



How effective is public health advice for healthy ageing and can it be updated based on any recent research?

Briefing Paper

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The increase in the number of people living into old age is a public health success. Changes in mortality have not been matched by declines in morbidity. Thus, whilst many people are living longer, many of the additional years are spent in poor health. There are marked inequalities in health between the most and least socially disadvantaged older people. There are factors amenable to public health interventions and evidence is best developed for lifestyle / behavioural factors, including: being more active; stopping smoking; reducing alcohol consumption and substance abuse; improving diet and maintaining healthy weight¹. Activity promotion has been the target of much age specific interventions, whilst other issues have been more generically approached across the life course.

This briefing note focuses on the evidence for physical activity to promote healthy ageing. This reflects the volume and strength of existing research on this topic, and the current drive to

modify activity at a population level. However this should not diminish the overwhelming importance of the social determinants of health. Banishing poverty, provision of safe environments, affordable healthy food, reliable transport systems and all the other social and economic factors that influence health are all essential to promote healthy ageing across the whole population²

The UK CMOs' [Physical Activity Guidelines](#) were updated at the beginning of September 2019³. These are based on specifically commissioned, recent, thorough literature reviews⁴. The new guidelines put strength and balance firmly at the core of the recommendations (Figure 1) and clarify the sorts of activities for which there is good evidence of effect (Table 1). They *“underline the importance of regular strength and balance activities: being strong makes all movement easier and increases our ability to perform normal daily tasks... the guidelines present thresholds for the achievement of optimal health benefits at the recommended levels of physical activity in terms of strength, moderate and vigorous physical activity, and balance activities”*⁴.

Type of sport, physical activity or exercise	Improvement in muscle function	Improvement in bone health	Improvement in balance
Running	★	★★	★
Resistance Training	★★★	★★★	★★
Aerobics, circuit training	★★★	★★★	★★
Ball Games	★★	★★★	★★★
Racquet Sports	★★	★★★	★★★
Yoga, Tai Chi	★	★	★
Dance	★	★★	★
Walking	★	★	☆
Nordic Walking	★★	?	★★
Cycling	★	★	★

★★★ Strong effect ★★ Medium effect ★ Low effect ☆ No effect ? Not known

Table 1 Types of activities that can help maintain or improve aerobic capacity, strength, balance and bone health and contribute to meeting the physical activity guidelines (reproduced from CMOs' [Physical Activity Guidelines 2019](#))



Figure 1

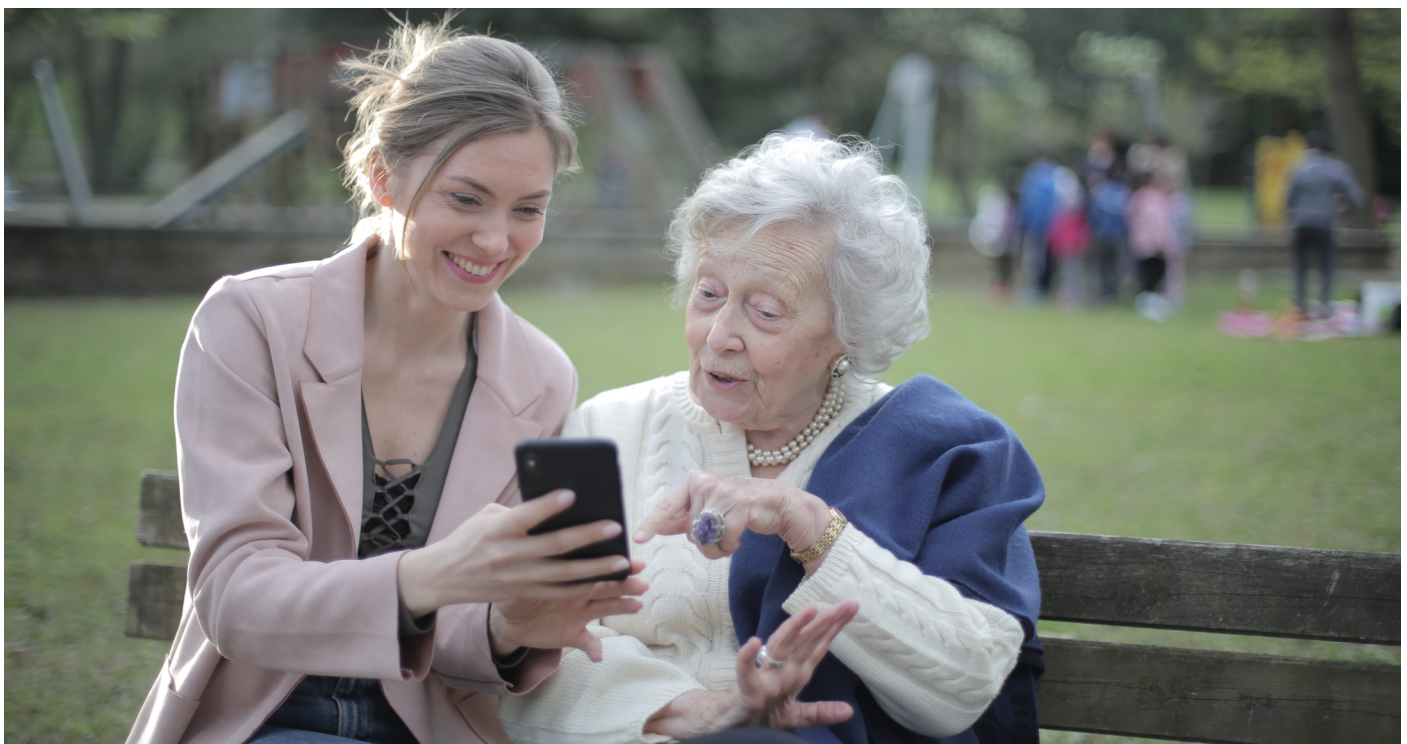
The success of dissemination of the new guidelines remains to be seen. The previous guidelines were only known by 20% of GPs, when surveyed in 2017⁵. The emphasis on strength and balance across the life course is a centrally important message⁶. Nonetheless, the need for exercise and activity has been core to public health messaging for some time, but still some 52% of those aged 75+ and 28% of those aged 55-74 report they are inactive (<30 minutes activity/week); an improvement of only 1-2% since 2015⁷.

Uptake and adherence to activity such regimens is crucial if they are to be effective, and only if there is large scale uptake can we expect there to be population health gain. Although there is good evidence on beneficial returns on investment for exercise interventions⁸, resourcing such interventions so that they are widely available across the population remains problematic⁹. While the evidence is strong, the challenge is to ensure uptake and adherence, since exercise does not work if it is not undertaken. Many older people are reticent to take up activities. Activities have to be attractive to older people. There are also challenges to access and adherence: provision is not integrated across the different services; the

move from rehabilitation to community is disjointed; and preventive provision is not adequate. More work is required to address health inequalities.

A recent European project¹⁰ investigating the effectiveness of health promotion interventions amongst older people concludes that:

- Interventions should involve various types of physical exercises or activities, and these should form key components of health promotion for older people.
- Health education on its own or combined with other interventions can be considered for specific target areas (e.g. nutrition).
- Home visits by carers are beneficial in their own right for some older people.
- Social involvement activities benefit older peoples' quality of life, cognition and physical activity.
- There are still gaps in the evidence of health promotion for older people.
- Emerging technologies potentially provide innovative solutions, but as yet are not fully evaluated.



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