Different ways of promoting physical activity

Article reviewed:

Physiotherapist-Led Physical Activity Interventions Are Efficacious at Increasing Physical Activity Levels: A Systematic Review and Meta-analysis Breanne E. Kunstler, MPhty, Jill L. Cook, PhD, Nicole Freene, PhD, Caroline F. Finch, PhD, Joanne L. Kemp, PhD, Paul D. O'Halloran, PhD, and James E. Gaida, PhD

As per the Canadian Institute for Health Information, in 2017, total health expenditures in Canada are expected to represent 11.5% of Canada's gross domestic product (GDP). Physicians and health care professionals continue to promote preventative care as one way to tackle the ever-growing cost of health care. Primary prevention is generally low cost and has wide-reaching benefits. Specifically, physical activity has been shown to reduce the burden of disease and decrease the progression of many common noncommunicable diseases (NCDs). In 2013, just over 2 in 10 adults and 1 in 10 children and youth in Canada met the Canadian Physical Activity Guidelines, which requires adults to achieve 150 to 300 minutes of moderate intensity of physical activity or 75 to 150 minutes of vigorous intensity physical activity, or an equivalent combination of both each week, as well as muscle-strengthening activities on at least 2 days each week. With so many people in Canada being physically inactive and with the rise in preventable diseases, primary care providers, including allied health professionals, have a critical role to promote physical activity and well-being. Physiotherapists are particularly well trained and positioned to promote physical activity in patients as their treatment plans often involve some type of physical activity.

This article did a systematic review of studies that assessed the efficacy of one-on-one, physiotherapist-led physical activity (PLPA) interventions at increasing physical activity levels among adults in clinic-based private practice, primary care, and outpatient settings. The eight studies that met this articles inclusion criteria looked at adults over the age of 18 who either had MSK injuries, risk factors for NCDs or who were suffering from NCDs. The studies either used subjectively (questionnaire) or objectively (accelerometry) quantified change in physically activity. A meta-analysis was conducted to look at the correlation of PLPA interventions at different follow-up times, as well as looking at success rates of PLPA interventions meeting minimum recommended physical activity levels. It also looked at the effect that the length of the therapy session had on the PLPA interventions success.

Looking at 3 out of the 8 studies included in the review, there was a significant finding that PLPA interventions were efficacious at assisting adults achieve the minimum recommended physical activity levels with an OR of 2.15. The other 5 studies included in the review showed a significant finding that PLPA interventions had only a small effect on patient's physical activity level in short and medium term follow-up which was not seen past 1 year of follow-up. When comparing the length of interventions seen in the different studies there was no difference in efficacy of PLPA interventions on the improvement physical activity level. Overall, the improvement in PA seen by PLPA interventions ranged from increasing vigorous, moderate and low-intensity PA.

In this article, it was highlighted that there was a lack of analysis on the content as opposed to the length of the interventions. There was also no emphasis on the importance of maintaining the level of physical activity achieved over time. As it was shown, the benefits of the PLPA interventions were not seen in the majority of the studies in long-term follow-up. The one study that did use intervention techniques geared towards maintenance of PA improvements resulted in such maintenance. Even though there was improvement of PA in most patients who received PLPA, the benefits of preventative lifestyle changes such as PA is truly seen when maintained over time and integrated into a person's weekly routine.

In summary, patients ultimately are responsible for the maintenance of their lifestyles. To help them integrate physical activity into their daily lives primary care providers can play an important role. This article shows that training physiotherapists and primary care health care professionals in behavioral changing counseling can help tackle the growing rate of inactivity and ultimately decrease the risks of NCDs.

M. Moroz M.D.C.M. CCFP Sport and Exercise Medicine Fellow, University of Ottawa

Advisor: Dr. Taryn Taylor BKin, MSc, MD, CCFP (CAC SEM), Dip Sport & Exercise Med