their health and wellbeing;
3. To explore the experience of accessing the scheme;
4. To explore the importance of free access.

Methodology

A mixed study design was employed using quantitative and qualitative methods consisting of a survey and focus group interviews.

Based on the aims and objectives of the study and following an extensive literature review, a structured, self-completed questionnaire was developed (Burgess, 2001), piloted and validated to collect socio-demographic information and data on the current uptake of the Gym For Free scheme. It was intended to elicit participants' experiences of accessing the service as well as information about their height and weight and perceived changes in their general health and wellbeing. The questionnaire consisted of closed and open questions to enable greater freedom of response and was designed to be completed in approximately 10 minutes. After piloting twice with staff and managers of the leisure centres ($n=7$), two additional questions were added and small changes in the wording and the order of questions took place. During this stage and following discussion with staff, it became clear that some of the potential participants might require support in reading and answering the questions. For consistency of approach and ensuring that literacy was not a constraint, it was therefore agreed to recruit and train two bilingual co-researchers in addition to the third author (M.K.) administering the questionnaire. A half day training of co-researchers took place prior to the second stage of piloting. The questionnaire was then piloted among six users (four women and two men) in one of the leisure centres. A debriefing session took place immediately after the piloting, and any issues or concerns were addressed prior to main data collection. No changes to the wording of the questionnaire subsequently took place, but as a couple of women were giving extra information about changes in the type of food they eat, it was decided to ask for more information by adding an open-ended answer to this question 'If yes, please explain'. A trial coding and analysis of pilot samples were carried out to test the analysis procedure and determine the type of data generated.

Sampling and participants

A poster inviting people to participate was designed and displayed in each leisure centre for 1 week prior to administering the questionnaire. Participation in both phases of data collection was voluntary. Potential participants were approached, and an explanation about the project was given. Those agreeing to participate were considered to have given their informed consent to the completion of the questionnaire. Written and signed consent forms were obtained from all the participants of the focus group interviews.

An opportunistic approach was taken to respondent selection, and 257 participants, who responded to the poster and expressed an interest, were recruited from the four pilot leisure centres during a 3½-week period. This represented approximately 11% of the total service users in those four leisure centres during the study period.

After completing the questionnaire, participants were asked whether they would like to be involved in further discussion about the scheme and to participate in a focus group interview;

details of those who agreed were taken. Telephone calls were later made to their homes reminding them of the agreed time and venue for the focus group interview.

Three focus group interviews were set up for scheme users, and one for the staff. The aim was to capture rich qualitative data (Flick, 2006) about experiences of the scheme and ideas for possible improvements. It was intended that, if more than 10 participants in each centre expressed an interest, a maximum of 10 would be randomly selected. It was also intended that focus groups would include men and women and members of minority ethnic groups. Although 21 people put their names forward, only 9 participated in three focus groups: 2 men (1 White and 1 Black) and 7 women (4 Pakistani, 2 Indian and 1 White). Eight staff members from the four leisure centres formed the fourth focus group: 6 women and 2 men.

Focus group data were collected using a semi-structured interview schedule which was developed based on the preliminary analysis of the questionnaire data. Each focus group lasted approximately 30 minutes. Participants signed a consent form and gave their permission for tape recording, prior to the focus group interview. The second author (A.R.) facilitated all focus group interviews, while the third author (M.K.) took detailed notes. A debriefing meeting took place between them immediately after each focus group interview and further field notes were made.

Data analysis

Quantitative data

Questionnaires were checked, coded and analysed using IBM SPSS Statistics software. Descriptive and inferential analyses were carried out by gender, age group and ethnic group. The Mann–Whitney test was used to compare the frequency of the use of leisure services before and after the introduction of the Gym for Free scheme. In addition, a Kruskal–Wallis test was carried out to identify differences between sub-groups. The level of significance for all tests was set at $p = .05$.

Qualitative data

Focus group transcripts were thematically analysed using Krueger's framework and Rabiee's guidelines (Krueger and Casey, 2000; Rabiee, 2004), to identify themes and sub-themes. Data were interpreted taking into account the verbatim accounts, the context within which these were elicited, the frequency and extensiveness of comments made, the intensity of comments, internal consistency, specificity of responses and the emergent picture.

Analysis was systematic, sequential, verifiable and continuous (Denzin and Lincoln, 2005). Initial analysis was carried out by the second author (A.R.), and the first author (F.R.) then checked the coding process and read the notes independently; this provided a trail of evidence and increased the dependability, consistency and conformability of data, important issues for assessing the quality of qualitative data (Denzin and Lincoln, 2005).

To ensure anonymity, each focus group was coded by number (e.g. 1, 2 and 3); the individual participants in each group were given a letter (A, B, C, etc.). Gender of respondents, but not their ethnicity was indicated as the latter would have made some respondents identifiable. For example, BF.1 means Female B in Focus group 1.

Ethics

Advice was sought from the queries line of the National Research Ethics Service. The research was viewed by them as being a service development and therefore did not require formal ethical

approval. However, the research team adhered to ethical principles during recruitment, data collection, analysis and reporting: autonomy, voluntary participation, doing good and no harm to participants, anonymity and confidentiality (Beauchamp and Childress, 2001; DoH, 2005b).

Limitation of the methodology

The authors are aware of the limitations of the methodology in relation to non-random selection and the small number of participants. However, the practicalities of real-world research and the importance of flexibility as a practitioner researcher need to be acknowledged (Robson, 2011). This was an evaluation of an innovative 6-month pilot scheme; the research team only became involved 3 months after work began. The short time scale required a certain degree of flexibility to sample selection without compromising the quality of data collection, analysis and ethical principles.

Results

This paper presents the result of the questionnaire, and focus group interviews with users of the scheme only, when appropriate the results are combined. The objectives set out in this evaluation study formed the framework for analysing and presenting the data.

Socio-demographic information

A total of 144 (56%) men and 113 (44%) women responded to the questionnaire. Almost one-third (32%) were aged 18–24 years and a slightly smaller proportion were aged 25–34 years (27%). The majority of the respondents were South-Asian (41%), followed by African and African-Caribbean (33%), representing the population profile of the constituency under study. Among South-Asians, 51% were Pakistani and 28% Bangladeshi. Among the Africans and African-Caribbeans ($n=85$), 47% were African-Caribbean, 26% were African and 27% were from other Black backgrounds.

The majority of respondents (38%) were either married or were living with their partners, 34% were living with their parents and 23% lived alone. With respect to household income, 53% did not disclose their income, and a further 16%, mostly women and students, said they did not know their household income. One explanation for not providing information regarding income could be due to respondents' assumption that if declared they might be excluded from the free scheme in future.

Less than half of the respondents had a job (42%), 27% were unemployed and the rest were either students (23%) or did not respond to this question (8%).

Changes in participants' use of leisure facilities

There was a marked difference between the use of leisure facilities before and after the introduction of the Gym for Free scheme, and particularly in relation to the frequency of use. Figure 1 provides a breakdown of frequency of use before and after the introduction of the scheme. The proportion of respondents who used the facilities almost every day or most days increased from 25% to 64%, and those who never used the leisure facilities decreased from 28% to 0%. There was a significant difference between the proportion of those respondents who used the facilities every day or almost every day and those who never did so ($p < .05$).

Figure 1 also indicates that nearly one-third of the respondents ($n=73$) never used the leisure facilities prior to the introduction of the scheme, suggesting a link between cost and frequency of use.

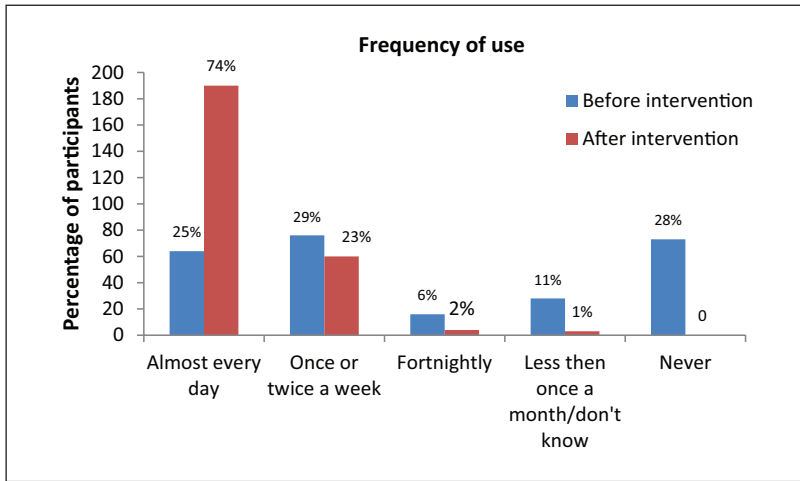


Figure 1. Use of leisure facility before and after the Gym Free scheme. Mann–Whitney test ($p < .05$).

When asked what prompted them to join the Gym for Free scheme, 51% of participants mentioned the free membership. When asked about the importance of free access, 86% mentioned that this was very important or important, 6% mentioned that they were not sure or did not respond to this question, and only 8% of participants mentioned that free access was not important.

Participants were also asked to what extent the Gym for Free scheme was important in motivating them to use the leisure facilities. A total of 90% of the respondents ($n=231$) stated either that was very important or important. When this issue was explored further in the focus group interviews, a number of participants mentioned ‘the free scheme’ was a key reason for initially motivating them to attend. They recognised that while the individual costs of sessions were reasonable, there were constant competing priorities for finite resources, especially when unemployed or doing temporary work. The fact that the scheme was free took the reason of cost away from the person’s motivation to attend, enabling them to visit more frequently:

The financial aspect is the biggest aspect ... (B1.F)

It is quite reasonable, but then if you think about it if you want to go to the gym three or four times a week it is all going to add up and when you are trying to pay off all your bills and everything is going up, it makes it more difficult. You just think ‘oh forget going to the gym, use the money to buy some groceries’. (A3.F)

I could not afford it if the Scheme is not free; I come 3–4 times a week. (A4.M)

It is close to home and is free. When you have been made redundant you can’t afford to pay £50 per month when you are relying just on temporary jobs ... The fact that I can still do exercise even though I know I’m not working, so it doesn’t mean that for a month when I’m searching for a job that I’m am going without. (A2.F)

I have been coming for a year but used to come one or two times, now four or five times a week. (A5.F)

The findings from both survey and focus group interviews clearly indicated that cost was an important barrier to participation in exercise.

Participants' reasons for joining the scheme

Participants were asked to choose as many options as they felt relevant; most of them therefore gave multiple answers to this question.

A large number of respondents mentioned 'getting fit' ($n=193$) as the main reason for joining the scheme. Others cited 'the free membership' ($n=143$) and/or intention 'to lose weight' ($n=87$), 'seemed like a good idea' ($n=62$), 'reduce stress' ($n=33$) and 'accompany a friend or family member' ($n=26$). One man saw that there could be multiple benefits to his health:

To make ourselves healthy, to be active ... there has been a great difference from coming here ... (A1.M)

One woman noted that undertaking exercise could contribute to a person's mental health and wellbeing:

When you go to the gym you may not feel in the mood but you do feel a lot better, I do know from certain things that I watch that it helps with anxiety and lots of other things as well. (A3.F)

While the scheme was established for participant self-referral and to increase activity levels, one man recounted that following his doctor's instructions to join the scheme, his aim had been to lose weight:

My doctor told me to come, as I was 14 stone. In 5 months I am now 13 stone and I am feeling very better. (A4.M)

A total of 85 participants (33%) stated that they joined the scheme specifically to lose weight. When asked whether this had been useful, 55 (65%) responded positively.

In response to questions about dietary changes, 153 participants (46%) stated that they had altered their eating patterns since joining the scheme. The top seven answers given were as follows: eating more fruit and vegetable (34%), less fat and fried food (16%), more healthily (10%), no junk food (4%), more water (4%) and fewer take-aways (3%).

Perceived benefits to health and wellbeing

Participants were asked whether they had noticed any benefits to health and wellbeing as a result of using the facilities at the leisure centre. They were asked to choose as many options as they felt relevant. Most of them therefore gave multiple answers to this question. Figure 2 identifies the health benefits most frequently stated. The range of answers in order of frequency of responses was as follows: increased energy levels ($n=121$), increased fitness level/stamina ($n=104$), muscle gain ($n=95$), increased confidence ($n=91$), stress relief ($n=77$), loss of body fat ($n=71$), less visits to general practitioner (GP) ($n=21$), keep fit ($n=9$), anger management ($n=8$) and build lower body strength ($n=5$).

Participants were also asked about changes in their weight. In response, 44% reported a decrease, 12% indicated an increase, 11% said it had not changed and the rest either did not know or did not answer.

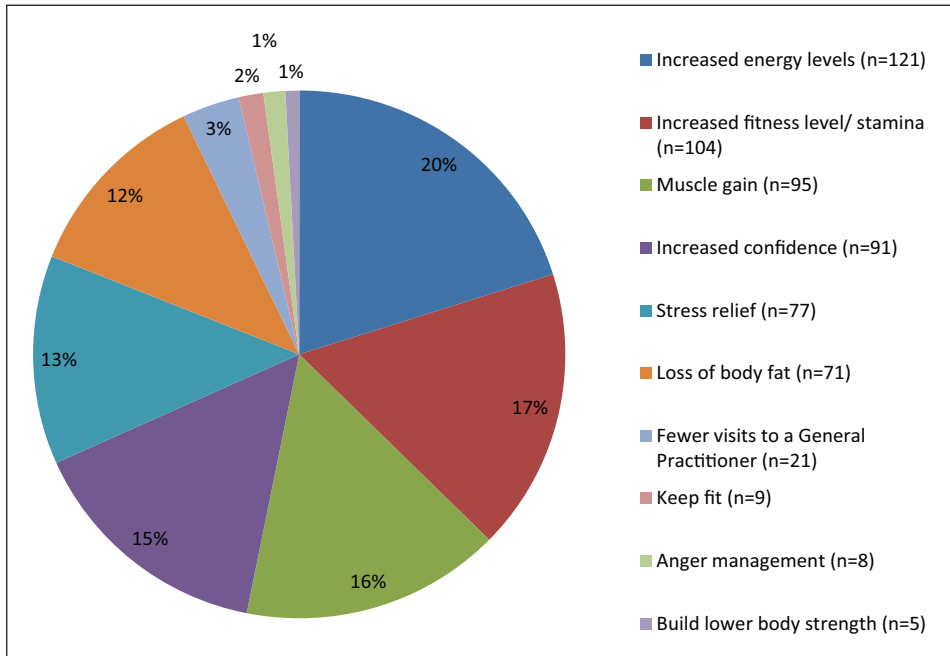


Figure 2. Perceived health benefits of exercise.

When asked whether they had made any additional changes in their lives, many participants mentioned that becoming more active resulted in them being motivated to alter their eating patterns:

Before I never used to think ‘Oh fruit’ but now the first thing I do, is go home have a quick shower and tend to have some fruit because you do feel quite hungry afterwards and instead of going for a big bowl of pasta or something I just have a big bowl of fruit instead. (A.2F)

I’ve changed my diet. You think that you’ve come to the gym you’ve worked really hard and I eat loads of healthy stuff ... I’ve stopped eating fried food. (B2.F)

I didn’t drink water before I came to the gym I wouldn’t touch it, and I drink it like you wouldn’t believe now, even my husband is shocked. (B1.F)

Other changes in lifestyle included reductions in alcohol and tobacco use, plus the uptake of additional exercise at home:

I tend not to drink that much now, where as I used to go out on a Friday night and it was like ‘oh it doesn’t matter you lie in on Saturday’ but now it’s like ‘no I’ve got to go to the gym in the morning’ so just like the last couple of weeks I just haven’t, maybe a glass of wine at home. And my smoking, I don’t smoke as much. (A2.F)

Despite the pilot running for only a short period of time, many participants reported significant changes. Family members joined the gym and their eating habits had changed too:

My mum, she has joined the gym as well. She saw me going and it kind of changed things and made her join. (A2.F)

I came first, then my daughter in law, then my daughter. (A1.M)

I think it motivates a lot of people around you, my partner feels motivated because I train, he wants to train and look good. My daughter also watches what she eats as well and she is 12 and starts looking at what's healthy and what's not healthy and my father as well. When I cook I kind of use lower fat, 'cos (because) I live with my parents I make my mom aware of what she buys, buy low fat, use less oil in her cooking and little things like ... (B2.F)

Participants reported a wide range of unexpected changes such as an increase in their motivation to exercise, a reduction in stress and anxiety and support for victims of domestic abuse. Many participants reported that a key benefit was that of reduced stress and increasing mental wellbeing:

I come every day after work before I go home it just de-stresses you, it is not just because it is free, it de-stresses you, you are healthy, you look good, you feel good. (B2.F)

I know when I do stick to my routine that I do feel better within myself, find it easier to sleep, ... a sense of achievement as well when you come out of the gym which makes you feel good as well. (A3.F)

One participant reported measurable changes in her medication for depression:

The medication I'm on for the postnatal depression, is half now. And the doctor said it is just due to me doing the exercising ... the more days I did the better I felt and the more people I met and got into more conversations and that made me feel great ... and he said keep it up don't stop. (B1.F)

Regular attendance was also linked to the development of social networks and friendship patterns together with reduction in social isolation of some women:

The Scheme makes you motivated and you meet friends, you start to meet other people there, now I find personally it's helped me as I had postnatal depression and I found it really relaxing and very de-stressing in here. (B1.F)

Going to the gym provided a respite for some women experiencing domestic abuse; other group members supported them:

They (Asian women) get stuck in the home 'cos (because) their husbands don't want to give them any money I've found a couple of ladies like that ... the scheme is free and through Chinese whispers they have heard about it ... and they have met people and managed to talk about their problems. And we have loads of problems, it makes your heart broken when you hear ... so these Asian ladies really benefit, they really have. (A3.F)

Discussion

In summary, two key findings emerged from this evaluation: the perceived benefits and increased access for those living with social and material deprivation.

Perceived benefits

Our study identified multiple physical, emotional, mental and social benefits of this pilot scheme: a reported reduction in the use of antidepressant medication, an increase in confidence, social support and changes in the lifestyle behaviours. Fox (1999, 2000) reports that there is evidence from numerous studies that exercise can improve one's self-esteem (Singh and Subhashni, 2013; Vogal, 2000; Warburton et al., 2007), which in our study was signalled through increased confidence. Singh and Subhashni (2013) report several studies which link aerobic and resistance training to reductions in depressive symptoms and lower depression scores. The benefits of exercise as highlighted in our study extend far beyond the pathogenic benefits, as supported by the Chief Medical Officer (DoH, 2011).

Increased access and widening participation

There is compelling statistical evidence and persuasive argument to support the uptake of regular moderate physical activity (DoH, 2009, 2011; WHO, 2010). Our data clearly demonstrate that the scheme represents a positive step towards addressing health inequality and widening participation through increasing access to free exercise and leisure facilities in one of the most deprived areas of Birmingham. In the short term, as the findings indicated, there is potential for a positive impact on users' perceived health and wellbeing.

It was notable that there was an increase in the activity levels of women, especially those from Pakistani and Bangladeshi ethnic backgrounds. Pringle et al. (2014) have also noted an increase in the activity levels of girls in their free swimming programme. In both cases, lower cost was linked to increased activity levels, particularly among women.

It is recognised that social and environmental circumstances are integral to lifestyle choices. The relationship between physical activity and social class is complex, however, and not solely related to access. However, the role of supportive social environments is being acknowledged (Thirlaway and Upton, 2009). Increasingly in public health, there is recognition of the social determinants of health (Griffiths et al., 2005; The Marmot Review, 2010) and the limitations of mainstream, individualistic interventions to improve the populations' health (Auerbach et al., 2011). Failure to respond to the structural and environmental factors and influences results in poor outcomes.

Little information is available from national initiatives (DoH, 2007) about cost being a barrier to participation in physical activity for adults. Focussing on changing structural and environmental factors by removing cost has been effective in increasing participation by young people (PricewaterhouseCoopers, 2010) as well as engaging community members in regular exercise in our study. This was achieved through an active partnership between the local authority and a PCT. Health strategists can set goals and targets that inform direction but this alone cannot guarantee success; there has to be a national and local willingness to achieve these objectives (Baggott, 2011).

Following the implementation of the Health and Social Care Act (2012), there has been a series of fundamental changes in the delivery and management of public health at a national and local level in England. One key policy change has been the transfere of responsibility for public health from the NHS to local government. The UK White Paper *Healthy Lives, Healthy People* (DoH, 2011) presents a new vision for public health and a new role for local government in improving public health. It also emphasises the centrality of local government and local communities in improving the health and wellbeing of the population and in tackling inequalities. The Health and Social Care Act (2012) stresses local government's new role in promoting health and wellbeing. This transfer has received considerable criticism (Royal Society of Public Health, 2014) with public health professionals feeling that decisions are heavily influenced by local politics rather than evidence. The Gym For Free scheme is still running, although the budget has been reduced (Birmingham City Council, 2011).

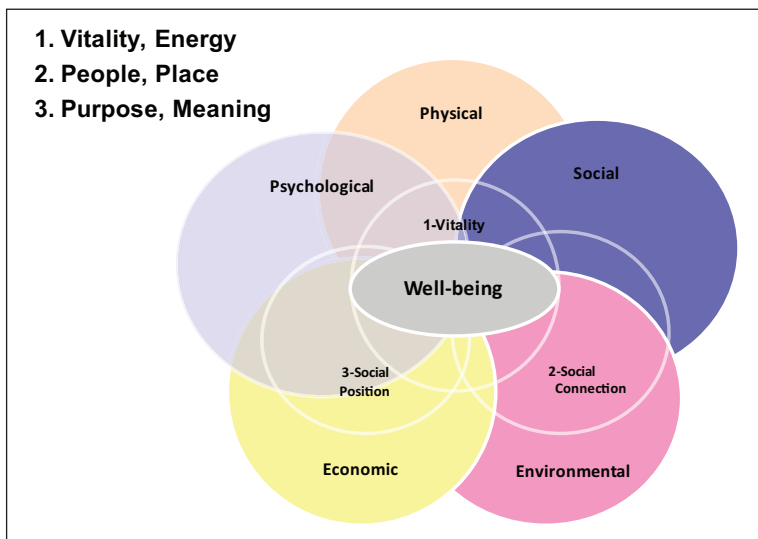


Figure 3. Interconnected fields of wellbeing.
Source: adapted from Labonté (1998) and IOSH (2011).

Despite the decreased level of funding, Birmingham City Council claims the scheme to have over 400,000 members equating to 16,000 attendances per week (DoH, 2014). The scheme has also been extended to incorporate 50 different activities in gyms, pools, community parks and venues across the city. Whether the scheme's continuation has been influenced by the early partnership between the health service and the local authority is unknown.

Regular attendance at the scheme has been attributed to the development of strong social networks and friendship patterns together with reduction in social isolation for some women. This finding echoes Reid and Frisby's (2004) findings about the many social benefits associated with leisure and recreation activities.

Wellbeing, as argued by Labonté (1998) and IOSH (2011), requires focussing on both subjective and objective measures and should engage with the five interconnected fields of wellbeing: physical, social, environmental, economic and psychological. According to Rabiee (2013), as illustrated in Figure 3, concentrating on people, place and purpose through improving social connectedness, creating conducive environmental and social positioning can enable people to have vitality, positive energy and meaning in life, which may in turn have a positive impact on wellbeing.

Based on data generated from this study, free access to the Gym for Free scheme appears to affect all aspects of wellbeing as highlighted above, particularly in relation to social connectedness and creating a positive environment for health (Figure 3).

Strengths and limitations

While there are limitations to our findings, data reported here offer an account of the short-term impact of the scheme. However, to demonstrate sustainability and effectiveness, long-term evaluation is required. This was a cross-sectional study and recruitment was opportunistic, not random and not generalisable. Despite these limitations, data generated show clear evidence of perceived short-term improvements in health and wellbeing demonstrating the scheme's potential to address health inequalities. It also highlights the importance and effectiveness of joined-up public health policy between stakeholders.

Conclusion

The Gym for Free scheme was successful in increasing the uptake of the exercise facilities among study participants from 25% to 64% either every day or most days and a reduction among those who never used these facilities from 28% to 0%. This was particularly the case among women and the most economically disadvantaged. Cost seemed to be an important barrier to participation in exercise in our study group; the free service was therefore a prime motivator. The scheme also widened participation among an ethnically diverse population particularly for women from Pakistani and African-Caribbean ethnic backgrounds.

Extending the scheme across the whole of the city was recommended together with the need to embark on a long-term evaluation of its effectiveness and sustainability to establish a firm evidence base. Recommendations were also made about changes to the type of activities offered to incorporate culturally specific sessions, and more overt links to other current healthy lifestyle programmes in the city – *Size Down*, *Exercise on Prescription* and *Smoking Cessation* – to increase multi-factorial benefits. It was also suggested that the name of the scheme be reviewed to reflect the main focus which was to be active and get fit, rather than only use the gym. The scheme is now called *Be Active* and available free to all residents of Birmingham, through the passport to leisure scheme, between 9 a.m. and 5 p.m. on weekdays and for a limited time on weekends. The time limitation imposed, particularly during the weekend, could be viewed as limiting the uptake of the service by working people, but the scheme has taken an important step towards improving the health of those most in need.

Acknowledgements

Our gratitude to all participants who took part in the survey and focus group interviews for giving us their time, thoughts and experiences of using and providing the Gym for Free scheme. We are also grateful to staff and managers at New Town, Small Heath, Summerfield and Nechells Leisure Centres for their support and practical advice during the process of data collection as well as to colleagues from the Heart of Birmingham Teaching Primary Care Trust and Ladywood Constituency Office for their commitment, enthusiasm and invaluable advice and support and facilitation. Last but not least we are very thankful to Jaspreet Bhopal for her backup and technical support regarding data input, processing and analysis and to Paula McGee for proof reading and editing.

Funding

This research received funding from Birmingham City Council

References

- Auerbach J, Parkhurst J and Caceres C (2011) Addressing social drivers of HIV/AIDS for the long-term response: Conceptual and methodological considerations. *Global Public Health* 6(Suppl. 3): S293–S309.
- Baggott R (2011) *Public Health Policy and Politics*. 2nd ed. London: Palgrave Macmillan.
- Beauchamp T and Childress J (2001) *Principles of Biomedical Ethics*. 5th ed. Oxford: Oxford University Press.
- Birmingham City Council (2011) *An Analysis of Birmingham Local Statistics 2010*. Birmingham: Department for Communities & Local Government.
- Burgess TF (2001) A general introduction to the design of questionnaires for survey research. Available at: <http://iss.leeds.ac.uk/downloads/top2.pdf> (accessed 13 May 2014).
- Denzin NK and Lincoln YS (2005) *Qualitative Inquiry*. 2nd ed. Thousand Oaks, CA: Sage.
- Department of Health (DoH) (2000a) *National Service Framework for Coronary Heart Disease*. London: DoH.

- Department of Health (DoH) (2000b) *The NHS Plan: A Plan for Investment. A Plan for Reform*. London: DoH.
- Department of Health (DoH) (2003) *Tackling Inequalities: A Programme for Action*. London: DoH.
- Department of Health (DoH) (2004) *At Least Five a Week: Evidence on the Impact of Physical Activity and Its Relationship to Health*. London: DoH.
- Department of Health (DoH) (2005a) *Choosing Health: Making Healthier Choices Easier*. London: The Stationery Office.
- Department of Health (DoH) (2005b) *Research Governance Framework*. 2nd ed. London: DoH.
- Department of Health (DoH) (2007) *Learning from LEAP: A Report on Local Exercise Action Pilots*. Carnegie Research Institute, Leeds Metropolitan University. Available at: <http://nwphpaf.org.uk/downloads/8113837696795145024012008131301.pdf> (accessed 5 September 2014).
- Department of Health (DoH) (2009) *Be Active, Be Healthy. A Plan for Getting the Nation Moving*. London: The Stationery Office.
- Department of Health (DoH) (2010a) *Healthy Lives, Healthy People: Our Health and Wellbeing Today*. London: HM Government.
- Department of Health (DoH) (2010b) White paper, healthy lives, healthy people: Our strategy for public health in England. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216096/dh_127424.pdf (accessed 5 September 2014).
- Department of Health (DoH) (2011) Start active, stay active: A report on physical activity from the four home countries' Chief Medical Officers. Available at: <https://www.gov.uk/government/publications/start-active-stay-active-a-report-on-physical-activity-from-the-four-home-countries-chief-medical-officers> (accessed 5 September 2014).
- Department of Health (DoH) (2014) *Moving More, Living More: The Physical Activity Olympic and Paralympic Legacy for the Nation Annexes*. London: DoH. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/279339/Moving_more_living_more_annexes.pdf (accessed 8 September 2014).
- Donnelly P and Harvey J (1996) Overcoming systemic barriers to access in active living. Report to Active Living Canada. Available at: http://physical.utoronto.ca/docs/cspss-pdfs/CSPS_Working_Paper_1_-_Overcoming_Systematic_Barriers_to_Access_in_Active_Living.pdf?sfvrsn=0 (accessed 11 October 2013).
- Flick U (2006) *An Introduction to Qualitative Research*. 3rd ed. London: Sage.
- Fox KR (1999) The influence of physical activity on mental well-being. *Public Health Nutrition* 2(3a): 411–418.
- Fox KR (2000) The effects of exercise on self-perception and self-esteem. In: Biddle SJH, Fox KR and Boutcher SH (eds) *Physical Activity and Psychological Well-Being*. London: Routledge, pp. 88–117.
- Griffiths S, Jewell T and Donnelly P (2005) Public health in practice: The three domains of public health. *Public Health* 119(10): 907–913.
- Hassmen P, Koivula N and Uutela A (2000) Physical exercise and psychological well-being: A population study in Finland. *Preventive Medicine* 30(1): 17–25.
- Health and Social Care Act (2012) Available at: <http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted> (accessed 6 November 2013).
- Health and Social Care Information Centre (2012) The Health Survey for England. Available at: <http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestylesrelated-surveys/health-survey-for-england> (accessed 28 July 2013).
- Health and Social Care Information Centre (2013) Statistics on obesity, physical activity and diet: England, 2013 (version 2). Available at: <https://catalogue.ic.nhs.uk/publications/public-health/obesity/obes-phys-acti-diet-eng-2013/obes-phys-acti-diet-eng-2013-rep.pdf> (accessed 5 May 2014).
- IOSH (2011) Measuring national wellbeing: IOSH response to the Office of National Statistics consultation. Available at: <http://www.iosh.co.uk/~media/Documents/Books%20and%20resources/Policy%20and%20Consultation/Reforming%20the%20medical%20statement.ashx> (accessed 14 June 2013).
- Krueger R and Casey MN (2000) *Focus Groups – A Practical Guide for Applied Research*. 3rd ed. London: SAGE.

- Labonté R (1998) *A Community Development Approach to Health Promotion*. Edinburgh: Health Education Board for Scotland.
- Mowforth C and Daniel J (2007) The effect of an acute bout of exercise on body image, mood and self-efficacy. *Health Psychology Update* 16(1/2): 80–81.
- PricewaterhouseCoopers (2010) Evaluation of the impact of free swimming. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/77389/FSP-exec-summary-June2010.pdf (accessed 20 April 2014).
- Pringle A, Zwolinsky S, McKenna J, et al. (2014) Initial effects of a free swimming pilot programme on the physical activity levels of young people. *Public Health* 128(5): 485–487.
- Rabiee F (2004) Focus group interview and data analysis. *Proceedings of the Nutrition Society* 63(4): 655–660.
- Rabiee F (2007) The role of nutrition and exercise in prevention and management of cardiovascular disease. In: *Proceedings of Cardiology, Bulgaria (update 2006)*, Sofia, 21–24 September, pp. 32–37. Heart Friends Around the World (HFATW).
- Rabiee F (2013) Health and wellbeing throughout life: The UK experience on sustainability and effectiveness of life cycle approach. Proceeding of *Well-being 2013 conference*, Birmingham: Birmingham City University.
- Reid C and Frisby W (2004) *Promoting Women's Health, Equity, and Inclusion: The Role of Accessible Community Recreation in Reducing Social Isolation*. The University of British Columbia. Available at: <http://lin.ca/sites/default/files/attachments/CCLR10-96.pdf> (accessed 21 February 2014).
- Reid C, Dyck L, McKay H, et al. (2000) *The Health Benefits of Physical Activity for Girls and Women Literature Review and Recommendations for Future Research and Policy*. Vancouver, BC, Canada: British Columbia Centre of Excellence for Women's Health.
- Robson C (2011) *Real World Research*. 3rd ed. New York: John Wiley.
- Royal Society of Public Health (2014) The views of public health teams working in local authorities Year 1. Available at: <http://www.rsph.org.uk> (accessed 20 April 2014).
- Scully D, Kremer J, Meade MM, et al. (1998) Physical exercise and psychological well-being: A critical review. *British Journal of Sports Medicine* 32(2): 111–120.
- Singh J and Subhashni D (2013) Exercise benefits patients with depression. *American Journal of Nursing* 113(10): 67.
- Stanner S (ed.) (2005) *Cardiovascular Disease: Diet, Nutrition and Emerging Risk Factors. The Report of British Foundation Task Force*. London: Blackwell Publishing.
- The Marmot Review (2010) Fair Society, Healthy Lives: Strategic review of health inequalities in England post 2010. Available at: <http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review> (accessed 11 February 2014).
- Thirlaway K and Upton D (2009) *The Psychology of Lifestyle: Promoting Healthy Behaviour*. London: Routledge.
- Vogal A (2000) Body image and self esteem. In: Reid C, Dyck L, McKay H, et al. (eds) *The Health Benefits of Physical Activity for Girls and Women. Literature Review and Recommendations for Future Research and Policy*. Vancouver, BC, Canada: British Columbia Centre of Excellence for Women's Health. pp: 60–83.
- Warburton DER, Nicol CW and Bredin SSD (2007) Health benefits of physical activity: The evidence (review). *Canadian Medical Association Journal* 174(7): 801–809.
- World Health Organization (WHO) (2002) *Reducing Risks, Promoting Healthy Life*. Geneva: WHO.
- World Health Organization (WHO) (2010) *Global Recommendations on Physical Activity for Health*. Geneva: WHO.