

Experiences in physical activity promotion in health care settings for primary prevention in the UK

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Abstract

In addition to the delivery of primary care services, recent changes to the NHS in the United Kingdom have placed increasing responsibility on GPs for the commissioning of the full range of health services from prevention through to clinical interventions and rehabilitation. Whilst historically there has always been an expectation that primary care professionals were ideally placed to provide support for prevention as well as treatment, their active engagement in the promotion of physical activity has remained largely superficial. With notable exceptions where individuals have a personal interest or commitment, the majority of health professionals tend to limit themselves to peremptory non-specific advice at best, or frequently don't broach the subject at all. There are a number of reasons for this including increasing time pressures, a general lack of knowledge, limited evidence and concerns about litigation in the event of an adverse exercise induced event. However in the 1990s there was a surge of interest in the emerging "Exercise on Prescription" model where patients could be referred to community based exercise instructors for a structured "prescription" of exercise in community leisure centres. Despite the continuing popularity of the model there remain problems particularly in getting the active support of health professionals who generally cite the same barriers as previously identified. In an attempt to overcome some of these problems Wales established a national exercise referral scheme with an associated randomised controlled trial. The scheme evaluated well and had subsequently evolved with new developments including integration with secondary and tertiary care pathways, accredited training for exercise instructors and exit routes into alternative community based exercise opportunities.

Keywords: physical activity, healthcare, counselling, chronic disease, prevention, Wales, United Kingdom

Zusammenfassung

Kürzliche Änderungen beim nationalen Gesundheitssystem NHS in Grossbritannien haben dazu geführt, dass medizinische Grundversorger zunehmend Verantwortung auch für Prävention, klinische Interventionen und Rehabilitation übertragen bekommen haben. Traditionellerweise ist davon ausgegangen worden, dass die Hausarztpraxis das ideale Setting nicht nur für die Behandlung, sondern auch für die Verhütung von Krankheiten darstellt. Tatsächlich hat aber – bei löblichen Ausnahmen in Einzelfällen – nur ein begrenztes Engagement in diesem Bereich stattgefunden, Prävention findet oft nur in Form von allgemeinen direktiven Ratschlägen statt, oder das Thema wird gar nicht angesprochen. Gründe dafür sind unter anderem der zunehmende Zeitdruck, begrenztes Wissen, begrenzte wissenschaftliche Evidenz und auch die Angst vor haftungsrechtlichen Ansprüchen bei Zwischenfällen im Zusammenhang mit mehr Bewegung. In den 1990er-Jahren stieg aber das Interesse am Modell der «Bewegung auf Rezept» stark an, bei der Patientinnen und Patienten für ein strukturiertes Trainingsprogramm an Bewegungsinstruktoren in gemeindebasierten Freizeitzentren überwiesen werden konnten. Obwohl dieser Ansatz nach wie vor sehr beliebt ist, gibt es immer noch Probleme bei der Umsetzung, besonders was die aktive Unterstützung durch die medizinischen Grundversorger angeht. Diese berichten im Wesentlichen immer noch über die gleichen Barrieren wie früher. Als Antwort darauf hat Wales ein nationales «Exercise Referral Scheme» (Trainingsüberweisungsmodell) etabliert und mit einer kontrolliert randomisierten Studie auch erfolgreich evaluiert. Aktuelle Entwicklungen umfassen hier die Integration auch mit der Sekundär- und Tertiäerversorgung, standardisierte Ausbildungsgänge für Bewegungsinstruktoren und die Vernetzung mit anderen Bewegungsmöglichkeiten in der Gemeinde.

Schlüsselwörter: Physical activity, healthcare, counselling, chronic disease, prevention, Wales, United Kingdom

Introduction

Approaches and models of physical activity promotion in the healthcare sector over the last twenty five years have varied considerably within and across countries influenced by both the healthcare systems and the roles of professionals within those systems. However, irrespective of the system the primary care physicians and their teams have consistently been a pivotal influence. A range of interventions have been delivered through this system ranging from “brief interventions” by General Practitioners GPs through to more directed interventions such as “exercise prescription” schemes that direct specific patients to formal exercise programmes, usually in the community.

However experience suggests resistance, in GPs and other physicians to engage in actively promoting physical activity amongst their patients (Ward et al., 2010). Historically they have cited a lack of evidence, time and trust in exercise professionals for their antipathy. And whilst there is some merit in these concerns, there is increasing evidence of a simple lack of knowledge regarding physical activity and health amongst health professionals (Weiler et al., 2013, West 2013, Philips 2012) that undoubtedly undermines their confidence and ability to fulfil a role that they perceive as having potentially harmful clinical and legal consequences.

Exercise Referral Schemes

The early 1990s saw the emergence of a new approach to promoting physical activity through primary care in the UK with the advent of “exercise on prescription” or “exercise referral” schemes. The premise was very simple; patients at risk of chronic disease would be assessed by their GP and where appropriate directed to a structured exercise programme usually delivered in a local authority leisure centre by exercise instructors. Early results appeared very promising with everyone seeming to benefit (Taylor et al., 1998), the GP would be better able to manage patients, leisure providers would be able to attract a whole new customer base and the patients themselves would get huge health benefits, and in no time at all schemes were proliferating all over the country. By 1998 there were estimated to be over 200 schemes operating across the UK (Riddoch et al., 1998).

However, this early promise wasn't reflected in the evidence and a number of reviews suggested serious limitations (Riddoch et al, 1998, Gidlow et al., 2005). These were due in part to the poor evaluations associated with the schemes that led to questionable results and unsubstantiated claims. Nonetheless, the model remained very popular and numbers of schemes continued to rise. Some of the concerns expressed by GP's and others were addressed including the establishment of national guidelines (NHS 2001) and statements of support by the medical defence unions (BHF National Centre for Physical Activity and Health 2010). But concerns remained as doubts were raised about;

- the limitations of short term programmes;
- the lack of follow-up data;
- the apparent low adherence rates by patients on the schemes;
- the lack of robust evidence on health outcomes;
- the lack of cost effectiveness data;
- the continuing reluctance of GPs to refer patients;

This culminated in an evidence review by the National Institute for Health & Clinical Excellence (NICE) which con-

cluded there was “insufficient evidence to recommend the use of exercise referral schemes to promote physical activity, other than as part of research studies where their effectiveness can be evaluated.” (NICE 2006).

Wales National Exercise Referral Scheme

During the development of the NICE review the Welsh Assembly Government was establishing a National Exercise Referral Scheme (NERS), the first national scheme of its type in the world. At that time there was a wide range of different local schemes in operation across Wales, so the Welsh Government decided to trial a single model that would be developed along national guidelines, operate across the whole country and be evaluated using a randomised controlled trial. The intervention included a 32 session supervised exercise programme at a local leisure centre with follow-up at 6 and 12 months. The scheme was launched in 2007 and for the purposes of the research only took patients with either primary coronary heart disease or a mild to moderate depression referral. The trial was completed and the results published in 2010 (Murphy et al., 2010).

2160 participants took part in the trial with 44% adherence at 16 weeks. There were significant improvements in both physical and mental health and significant increases in physical activity amongst those referred with a CHD risk diagnosis, though not amongst those referred with a depression or anxiety diagnosis. A cost-effectiveness analysis indicated a cost per QALY of £12,111, well inside the NICE threshold of £20,000 to £30,000 (www.nice.org.uk). In short the trial had shown the scheme to be both effective and cost-effective.

Since the end of the trial the scheme has continued to expand and develop with over 25,000 patients a year now accessing it and the 16 week adherence rate over 55%. It has extended the range of referrals to incorporate most sedentary patients with chronic conditions. A national database has been established and the range of data increased to include a variety of physiological, demographic, health outcome and exercise data as well as monitoring attendances, activities, etc. New technologies are being trialled including the use of cloud-based personal monitoring devices that use accelerometry to monitor activity throughout the day. Referral points have been extended to include community services such as pharmacies and secondary care and rehabilitation services. The scheme is being incorporated into chronic disease care pathways and trials with overweight patients awaiting hip and knee surgery have indicated not only significant improvements in their general health and their mobility but even suggest some patients can be removed from the surgical waiting lists. These small scale preliminary studies have naturally generated research interest and more substantive studies are being planned. Finally broadening the range of activity options is being explored, with exit routes into community walking programmes, and “green” exercise amongst those being offered and Tai Chi, dance and other community activities being considered for further development.

A recent review of national health improvement programmes (Public Health Wales 2013) identified the scheme as one of those worthy of continuing support and new developments are being considered including the establishment of a second tier of referrals who do not require the close supervision indicated by the clinical criteria but who would benefit from professional support, advice and signposting.

Key Developments

The concerns about exercise referral schemes expressed in early reviews and highlighted by the NICE guidance were well founded but have now largely been addressed and the evidence from Wales suggests that there is an effective and potentially promising model to be developed further. However, it remains the case that there are still a majority of GPs and other physicians who are not using these schemes. The development of the PAR-Q-Plus risk assessment tool at the University of British Columbia (www.eparmedx.com) may help address some of these problems by providing a simple evidence-based algorithm that can direct patients with any given condition to the appropriate exercise options. This benefits GPs who can now quickly assess the exercise needs of their patients and signpost them to the appropriate intervention, but could in theory be used by patients themselves to identify their own options. The tool is presently undergoing validation and ethical approval for use in the UK.

The second key development that marks the UK system out as unique is the establishment of a comprehensive range of nationally accredited training packages that exercise professionals need to work with patients including a generic qualification for exercise referral and a range of higher qualifications covering cardiac rehabilitation, back care, falls prevention, stroke, diabetes, weight management, mental health, cancer and chronic obstructive pulmonary disease (www.exerciseregister.org). Over 200 exercise professionals have been trained in Wales and many more across the UK and their enhanced skills and knowledge are not limited to dealing with exercise referral patients but are equally valid when managing their routine clientele attending local facilities.

Health Professional Education

A continuing concern that informs discussions around the promotion of physical activity for health is the evident gap between public expectations of health professionals and their knowledge. Several studies and papers (Joy et al., 2013, Dunlop et Murray, 2013), including a recent survey by the Health Enhancing Physical Activity (HEPA) network Europe, have now identified this as a global issue that starts with a lack of education at entry level for doctors and that persists through medical specialities and into General Practice. To help address this there have been a number of online professional development tools developed including one called "Motivate2Move" developed by a GP in North Wales and hosted by the Deanery at Cardiff University (www.gpcpd.walesdeanery.org). A similar resource called "Every step counts" has been launched by NHS Scotland (www.elearning.healthscotland.com) to accompany their Physical Activity Care Pathway and a more generic tool is being developed through an EU funded project addressing CHD risk factors (Leonardo UK 2011).

Despite these advances there is an increasing recognition that medical curriculums need to be better informed with a stronger emphasis on the role and impact of physical activity not only as an effective therapeutic intervention for many medical conditions but also as an important preventative tool for many more chronic conditions.

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