

Fit for life

Promoting an active lifestyle

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Standfirst

Nurses are ideally placed to encourage patients to become more active, and to give them safe guidelines

The rising prevalence of obesity and preventable chronic disease has led to global concern about physical inactivity. There is increasing attention on how to maximise efforts to promote active lifestyles through multiple settings and agencies and how these efforts should be maintained across the lifecourse. Being physically active is essential for physical and mental health. Engaging in regular physical activity, even on a relatively small level, can reduce the risk of more than 20 chronic conditions including coronary heart disease, stroke, type 2 diabetes, obesity, some cancers, musculoskeletal conditions and mental health problems (WHO, 2010).

Promoting physical activity across the lifespan is therefore essential for lifelong wellbeing and reducing the burden of disease. Reducing excessive sedentary behaviour (time spent sitting or lying down) is equally as important, since it is not only associated with overweight and obesity as risk factors for chronic disease, but is an independent risk factor for ill-health, irrespective of a person's overall level of physical activity. Being sedentary is independently associated with all-cause mortality, type 2 diabetes, some types of cancer and metabolic dysfunction (Sedentary Behaviour and Obesity Expert Working Group, 2010). Physical activity has known benefits not only in disease prevention, but is commonly a core aspect of first-line management strategies for treatment of a wide range of long-term conditions.

Community and primary care nurses are at the forefront of population healthcare and the role of the registered nurse has significantly evolved to meet

the changing healthcare needs of the 21st century to include preventive care, health coaching and chronic disease management (Smolowitz et al, 2015). They have a significant opportunity to promote healthy lifestyle behaviours to diverse population groups. Their responsibility for promoting population health is laid out in the 2012 national Nursing, Midwifery and Care Strategy: Compassion in Practice, in which “Maximising the impact of nursing and midwifery on improving and protecting the public’s health” is one of the six key areas for action (DH, 2012).

Primary care practitioners demonstrate enthusiasm for physical activity promotion; a study conducted in Scotland (Douglas et al, 2006) showed that the majority of practice nurses (88%) and health visitors (90%) surveyed felt they would be likely to recommend *all* apparently healthy adult patients to take moderate exercise. However, their knowledge about recommendations and physical activity promotion practices appears to be inadequate.

In Scotland, only 9% of practice nurses and 11% of health visitors surveyed correctly described current physical activity recommendations for adults (Douglas et al, 2006). A study in England found that nurses did not have a structured approach when promoting physical activity to older people, and had limitations in their knowledge and skills of physical activity promotion (Goodman et al, 2011). Similar patterns have been observed outside the UK; in Brazil, over 95% of nurses and community healthcare workers reported needing more information on physical activity guidelines, and many held incorrect beliefs about recommendations and about the consequences of physical inactivity (Burdick et al, 2015). This is further complicated by the change in UK physical activity guidelines in recent years, affected population-level understanding of physical activity recommendations. Although general knowledge about physical activity guidelines was shown to have increased, it seems there are demographic disparities in that disadvantaged population groups seem to be less knowledgeable about physical activity guidelines (Knox et al, 2013), further demonstrating the need for healthcare professionals to be fully informed. This article summarises current UK guidance (DH, 2011; NICE, 2013).

Who should be targeted for physical activity promotion?

Despite the known benefits of physical activity and the risks of inactivity and sedentary behaviour, the majority of adults and many children across the UK are insufficiently active to benefit their health. As such, every opportunity should be taken to discuss and assess physical activity with all patients. NHS England advocates 'Making Every Contact Count' (MECC; NHS, 2014), provides advice on how to implement this concept in clinical practice, and provides practical tools and resources to support the process.

Particular care should be taken when delivering advice to vulnerable groups and their families (e.g. older adults, children and those with cognitive impairment). Health inequalities mean that some population subgroups may warrant particular attention for physical activity promotion.

Physical activity levels are known to reduce during adolescent years and the transition into young adulthood (Li et al, 2016), and in general, women are less active than men (Edwards and Sackett, 2016), which may be associated with onset of family responsibilities, pregnancy or the menopause. Physical inactivity and obesity are known to be higher in certain ethnic minority groups (Fowler, 2015; Jenkins et al, 2015; Dogra et al, 2010), and is often higher in people living in low-income households, and in people with lower levels of education (Roberts et al, 2013).

How much physical activity should be recommended?

There is clear guidance from the Chief Medical Office (CMO) (DH, 2011). This document presents the most recent guidelines on the volume, duration, frequency and type of physical activity required across the lifespan, to achieve general health benefits. The current guidelines recognise the importance of lifelong daily physical activity, allow greater flexibility for how recommendations might be achieved, describe the role of both moderate and vigorous physical activity (and how they might be combined), and advocate minimising sedentary behaviour. While the nurse should tailor advice on a case-by-case basis, it is proposed that all individuals should aim to engage in at least the appropriate level for their age, and sedentary behaviour for extended periods (except during sleep) should be minimised.

The guidance covers:

- **Early years (under 5 years)** Physical activity is encouraged from birth, particularly through active play and water-based activities in safe environments; those capable of walking unaided should be physically active daily for at least 180 minutes, spread throughout the day.
- **Children and young people (5-18 years)** All should engage in moderate to vigorous intensity physical activity daily for at least 60 minutes and up to several hours. Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated on at least three days per week.
- **Adults (19-64 years)** All should be active daily and accumulate at least 150 minutes of moderate-intensity activity, or 75 minutes of vigorous activity (or moderate and vigorous activity combined), in bouts of 10 minutes or more over a week. Activity to improve muscle strength should be undertaken on at least two days per week.
- **Older adults (65+ years)** Should aim to be active daily, accumulating at least 150 minutes of moderate-intensity activity in bouts of 10 minutes or more over a week. For those already active at moderate intensity, comparable benefits might be achieved through 75 minutes of vigorous-intensity activity spread across the week or a combination of moderate and vigorous activity. Activity to improve muscle strength should be undertaken on at least two days a week; those at risk of falls should incorporate activity to improve balance and co-ordination on at least two days a week. However, it is accepted that some physical activity is better than none, and physical activity provides benefits for physical and cognitive function.

The National Institute for Health and Care Excellence (NICE) has published guidelines on physical activity in children and young people (NICE, 2009). These include: promotion of activity benefits, encouraging participation, high-level strategic policy planning, consulting with and actively involving children and young people, promoting physical activity and sustainable travel, provision of spaces, facilities and opportunities, and having a skilled workforce for promotion of physical activity in this population.

Motivational interviewing (MI) techniques are commonly used within primary or secondary prevention to promote physical activity in all ages, and have demonstrated positive outcomes for adopting and sustaining new behavior change. This directive and patient-centered approach is aimed at helping patients to consider their actual health behaviour, and their desired behaviour with the intention of resolving the gap between the two. With this approach patients are encouraged to focus on the improvements they can make for themselves, and self-set goals to meet their desired outcomes, rather than being instructed on what to do by the healthcare provider. Practice nurses have been shown to use MI techniques to a moderate extent although it has been suggested that techniques can be challenging to apply in routine practice, and that booster sessions following initial training might increase adoption of MI techniques (Noordman et al, 2012).

Very brief interventions (VBIs) for promoting physical activity are gaining popularity due to their scalability and the practicalities of delivering interventions in clinical practice. Pears et al (2015) have demonstrated the acceptability and feasibility to participants and practitioners of four VBIs, all taking around five minutes to deliver in the primary care setting: Motivational intervention; Action Planning intervention; Pedometer intervention; and Physical Activity Diary intervention – and all were deemed to be potentially usable within a preventive health check in primary care.

There are guidelines for physical activity and occupational therapy to support mental wellbeing in the over-65s (NICE, 2008) and for adults (NICE, 2013). Key physical activity recommendations from (NICE, 2013) are summarised below:

- **Identifying adults who are inactive** This could be done during consultations, waiting times, health checks or a session for management of a long-term condition. Activity levels should be (sensitively) assessed and recorded, using validated tools. The health benefits of physical activity should be communicated with those not meeting current guidelines, either in a current or later consultation, or through referral to

another member of the primary care team.

- **Delivering brief advice and following up** Adults assessed to be not meeting the recommendations should be encouraged to increase their activity levels, according to their current activity level, health status, circumstances, personal preferences, barriers, motivations and goals. Local opportunities should be promoted where people with diverse needs can engage in physical activity. A record should be kept of discussions and ideally, a written summary of advice and goals should be provided to patients; their goals should be followed up at future opportunities.
- **Incorporating brief advice into commissioning** Brief interventions may include the provision of opportunistic advice, discussion, negotiation or encouragement. Advice should be incorporated into care pathways for the treatment of chronic conditions (e.g. coronary heart disease, stroke, type 2 diabetes and mental health problems), incorporated into services for populations at risk of inactivity (including those over 65 years, with disabilities or from ethnic minority groups) and built into long-term disease management strategies.
- **Systems to support brief advice** Ensure the correct resources, information and systems are in place. For example, using Read Codes (standard vocabulary to record patient findings and procedures in health and social care IT systems across primary and secondary care) will help to identify opportunities for assessment and advice. Using up-to-date details about local opportunities for active lifestyles, and approved resources, documents and forms to assess, record and follow up. Using standardised assessment tools such as the General Practice Physical Activity Questionnaire (GPPAQ) will equip nurses with the knowledge they need to identify and monitor those who are inactive and make clear recommendations about behaviour change.
- **Providing information and training for primary care practitioners** Communicating information about: definitions of physical activity and current guidance; 'at-risk' populations and specific groups (e.g. older adults, people with disabilities, ethnic minority populations); physical activity assessment; how provision of brief advice fits within the primary

care remit; understanding misconceptions about physical activity; best methods of delivering brief advice and motivating behaviour change. To ensure that nurses are empowered with up-to-date knowledge of current physical activity recommendations and best evidence on strategies and approaches to [i] assess and monitor patient physical activity levels, [ii] deliver physical activity promotion in practice, and [iii] ensure that particular 'at-risk' populations are appropriately identified and targeted.

The British Heart Foundation (BHF) has described many innovative ways to promote physical activity and reduce sedentary behaviour using new and emerging technologies, gaming, mass and social media, active assistance and interactive assistance technology. Strategies to increase physical activity in the community have been described by the US Centers for Disease Control and Prevention (2011), including community-wide campaigns, individual behaviour change programmes, point-of-decision prompts (e.g. encouraging stair use and incidental activity), school-based and community physical activity programmes and active travel interventions (walking or cycling for travel). Peterson (2007) describes strategies to promote and deliver physical activity counseling intervention in primary care (Peterson, 2007).

What else can nurses do?

Nurses are expected to promote healthy lifestyle choices at all appropriate opportunities, to ensure they fulfill the NHS implementation guidance for 'Making Every Contact Count' (MECC; NHS, 2014). Simply talking to patients about how active they are in everyday life can begin to raise awareness in the first instance about personal health behaviours. Nurses can play an important role in inspiring and motivating patients to adopt positive attitudes about the value of physical activity and exercise, and providing encouragement and support faced with negative attitudes, or during naturally occurring lapses in behaviour. Nurses may choose to draw on national educational initiatives (e.g. Change4Life), where the key message is to eat well, move more and live longer. They can assess the patient's current activity level using standardised assessment tools, and accompany this with appropriate, personalised,

individually tailored and effective lifestyle advice (DH, 2008). Nurses may choose to use motivational interviewing (MI) techniques, or very brief interventions (VBIs). Discussions should focus on identifying and addressing barriers to active lifestyles, encouraging patients to self-set achievable goals and monitor their own achievements. It should focus on building an individual's self-efficacy (or confidence) for physical activity and exercise, which is important in making lasting behavioural changes. Nurses can provide practical solutions, through effective referrals and signposting patients and their families to local services that promote active lifestyles, such as gyms and sports centres, community exercise classes and local walking groups. Clinical judgment should always be utilised alongside government recommendations in the provision of tailored advice, as activity goals need to be realistic and sensitive to culture and personal barriers to change. The guidelines should always be interpreted in the context of individual physical and mental capabilities. Changes in activity for some may be as simple as chair-based exercises, or incremental increases in activities of daily living such as housework, gardening, or using the stairs.

Nurses are part of a wider community of healthcare professionals with a public health remit. As such, they are not alone in promoting active lifestyles, and can draw upon the skills and services of a wider team including exercise specialists delivering specialist exercise referral services, dieticians and nutritionists, health psychologists and physiotherapists.

Nurse-led physical activity interventions in primary care practice are diverse, but examples may include complex walking interventions among adults and older adults (Beighton et al, 2015) and health coaching telephone support calls (Eakin et al, 2015).

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