

Editorial

Promoting physical activity in primary care: How to get over the hurdles?

PHYSICAL ACTIVITY AND HEALTH

Public health promotion policies have recognised the role of physical activity as a key determinant of good health. Activity is associated with reduced mortality, with the prevention of many conditions including cardiovascular disease, diabetes, osteoporosis, depression, colon cancer and obesity, and with improved levels of physical functioning and independent living.¹ However, there is a serious shortfall in the actual numbers of people who engage in sufficient levels of activity to confer health benefits.^{1,2} This contributes significantly to ill health and risk of coronary heart disease, on a par with smoking, excessive alcohol consumption, elevated blood pressure, obesity and poor diet.

Primary care has been recognised as a potentially important site for promoting physical activity.¹

PHYSICAL ACTIVITY PROMOTION IN PRIMARY CARE

Background

In 1995, the American College of Sports Medicine, in conjunction with the Centre for Disease Control recommended that "Every U.S. adult should accumulate at least 30 minutes or more of moderate-intensity physical activity on most, preferably all, days of the week".³ In Northern Ireland 78% of people do not perform the recommended level of physical activity.²

Methods of delivery

Primary health care professionals may promote exercise by giving opportunistic advice during routine consultations or by referring patients to activity promoting programmes. These include exercise referral schemes (whereby the patient is given a prescription for exercise sessions at the local leisure centre) or supervised training sessions (such as an organised walk led by a health care professional).

Difficulties

Barriers to promoting physical activity which have been identified include a lack of health professionals' time, specialist knowledge and

their own levels of interest in exercise.⁴ Opportunistic, non-specific advice is applicable to all but has not been shown to lead to significant long-term changes in activity levels. Of the UK population, less than 1% are referred to specific exercise schemes. Most of those who are referred are white, middle-class, middle-aged, healthy women.

People also report a lack of time as a barrier to increasing their levels of activity and they find difficulty in sustaining interest in participation in activity programmes.

OVERCOMING THE DIFFICULTIES

Lack of health professionals' time

Using motivational interviewing techniques the doctor may assess the patient's desire to change their lifestyle and begin an exercise programme. This may avoid wasting health professionals' effort and time on those who are not serious about investing their effort and time in exercise.

When a patient clearly shows an intention to increase their activity, the General Practitioner GP may refer them to a local leisure centre to receive appropriate exercise testing by trained professionals. They may then embark on an activity programme¹ which uses specialist services to tailor exercise to the individual and offers a potential saving of time for the GP by reducing the necessity for follow up. Such programmes should address the needs of individual adults and local communities.¹ Patient selection should be medically led, targeting those who are sedentary, therefore allowing maximal potential for health gain, and those with specific medical conditions.¹

Lack of specialist knowledge

Concern has been expressed regarding the suitability of GPs to prescribe exercise given their limited training in this area.⁶ Some medical defence organisations advise that, if the GP is unsure of their own level of knowledge, rather than prescribing exercise, recommending it is appropriate.¹ There are some simple tools available to GPs to help patients reach their activity goals. These include brief motivational

interviewing techniques which may be used to encourage patients to consider a positive change in their lifestyle, and pedometers.

Pedometers are small electronic devices that fit to the belt and are used to count numbers of steps taken. They are relatively cheap, easy to operate and can be used to assess compliance with an exercise programme by determining distance walked (stride length multiplied by number of steps) and speed of walking (distance over time). Such information can be used as a measure of the intensity of activity and to estimate total energy expenditure.

Patients may set themselves targets to reach in terms of number of steps. In a pilot study of a primary care based walking programme, not yet published, we found that pedometers provided a useful method of external monitoring, providing both a record of changing performance and a motivational tool. It has been proposed that younger adults should aim for between 7,000 and 13,000 steps per day of general activity and older adults between 6,000 and 8,500. To achieve this may mean an increase in daily routine activity (e.g. starting to walk to another department at work instead of phoning).

Lack of the professional's own interest in exercise

Primary care professionals' levels of personal activity or desire to change their own exercise habits tend to be directly related to their levels of exercise recommendation to patients. In one study⁴ GPs who were already exercising or contemplating exercise were three times more likely to recommend exercise to their patients. This trend quadrupled with practice nurses. MacAuley & Jaques liken the sedentary physician recommending exercise with the doctor who smokes but tells their patient to stop; "although the advice is sound, will the message be heard?"⁵

Difficulties in recruiting patients to schemes

Difficulties in recruiting patients to physical activity schemes have been reported. In a pilot study in Swansea, only 38 patients were recruited from seven general practices over four months: the scheme was abandoned due to lack of interest. The Stockport 'Exercise on Prescription' scheme recruited 60% of patients invited to take part by GPs but after 10 weeks there was a high percentage of non-attendance. The problem of poor recruitment requires further study.

Patients report a lack of time as a barrier to

increasing their activity levels and participating in schemes. Most people (health care professionals included) find life is getting busier and spare time shorter. Recent research suggests that health benefits can be accumulated over the course of a day by dividing 30 minutes' exercise into shorter bouts. Parking some distance from the workplace and walking briskly to and from it for 10-15 minutes could accomplish the recommended amount of daily activity.

Sustaining levels of adherence

A review of randomised controlled trials⁶ revealed characteristics of programmes which were most effective at sustaining participation in physical activity:

- Activity performed at home, rather than in leisure facilities
- Unsupervised, informal exercise, at a time suitable to the individual
- Frequent professional contact, usually by telephone
- Moderate intensity exercise, with walking as the most common form

GPs could translate this knowledge by recommending patients undertake a programme of brisk walking for 30 minutes a day, on most days of the week. To empower the patient to maintain this activity GPs may suggest that they keep a simple diary, recording the exercise that has been performed. Accountability is a helpful thing, and these diaries could be returned to the practice nurse for evaluation.

Risks associated with regular physical activity

The risks associated with a more active lifestyle are relatively low with moderate levels of activity, but increase with intensity. Before beginning an exercise programme, a cardiac risk assessment should be made. Guidelines of professional organisations such as the American College of Sports Medicine can be used. For relatively healthy patients, risk assessment involves a brief medical history and physical examination to exclude risk factors for heart disease. In less healthy patients, more rigorous pre-exercise assessment may include a maximal stress test.¹ Patients with coronary heart disease have the most to gain from moderate intensity exercise, as long as care is taken to avoid performing exercise in sudden bursts and not ignore symptoms such as chest pain or dizziness.

Conclusions for physical activity in primary care

Physical activity advice is firmly on the agenda for health promotion. Primary health care workers have been advised that they should always recommend or advise patients to increase levels of physical activity with the same priority as they give to dietary advice or smoking cessation.¹ Difficulties exist, but steps can be taken to minimize these. More study is needed on the promotion of exercise in primary care.

M.A. Tully*, M. E. Cupples*, I.S. Young[†]

*Department of General Practice, The Queen's University of Belfast, Dunluce Health Centre, 1 Dunluce Avenue, Belfast BT9 7HR.

[†]Department of Medicine, The Queen's University of Belfast, Institute of Clinical Science, Royal Victoria Hospital, Grosvenor Road, Belfast BT12 6BA.

Correspondence to Mr Tully.

E-mail: m.tully@qub.ac.uk

REFERENCES

1. Department of Health. Exercise referral systems: a national quality assurance framework. London, HMSO; 2001.
2. The Northern Ireland Statistics and Research Agency. Physical activity bulletin. *Health and Social Wellbeing Survey* 2001, 2002; **3**: 1-4.
3. Pate R R, Pratt M, Blair S N, Haskell W L, Macera C A, Bouchard C, *et al.* Physical activity and public health. A recommendation from the Centres for Disease Control and Prevention and the American College of Sports Medicine. *JAMA* 1995; **273**(5): 402-7.
4. McKenna J, Naylor P J, McDowell N. Barriers to physical activity promotion by general practitioners and practice nurses. *Br J Sports Med* 1998; **32**(3): 242-7.
5. MacAuley D, Jaques R. Exercise: the right prescription in practice. *Br J Gen Pract* 2000; **50**(461): 948-9.
6. Hillsdon M, Thorogood M, Antiss T, Morris J. Randomised controlled trials of physical activity promotion in free-living populations: a review. *J Epidemiol Community Health* 1995; **49**(5): 448-53.