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What is This?
Sustainable participation in regular exercise amongst older people: Developing an action research approach

Jeanne Davies\textsuperscript{a}, Carolyn Lester\textsuperscript{b}, Martin O’Neill\textsuperscript{a,c} and Gareth Williams\textsuperscript{a}

Abstract

Objective  This article describes the Triangle Project’s work with a post industrial community, where healthy living activities were developed in response to community members’ expressed needs.

Method  An action research partnership approach was taken to reduce health inequalities, with local people developing their own activities to address health and well being issues. At the instigation of older women attending a community consultation, a low intensity exercise class was started. Baseline details including weight, self-assessed fitness and mobility problems were recorded. The class branched out into social activities including healthy eating, walks and outings; members controlling the pace and content of both class and spin-off activities via continuous feedback and discussion with the Triangle researcher. Two evaluation events were held using a focus group format.

Findings  Barriers to regular participation are discussed, together with the achievement of a sustainable fitness group with evidence of health improvement in an initially ‘unfit’ group. Social aspects were highly valued by participants and contributed to sustainability of the class, which is now run by members without external input.

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Limitations Though activities appeared to be sustainable when the Triangle Project ended, no longer term follow-up has been possible due to cessation of funding.

Implications Projects aiming to achieve sustainability should build in provision for longer term follow-up.

Key words: action research, exercise, older women

Introduction
The UK government has stated that: ‘Health is inextricably linked to the way people live their lives and the opportunities available to choose health in the communities where they live’1. But as with many such general policy statements based on virtuous principles, the devil emerges from the detail of implementation and application. How is health linked to the way in which people live, how is this determined and how can opportunities be provided in communities where they are limited? Indeed, what does individual choice mean in circumstances in which physical, economic or social constraints prevail?

These issues underlie the work undertaken by Derek Wanless on behalf of both the UK Treasury2,3 and the Welsh Assembly Government4, emphasizing that the NHS cannot be sustained in its current form. The UK population must be engaged much more effectively in strategies for health improvement outside the remit of the NHS. Public engagement is the key to sustainable health improvement, and central to Wanless’s fully engaged scenario where people are much more highly attuned to risk factors and make substantial changes in health related behaviours. This has been identified as key to the strategic framework being developed in Wales5.

Simply providing better health promotion information improves the health of some, but leaves others behind6, so strategies for health improvement that fail to simultaneously address the social determinants of health and their unequal distribution are unlikely to reduce health inequalities. Ability to engage in ‘behaviour change’ depends upon the complex interaction of economic resources, social relationships, physical environments, meaningful opportunities, and what is sometimes referred to with misleading oversimplification as ‘motivation’. Although the Wanless reviews and government strategies appear to be sensitive to these issues, the tendency remains to default to individualistic concepts such as ‘choice’ and to avoid the complex question of how a healthier way of life can be supported and developed under widely divergent social and economic conditions.

For older people who may not have taken part in organized physical activity for many decades, developing a fully engaged relationship to health improvement could be particularly problematic, as even exercise on prescription schemes that provide health worker and financial support are difficult to sustain7. With chronic health problems emerging in mid and later life amongst large sections of the population, finding imaginative and successful
Regular exercise amongst older people

ways of sustainably engaging older people in activities known to improve health and well being is an important priority.

**Fitness 50+**

Fitness 50+ developed within the Triangle Project, one of seven projects funded by the Welsh Assembly Government’s Sustainable Health Action Research Programme (SHARP) with the purpose of investigating whether this method could engage disadvantaged communities in sustainable activities to reduce health inequalities. ‘Triangle’ was a partnership between the School of Social Sciences at Cardiff University, the National Public Health Service (NPHS) for Wales, and community development consultants.

Triangle covered three disadvantaged post industrial communities in South Wales and reports on the project’s work in Gurnos (Merthyr Tydfil) and Riverside (Cardiff) have previously been published. This article describes activity in Ystradgynlais (population 2543), a small semi-rural town and former coalmining community at the western end of the South Wales valleys. Light industry later became the main employer but factory closure in the late 1990s caused widespread unemployment and, though many of those affected had transferable skills, travel costs to other areas for employment made work economically impractical for some.

A partnership approach was taken to reducing health inequalities, whilst working with local communities to develop their own strategies to tackle health and well being issues. The aim was to initiate a process for positive change, rather than impose a ‘ready made’ project. This was achieved by recruiting ‘local researchers’ employed by the University who did not necessarily have formal qualifications but who were either resident in or had close connections with the community.

Triangle Ystradgynlais began, in 2001, in partnership work with the NPHS Local Health Promotion Team (LHPT) to organize a Health Fair, to increase awareness of local self-help services and provide an opportunity for Triangle to consult the community. The need emerged for a daytime exercise class appropriate for older people and a six week pilot project began in January 2001. This article describes how the class was developed and evaluated, exploring the benefits of attending the class and barriers to sustaining it.

**Method**

When the need for a class was established, Triangle’s researcher made this known to organizations whose remit was to provide sporting and recreational activities. The Local Authority Sports Centre could not accommodate a daytime class and though other organizations were willing to hire out halls, they did not wish to take responsibility for the class. The local researcher therefore set up a six week pilot class, helped by free use of a hall and instructor’s fees being paid by the LHPT. The class was advertised extensively using posters, a community magazine and via word of mouth.
There was no charge initially but participants were informed at the outset that if the class continued beyond six weeks, a charge would have to be made to cover costs.

**Action research and evaluation**

All activities were developed using action research, whereby consultation and reflection shapes future action, as described by Kemmis and McTaggart\(^1\) and by Winter and Munn Giddings\(^2\). Triangle employed a continuous cycle of evaluation and revision, emphasizing the democratic and participative aspects of the action research process, ensuring that participants decided on what was most important for their community, building interventions in partnership with the Triangle researcher and gaining ownership of the project. This method incorporates co-learning, leading to sustainable collective action, where local people set their own agenda and eventually carry it out without an external facilitator\(^3\). Reflection and review of Fitness 50+ was a continuous process, via informal discussions, regular committee meetings and annual general meetings. All members were encouraged to express their views with the regularly repeated injunction to ‘speak out, don’t drop out’.

All potential members were asked to consult their doctor before joining and completed a baseline questionnaire on existing medical conditions which might be relevant to their ability to take part. The questionnaire also included weight, fitness/activity level and mobility problems (all self assessed), which also assisted the instructor in planning appropriate classes. This questionnaire was repeated in the class at intervals between 2001 and 2005, the final time at the beginning of 2005.

Two evaluation events were held to follow up on points raised by members and to provide further opportunities to ensure that classes were meeting the needs of the community. Whilst the primary purpose was research, the organizer ensured that they were pleasant social events with facilitators who were able to achieve a good rapport with their groups. A healthy lunch was provided at both events.

At the first event in March 2003, members split into three focus groups to discuss how they had benefited from attending the class. At the second event in February 2005, past and present members were invited to explore the project in greater depth using a similar format, with the addition of an evaluation questionnaire providing entry to a health themed prize draw. The purpose was to gain a deeper understanding of the perceived benefits of attending, and reasons for and possible solutions to the high drop out rate. To reduce any potential bias, an experienced evaluator with no previous contact with Fitness 50+ observed the event and provided an independent assessment of its effectiveness.

**Results**

The pilot began in January 2001 and 63 people joined within the six week period, most of whom had heard about the class by word of mouth. Average weekly attendance was...
36 people. Though the class is open to both sexes, only four men joined after being advised to take gentle exercise: all came with a wife/partner.

After four weeks it was explained that in order to continue, members would need to form a management committee and pay a fee, eventually set at £2.50. Twelve members volunteered for the committee, named the group Fitness 50+ Ystradgynlais and drafted a constitution. As a constituted body the group has been able to secure funding sources for equipment, training, extending the classes to other local areas plus support for health-related activities including trips, healthy lunches and occasional walks during the summer break.

It was apparent from the outset that there were vast differences in ability and the class was developed to accommodate a range of needs. Commitment to action research meant that the class format was decided by members and the level and type of exercise was driven by their feedback. Two members have trained as Extend instructors and continue to run a section of the class for older and less able members.

In the first year only 35 sessions were held, as the class closed for school holidays, but in subsequent years this was increased at members’ request, closing only when the hall is unavailable. At the time of the second evaluation event four years later, the group was entirely female with 44 regular attendees and 14 who had attended irregularly for some time. Though the class is aimed at those over 50 years old, 73 per cent of members were aged over 60 years and 18 per cent over 70 years.

The social element of the class is fundamental and much valued by members, who need little encouragement to stay on for tea/coffee. The regular trips, lunches and health activities are planned collaboratively with the aim of reinforcing health messages, all trips involving a walk and lunches comprising salads or home made soup. Opportunities are provided for members to try new foods that they may not otherwise encounter, with recipes available (Figure 1).

**Why do people drop out?**

Whilst membership has increased overall, 50 (54 per cent) of those joining in the first year dropped out. Existing members reported that some leavers had felt self-conscious, whilst a small number felt that the class was ‘cliquey’. (This comment may have had some justification as strong friendships developed within the group and, whilst this contributed to success, class leaders were reminded to ensure that new members felt welcome.) As only one of the ex-members invited to the second evaluation attended, the following information on reasons for leaving was derived from personal communication or from the questionnaire.

Unfortunately, eight people left at the end of the pilot period when a fee was introduced because they could not afford to continue, but the most frequently cited reason for leaving was poor health, followed by care commitments for grandchildren and other relatives. Some found the day, level or venue unsuitable so were advised
if there was a suitable alternative. Ten people who had left because they found the class too strenuous returned when lower intensity Extend instruction became available. Those who had joined whilst on sick leave left when they were able to return to work.

**What prevents people attending regularly?**

From 2001 to 2005 total membership did not fall below 43 but with an average attendance of 53 per cent, it is difficult to guarantee the 24 attendees required each week to break even. The fluctuation in attendance from 14 to 40 people was investigated at the second evaluation event where members cited the following reasons for irregular attendance: medical appointments, holidays, family commitments, visitors, bad weather, transport difficulties and laziness.

**Health benefits of attending the class**

Benefits reported by 31 members attending the first evaluation event were improvements in body awareness, diet, weight control, muscle tone, balance, co-ordination, concentration, relaxation and confidence. Thirty-two current members attended the second evaluation event and similarly reported improvements in suppleness/fitness, muscle tone, energy/stamina, mental alertness, libido, health consciousness, mood and diet. Though weight control was not a priority for most, changes in the range of
Regular exercise amongst older people

+4 to −20 pounds were reported. Some observed that they could now eat more without gaining weight due to being more active.

Improving health and well being was the primary aim and Figures 2, 3 and 4 show gains in self-assessed fitness, comparing levels on joining with those reported in 2005. These figures are based on 44 current members who had all attended for at least a year, comparing baseline data with responses to a repeat self-completion questionnaire in February 2005.

FIGURE 2

Distance regularly walked (n=44)

Note: Long and short distances were self defined

FIGURE 3

Joint mobility (n=44)
At both evaluations the class was reported to be socially beneficial, facilitating friendships, widening horizons and providing an opportunity to ‘switch off’ from problems in a caring environment. At the second evaluation negative comments on differences from other classes were that the Fitness 50+ classes were less aerobic and that there was no heavy equipment, such as a treadmill. (Classes are less aerobic due to the age and ability of members and heavy equipment is precluded by limited storage space.) Positive differences were the type of exercise, social aspects and convenience (Table 1). The question of possible improvements to the class produced several suggestions but little overall agreement, so it was not possible to translate these into actions that would be supported by the majority of members. For example, some thought that the class could be split by ability, but their subsequent assessment of the level of exercise showed that this would be impractical, as only six members thought it was too difficult and one too easy. However, though the class was not split, ‘Extend’ instruction was made available for those who found the general level too challenging.

The independent observer attending the second evaluation event concluded that it was well prepared and that the facilitators were able to draw out opinions from the participants without leading them in any way. Though it was not possible to take

**TABLE 1** Positive differences from other classes

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Social</th>
<th>Convenience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nobody pushes you</td>
<td>Strong social aspect</td>
<td>Central location</td>
</tr>
<tr>
<td>Different type of exercise</td>
<td>Friendly and supportive</td>
<td>Daytime class</td>
</tr>
<tr>
<td>Gentle exercise</td>
<td>Stable membership</td>
<td>Reasonable cost</td>
</tr>
<tr>
<td>Not specific to health problem</td>
<td>Trips motivate &amp; encourage</td>
<td></td>
</tr>
<tr>
<td>Appropriate level</td>
<td>Specific age group</td>
<td></td>
</tr>
<tr>
<td>Good instructor</td>
<td>It’s a good laugh</td>
<td></td>
</tr>
</tbody>
</table>
up all suggestions, the focus group format provided an opportunity for a useful open discussion of different options.

**Discussion**

The action research method used in this project has ensured that, via continuous feedback, reflection and adjustment, members’ opinions have strongly influenced how the class is run in terms of content, pace and social activities. The formation of a committee early on, which chose a name and drafted a constitution, was also helpful in establishing early ownership by users.

Action research in this instance has produced activities grounded in users’ wishes, achieving physical and mental health outcomes consistent with the existing evidence base. In emphasizing the importance of physical activity for their own health and well being, this group of older women has reiterated well established links between physical activity, improvements in physical and mental well being and with feeling younger. Evidence also shows that moderate and non-endurance based activities with support and follow up are associated with longer-term increases in physical activity.

The emergence of a social group with shared values supportive of positive health behaviour can be related to the theory of self integration and social reward proposed by Siegrist. These women identified for themselves the importance of social interaction in sustaining their increased physical activity and, supported by the Triangle researcher, instigated social activities. This fostered a holistic approach, whereby exercise, healthy eating and social support enabled participants to achieve improvements in mobility and stamina. Both evaluation events confirmed the importance of social aspects of the class, which members appear to value as much as the exercise, some attending to socialize even when they are not fit enough to exercise.

Though this activity was initiated and its development informed by the wishes of participants, administrative and practical difficulties remain in maintaining the class. The attempt to involve past members in the second evaluation event was not successful, probably for similar reasons to those given for leaving, most of which could not have been overcome by adjustments to the class that would not have adversely affected existing members.

A large hall is required but some users can only attend sporadically, so a substantial membership is necessary in order to cover costs. As contact details were recorded at first attendance, it has been easy to keep in touch, making it less likely that people will stop coming completely. Acceptance that irregular attendance is better than none, just as ‘healthier eating’ rather than ‘healthy eating’ is often a more realistic goal, has ensured that those with other responsibilities and interests do not lose touch with the group if they are unable to attend every week. The social focus has lessened the importance of a guilt-based impetus to exercise, which is often short lived, by emphasizing the enjoyable aspects of physical exercise, healthy eating and an active social life.
More than a year after the Triangle Project came to an end, information from the former researcher (a local resident) suggests that Fitness 50+ continues its success, but no longer-term follow-up is likely due to cessation of funding. It would be beneficial to revisit all seven SHARP projects when some years have elapsed to report on their sustainability and development.

Acknowledgements
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8 O'Neill M, Williams G. Developing community and agency engagement in an action research study in south Wales. Critical Public Health, 2004: 14: 1


