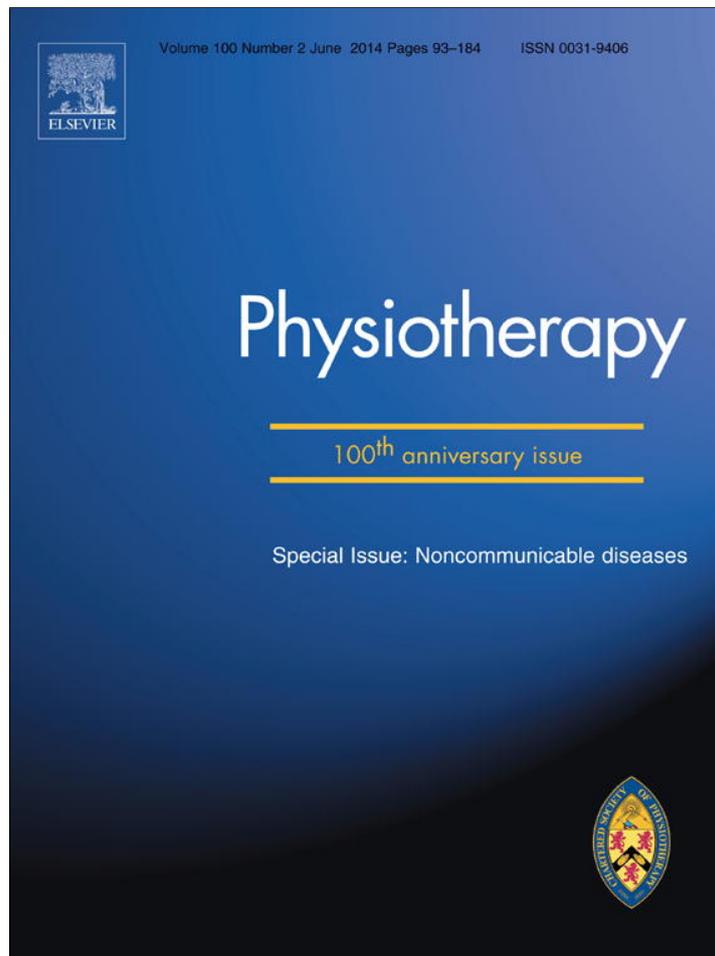


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## Editorial

## Physiotherapists have a vital part to play in combatting the burden of noncommunicable diseases

The burden of noncommunicable diseases (NCDs) has been described as “a public health emergency in slow motion” by the United Nations (UN) Secretary General Ban Ki-moon [1], and the World Economic Forum considers chronic diseases in both high and low resource countries to be a major risk to the global economy [2]. However, all NCDs can either be prevented or, if identified early, treated and managed in a way that significantly reduces disability, financial and societal costs, and prolongs healthy years of life [3].

The four main NCDs leading to the highest incidences of mortality are cardiovascular disease, chronic respiratory disease, diabetes, and cancer. These account for around 80% of all deaths from NCDs, of which there are more than 36 million each year. Cardiovascular disease accounts for 17.3 million deaths, followed by some forms of cancer (7.6 million), respiratory diseases (4.2 million), and diabetes (1.3 million). These diseases share four risk factors: tobacco use, physical inactivity, harmful alcohol use, and unhealthy diets. These in turn are associated with four key metabolic/biometric changes that increase the risk of NCDs: raised blood pressure (the leading NCD risk factor), overweight/obesity, hyperglycemia, and hyperlipidemia. There are 3.2 million deaths annually that are attributed to insufficient physical activity alone [4].

NCDs are not diseases confined to high resource countries; 80% of NCD-related deaths occur in low and middle income countries. They are the leading cause of death in all regions except Africa where the largest increase in NCD-related deaths is predicted to occur by 2020. Further, by 2030 deaths from NCDs in Africa are predicted to exceed the combined deaths from communicable and nutritional diseases and maternal and perinatal deaths. Of 9 million premature deaths (<60 years) annually that are attributed to NCDs, 90% occur in these low and middle income countries. [4] In addition, by 2030, low income countries are predicted to have eight times more NCD-related deaths than high income countries [5].

While the risk factors are prevalent in both high and low income groups those on higher incomes can access services and products to help in prevention and treatment. Individuals

in high income countries are four times more likely to have NCD services covered by health insurance than low income countries. The personal health costs associated with NCDs can quickly drain the resources of those in low resource settings, driving families into poverty [4].

Some of the most effective interventions for behavioural change result from population-level interventions and legislation, as evidenced for example by the dramatic reduction in tobacco use resulting from national integrated policies. Critical to success in most areas are multi-faceted, multi-sectorial, multi-disciplinary, and culturally relevant strategies. Low cost solutions exist that target reduction of the modifiable risk factors and map NCD prevalence [6]. Given the high costs associated with treating the consequences of NCDs, adolescence has been described as the “last best chance” to build positive health habits and limit damaging ones [7]. To address NCDs as a society-wide issue, requiring comprehensive and inclusive action, a lifespan approach needs to be adopted by all involved.

In a recent study O’Donoghue *et al.* (2014) identified the potential contribution of physiotherapists in addressing all risk factors associated with NCDs, not just physical activity levels. However, they found that physiotherapists did not feel that they had sufficient time or the necessary competencies to address the other risk factors, concluding that practice standards and educational requirements needed to be addressed [8]. If physiotherapists can capitalise on the opportunity to assess and advise on all four risk factors in every patient encounter, the profession would be making a significant contribution to combatting the burden of NCDs; there are resources already in existence to facilitate this. The World Health Professions Alliance (WHPA)<sup>1</sup> launched an NCD campaign in 2011 that included a toolkit of resources.

<sup>1</sup> WHPA is the global body representing more than 26 million health care professionals worldwide. Its members are the International Council of Nurses (ICN), the International Pharmaceutical Federation (FIP), the World Confederation for Physical Therapy (WCPT), the World Dental Federation (FDI) and the World Medical Association (WMA).

The WHPA health improvement card provides a lifestyle scorecard, measuring lifestyle/behavioural risk factors, a biometric scorecard which measures metabolic/biometric risk factors, and an action plan and goals for targeting these risk factors. There are guides for health professionals and for the public. These resources are easy to use and freely available from <http://www.whpa-ncdcampaign.org/> [3].

There is a groundswell of coordinated effort to affect policy change at the highest level and drive action to address NCDs as evidenced by the recent meetings and reports from the World Health Organization (WHO) and United Nations (UN), along with advocacy initiatives such as those of the NCD Alliance (<http://ncdalliance.org/>) and WHPA. The UN High-level Meeting on NCDs in 2011 and the UN Political Declaration committed Member States to a set of actions to accelerate activities related to combating the NCDs [9,10]. However, the UN Secretary General's progress report stated that progress to date has been "insufficient and highly uneven" at the national level [11]. The WHO Global Action Plan for the Prevention and Control of NCDs 2013 to 2020 offers a road map and a menu of policy options for Member States, WHO, UN organisations, intergovernmental organisations, Non-Governmental Organisations (NGOs), and the private sector. If collectively implemented it aims to attain nine voluntary global targets, including that of a 10% relative reduction in prevalence of insufficient physical activity by 2025 [12].

2014 will see the UN hold an NCD Review meeting to assess progress made on NCDs since 2011. This is a significant opportunity to reaffirm commitments and promote NCDs as a priority in the post-2015 development agenda [13,14]. Parallels are being made to the High-level reviews of HIV/AIDS in terms of the potential to create political action and long term sustainable impact [15].

Much attention has been given to the leading four NCDs, all of which benefit from the vital contribution of physiotherapists in both prevention and rehabilitation. However, to purely focus on these NCDs and their risk factors may exclude research and health service investment in the management of the NCDs leading to some of the highest levels of disability. These other NCDs include: musculoskeletal, for example osteoarthritis, osteoporosis, and rheumatoid arthritis; neurological, including multiple sclerosis and Parkinson's disease; and mental, for example Alzheimer's disease and senile dementia. Physiotherapists know just how important physical activity is in all of these.

WCPT will be taking to its General Meeting of 106 member organisations in 2015 a policy statement on NCDs for approval. This will emphasise the important role that physiotherapists play in health promotion and disease prevention as well as improving and maintaining physical activity, movement potential, and functional independence. It will also call on national physiotherapy associations to advocate for change and the involvement of the physiotherapy profession in strategies to address the NCDs [16]. The time for concerted action is now and physiotherapists have a vital role to play. We need

to draw on the evidence to demonstrate the effectiveness of physiotherapy interventions and seize the opportunities to be creative and address all risk factors associated with NCDs, not just physical inactivity.

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