

Social environment and healthy ageing

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Accepted for publication: 17 Feb 2017

Cite this article as: Schalkwijk F, van Bodegom D. Social environment and healthy ageing. SDH. 2017;3(1):1-2. DOI: <http://dx.doi.org/10.22037/sdh.v3i1.17389>

With growing numbers of people living to older ages, age-related diseases have become an increasing challenge for societies everywhere. Many age-related diseases however, should rather be considered lifestyle related diseases since lifestyle plays an important role in the etiology and the treatment of cardiovascular disease, obesity, type 2 diabetes and many forms of cancer. This has led to a large body of literature investigating the possibility to change people's lifestyle. Interventions with, for example, physiotherapists that engage in daily physical activity with older people have shown substantial benefits, even reversing type 2 diabetes and some characteristics of the ageing process (1,2). Most lifestyle interventions, however, struggle to achieve sustained, long-term behavioural change (3,4). Few individuals can maintain the effort to adopt a new diet or exercise regime themselves, without intensive coaching by professionals. These interventions are therefore expensive and this hinders the widespread and continued delivery to the growing number of older people with unhealthy lifestyle and (risk for) age-related disease. Therefore, it is important to explore novel sustainable and cost-effective methods for lifestyle interventions to combat the burden of age-related disease in ageing societies. One often overlooked influence on the health behaviour of older people is the effect of the

social environment. We believe that peer coaching, in which older people coach each other in achieving lifestyle changes, is such a promising method to deliver health benefits in a sustainable, scalable way.

Although there is substantial documentation of the effect of peers on adolescents and children, the influence of peers has been overlooked in older people. In peer coaching, the social environment is applied as a method to deliver an intervention. Peer coaching is a face-to-face intervention in which a group is led by a peer, a non-professional, who shares a common background with the participants. A peer coach uses experiential knowledge to understand the wishes, motivations, possibilities and limitations of the participants. In the secondary prevention of alcohol abuse, peer coaching is already applied very successfully through *Alcoholics Anonymous*, which delivers health benefits through peer coaching to over two million members spread over 150 countries (5,6). Since increasing physical activity is able to ameliorate so many characteristics of the ageing process, we have studied a proof-of-principle in which peer coaching is applied to establish a sustainable and cost-effective increase in physical activity of a group of older adults in The Netherlands.

Since peer coaching initiatives are not dependent on professionals, they are low-cost and therefore of great interest to

participants, policy makers and insurers. Furthermore, since they do not require large numbers of trained professionals, peer coach interventions are scalable in a rapid way. Every older person who wants to exercise more can act as a peer coach, while there are not nearly enough physiotherapists to assist all older persons in need of lifestyle improvement. Although some question the effectiveness and safety of non-professional interventions, studies show that peer coaching is both safe and equally effective in stimulating physical activity as traditional interventions (7). Finally, in our study, we found that the peer coaching intervention was able to reach a relatively large amount of people from low socio-economic status, who are not only the ones that have the largest potential health benefit but also the ones that are notoriously difficult to reach with traditional, professional-led interventions. Similar initiatives that apply peer coaching for increasing physical activity in elderly in Cuba and China show that the application of this concept on a national scale is not an unrealistic perspective (8). Furthermore, initiatives such as buddy systems for healthy diets, the *Weightwatchers* programme and *Alcoholics Anonymous* show that peer coaching can also be applied to a range of life style domains outside physical activity.

Peer coaching for physical activity is an illustration of an innovative way of delivering health interventions through the involvement of the social environment. In addition to the advantages that we mentioned, the involvement of the social environment may have beneficial effects in wellbeing and the prevention of loneliness, by creating more social cohesion within communities. This further emphasizes the importance of the social environment in the search for novel cost-effective lifestyle strategies to combat the burden of age-related disease in ageing societies.

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