

COMMENT ON THE NEW BRUNSWICK HEALTH CARE REFORM



The role of a kinesiologist in health care services

As New Brunswick undergoes reform of the health care system, the New Brunswick Kinesiology Association would like to take the opportunity to reiterate the importance of a kinesiologist as a member of interdisciplinary health care team and their key role in promoting physical activity, and how they contribute to the prevention and treatment of chronic disease and injury. A kinesiologist is a health care professional with a university degree in science. Their expertise lies in the knowledge of human movement and physical activity and the use of physical activity as a primary means of intervention in the prevention of chronic disease and musculoskeletal conditions.

THE COST OF PHYSICAL INACTIVITY

In 2009, the direct, indirect and total costs of physical inactivity in Canada were estimated at \$2.4 billion, \$4.3 billion and \$6.8 billion respectively, making physical inactivity one of the major contributors to chronic disease and health care spending in Canada (1). According to the New Brunswick Health Council's (NBHC) latest Population Health Snapshot 2016 (2), 49.2% of New Brunswickers were moderately active or active every day compared to the Canadian average of 53.7%. There is compelling evidence in the literature (3) on the effectiveness of regular physical activity in the primary and secondary prevention of many chronic diseases and premature death. In addition, the Canadian Network for Mood and Anxiety Treatment

(4) now recommends physical activity as an additional front-line intervention for depression in Canada. Conversely, if we could increase the amount of physical activity for all Canadians by just 1%, the projected savings would be \$2.1 billion per year, a cumulative reduction of \$20.3 billion by 2030 (5). It is clear that physical inactivity has direct and indirect economic costs, but more importantly, it affects everyone's quality of life. More needs to be done to make it easier for the entire population to be physically active, and this needs to be done with confidence and safety.

KINESIOLOGISTS ARE HEALTH CARE PROFESSIONNALS

A kinesiologist has the skills to promote long-term change in physical activity behaviour and enable New Brunswickers to meet the new Canadian 24-hour adult movement recommendations (6), which recommend accumulating at least 150 minutes of moderate to vigorous physical activity per week in addition to including twice-weekly strength training. The New Brunswick Kinesiology Association has close to 50 certified kinesiologists, with continuing education and professional liability insurance, who are ready to serve their population in order to make their province more active and healthier. As further support of the role of kinesiologists in transforming the health of Canadians, we need not look far to see how kinesiologists can be incorporated into the health care system.

In Ontario, as of April 1, 2013, Kinesiology is recognized as a regulated health profession. Just prior to being recognized as a regulated health profession, a survey (7) was conducted with other health professionals such as physiotherapists, occupational therapists and nurses on the potential value of Kinesiologists as a regulated health profession. It was suggested that the integration of kinesiologists into the health care system in a formal and structured way had several strengths, including providing unique expertise (physical activity promotion) that could potentially help with continuity of care for the patient and bridge the gap between wellness and the spectrum of disease. Currently, physical activity promotion is an under-utilized tool because a promoter is often absent from the interdisciplinary health care team. This study also identified potential weaknesses in the profession, including the low recognition of the role of kinesiology amongst health professionals and in the general public. This lack of awareness was not due to a lack of potential contributions, but rather to the relatively recent formation of the profession and limited public awareness. Over time, this will change. For example, one of the actions that will contribute to better recognition and training is the inclusion of students in collaborative efforts with other health professionals while they are in training. In fact, this action is currently underway as part of the post-secondary education program in New Brunswick, as part of undergraduate training at the Université de Moncton. Kinesiology students participate in professional intercollaboration activities where they work on solving medical case studies with medical, nursing, respiratory therapy and social work students. Just as the contribution of health care professionals varies according to the needs of each patient, so does the kinesiologist's contribution to these sessions. There are times when their services are not needed, just as there are times when their services are of primary importance.

There are other calls for kinesiologists to be included in medical services. In an article published in the 2018 Journal of Canadian Family Physicians (8), which was widely read and commented on, it is strongly recommended that exercise specialists such as kinesiologists be included in interdisciplinary

treatment teams. The example of treating a person with osteoarthritis is cited in the article, but there is other evidence that physical activity promotion can help treat a wide variety of conditions and that current health care professionals recognize the benefits. In addition, in the recently published guidelines for the treatment of obesity in Canada (9) (the most widely read article on the Canadian Medical Association Journal website at the time of publication), an entire chapter is devoted to physical activity in the treatment of obesity and it is recommended that increased physical activity can be an integral part of all obesity management strategies. It is reasonable to ask why the incorporation of physical activity specialists in the health care system is so slow? New Brunswick has the opportunity to lead in this arena and show other provinces and jurisdictions the innovative approach to healthcare by increasing support for kinesiologists within the health care system. There is ample evidence that this would be welcomed by other health care professionals and ultimately better serve the needs of New Brunswickers.

It is relevant to examine in detail a few examples of how the changing demographics in New Brunswick make it particularly important to include additional efforts in preventive health care, such as physical activity promotion, to adapt to the changing nature of health care needs in New Brunswick. Specifically, the aging population and obesity are issues that will require focused and concerted efforts in the next phase of health care reform in our province.

AN AGING POPULATION

According to the Atlantic Provinces Economic Council's latest report " Looking ahead " (10), the number of seniors in Canada has doubled in the last two decades and it is projected that the number of seniors will increase by 32% by 2040, with 1 person aged 85 and over. This will then lead to a 27% increase in health care costs in Atlantic Canada over the next two decades due to the higher cost of care for seniors. It is necessary that these people remain healthy for as long as possible with a good quality of life.

According to the World Health Organization's World Report on Ageing and Health (11), people are at greater risk of multimorbidity, which is the presence of several

chronic diseases at the same time, as they age. Multimorbidity has a significant impact on older people, altering their capacity and thus having a direct impact on the number of healthy years of life lost. In his report "Chronic conditions and health service quality: Are we meeting the need?" (12), it was reported that chronic health problems occur at an earlier age in NB and that among people with three or more chronic conditions, six out of 10 were under the age of 65.

We already know that physical activity contributes an important role in prevention through its protective role against chronic diseases such as cardiovascular disease, diabetes, stroke and certain types of cancer (13), mental illness, dementia (14), in addition to having a beneficial effect on well-being (15). In addition, people who adopt a healthy lifestyle and engage in regular physical activity not only live longer, but live longer in good health (16) According to the WHO, (11) physical inactivity accounts for up to 20% of the attributable risk of dementia for a given population and 10 million new cases globally could be prevented each year if physical activity recommendations were followed by older adults.

Although we know the health benefits of physical activity, less than 35% of people aged 65 years and older (17) meet the recommendations of at least 150 minutes of moderate to vigorous physical activity per week. (6) With such predictions of the number of older adults in Canada by 2040, there is good reason to believe that investing in prevention through the integration of physical activity strategies in our communities can only be beneficial.

The NBHC report, which discusses the declining life expectancy in the province (18), states that between 2012 and 2016, approximately 1,800 people per year will die from preventable causes in New Brunswick. These are premature deaths that could have been prevented through primary prevention efforts, such as adopting a healthy lifestyle. According to the report, these prevention and health promotion services are provided primarily through primary health and public health and in conjunction with community-based health promotion initiatives. These services are essential to reduce the occurrence of chronic diseases and the premature deaths they can cause. In addition,

risk factors that contributed to at least 7 of the top 10 preventable causes of death in New Brunswick included smoking, physical inactivity, high blood pressure and obesity. It is recognized that regular physical activity plays an important role in the primary and secondary prevention of many chronic diseases (3). In addition, having an active lifestyle on a daily basis reduces sedentary behaviours that are harmful to health (6).

OBESITY IS A PREVALENT, COMPLEX, PROGRESSIVE AND RECURRENT DISEASE THAT IS DETRIMENTAL TO HEALTH

Obesity is a complex health problem that has no simple solution. In fact, there is no solution that works for the entire population, it requires an individualized approach and focuses on behaviour change.

The many chronic diseases related to obesity do not need to be repeated, suffice it to say that there are many complicating factors. Obesity is strongly associated with 8 of the top 10 most common health problems in New Brunswick (2). The challenge of treating obesity is further complicated by the stigma associated with the disease and how it affects a person's physical abilities and psychological outlook. Finally, and not most importantly, it is economically relevant that obesity increases health care costs.

Although complex, the basis of obesity management is to decrease dietary intake and increase physical activity, which creates a negative energy balance. This is simple to say, but in practice it requires significant effort. Dietitians are recognized as part of the health care system and help to assist in the management of obesity when individuals are referred to their services. However, the other half of the equation is currently missing. It is important to note that weight loss should not be the focus of obesity interventions. Weight loss is one possible outcome but should not be the only desired outcome. It is more realistic to focus on weight management rather than weight loss. Physical activity has an important role to play in weight management. The doses and intensities are known, the challenge of exercise is to get people moving and keep them active.

Not only does the kinesiologist know what is needed in terms of exercise intensity and volume, but they also know how to get people more active. In overweight adults, physical activity can improve diseases such as diabetes, hypertension, and the risk of heart disease, while increasing overall well-being and quality of life. These changes can occur without significant weight change and the kinesiologist is well equipped to do this effectively and safely.

THE KINESIOLOGIST, AN INVALUABLE RESOURCE FOR INTERDISCIPLINARY TEAMS AND A HEALTH PROMOTER

Kinesiology is a relatively new profession, but physical activity is not a new concept. Movement is an integral part of our daily activities and contributes to the proper functioning of the body. Human health challenges have shifted from infectious to chronic diseases that are associated with the determinants of health model, which includes individual behaviours and lifestyle choices. Just as following a healthy diet requires support and guidance, increasing the amount of physical activity one does is important and also requires assistance. Kinesiologists are experts at promoting physical activity and helping individuals make sustainable physical activity choices.

Kinesiologists are human movement and physical activity specialists

There is a growing interest and recognition of physical activity as a way to complement health care services. For example, in the fall of 2020, the New Brunswick Nurses Union presented findings from their report (19) on long-term care in the province where, among other things, 89% of respondents stated that residents were not receiving the necessary assistance to exercise. In addition, last November, following the arrival of Dr. France Desrosiers as President and CEO of the Vitalité health network, an article from Radio-Canada highlighted 5 challenges (20) that awaited the network

following the change of its CEO. The article talked about adapting services to the health status of New Brunswick by maximizing the use of other health professionals. Kinesiologists in New Brunswick, most of whom are outside the health system, are underutilized and represent an invaluable resource for population health and physical activity consultation. Taking Action on Prevention is supported by the original "Building on Values: The Future of Health Care in Canada" document that launched Canada's health reforms, where recommendations 22 and 23 of the document place prevention and health promotion as an integral part of primary health care and recommend the implementation of physical activity strategies (21). There is a striking and urgent need to address the health of Canadians, not when they are ill, but before they get there. In addition, recent clinical practice guidelines for obesity (9), cardiovascular disease (22), chronic pain (23) and musculoskeletal disorders (8) highlight the need for physical activity specialists to join interdisciplinary health care teams.

CONCLUSION

Health care reform offers an opportunity to modify the current health care system to create a better system that responds to the needs of New Brunswickers. The health challenges that New Brunswickers face are complex, and more efforts need to be deployed 'upstream' in order to reduce the burden 'downstream' on the health care system. Continuing to ignore the investments in true preventative health measures, such as increasing population physical activity levels, will not realise the full potential of the health care system in New Brunswick as a means to improve the lives of New Brunswickers. In this current health care reform, we urge you to consider the role of kinesiologists in promoting physical activity as part of a healthy lifestyle and how increasing their presence in the NB health care system can help improve the lives of New Brunswickers.

REFERENCES

1. I. Janssen, Health Care Costs of Physical Inactivity in Canadian Adults, *Appl Physiol Nutr Metab*, 2012
2. Population Health Snapshot 2016 | New Brunswick Health Council.

3. D.E.R. Warburton, Health Benefits of Physical Activity: The Evidence, Canadian Medical Association Journal, 2006
4. Exercise and Depression Toolkit - UBC
5. Krueger, H., Turner, D., Krueger, J., & Ready, A. E., The economic benefits of risk factor reduction in Canada: tobacco smoking, excess weight and physical inactivity. *Canadian journal of public health*, 2014
6. Canadian 24-hour movement guidelines: An integration of Physical Activity, Sedentary behaviour, and Sleep, For adults ages 18-64 years, SCPE-CSEP
7. Braniff, K, Montelpare, W & McPherson, M. Assessing the relative perspective of the regulation of kinesiologists among other health professionals. *Health*, 2012
8. Aaron Jattan and Brent Kvern, Exercise Specialists Should Be Members of Our Health Care Team, *Canadian Family Physician*, 2018
9. Wharton S. et al., Obesity in Adults: A clinical Practice Guideline, *CMAJ*, 2020
10. Looking ahead: Wide-Ranging Implications of Atlantic Canada's Aging Population, Atlantic Provinces Economic Council, January 21, 2021
11. World Health Organization, World report on ageing and health , 2016
12. New Brunswick Health Council, "Chronic conditions and health service quality: Are we meeting the need?," 2016.
13. Global action plan on physical activity 2018–2030: more active people for a healthier world, World Health Organization, 2018
14. Livingston G., Dementia prevention, intervention, and care, *The Lancet*, 2017.
15. Penedo, Frank J., *Exercise and well-being: a review of mental and physical health benefits associated with physical activity*, *Current Opinion in Psychiatry*, 2005
16. James F. Fries, Aging, Natural Death, and the compression morbidity, *N Engl J Med*, 1980
17. Statistics Canada. Canadian Health Measures Survey, Health characteristics, annual estimates
18. Life expectancy is getting shorter in New Brunswick, New Brunswick Health Council, 2021
19. The Forgotten Generation: An Urgent Call for Reform in New Brunswick's Long-Term Care Sector. NBNU, 2020
20. Les 5 défis du réseau de santé vitalité, Radio-Canada.ca
21. Roy J. Romanow, C.R., Building on values: The future of health care in Canada, Final report, November 2002
22. Sheldon W., Canadian Cardiovascular Harmonized Guidelines Endeavour (C-CHANGE) Guideline for the Prevention and Management of Cardiovascular Disease in Primary Care:2018 Update, 2018
23. Jason W. Busse et al., Guideline for Opioid Therapy and Chronic Non cancer Pain, *CMAJ*, 2017

ABOUT THE NEW BRUNSWICK KINESIOLOGY ASSOCIATION

The AKNB is a non-profit organization whose mandate is to promote the profession of Kinesiology in New Brunswick. Our mission is to :

- To provide leadership in promoting the profession of Kinesiology and Human Kinetics;
- Stimulate the evolution of the profession of Kinesiology through the development of continuing education for its members;
- To foster partnerships with the academic community by supporting research and development of the Kinesiology program;
- Reinforce the benefits of membership to its members.

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