

The Emerging Role of Naturopathic Medical Care in Health Promotion and Aging

Erika Buckley-Strobel, BSc, ND



UPDATE

EDITORIAL

COMMENTARY

CASE REVIEW

PRACTICE

RESEARCH

Abstract:

The numbers of seniors as a proportion of the Canadian population has never been higher. This has created strain on provincial health care budgets across Canada, as rates of patients with chronic diseases and complex needs continues to rise. Given these challenges, the need for a collaborative and health-promotion focused model for seniors' health care has never been more urgent. There is a strong argument to be made that naturopathic doctors (NDs) are ideally suited to fill this gap, because of their unique training and philosophies of care, and should be funded in a community health model. The benefits of this solution are: for ND clinicians, greatly expanded practice opportunities; for communities, that seniors will increasingly be able to age in place successfully; and for government, that cost savings will accrue to provincial health budgets from decreased chronic disease burden and demands for hospital and long-term based care.

The healthcare of an ever-aging Canadian population is one that has planners and providers considering options as to how to best provide for the medical needs of seniors today and into the future. Health promotion is one concept that has shown the ability to look ahead and help decrease the need for chronic care in hospitals, thereby decreasing the costs to the provincial governments. Health promotion and disease prevention strategies are key in achieving healthier and more productive seniors in our society¹ thereby decreasing demand on the health care system. For some time, governments of various levels in Canada have been recognizing the need to shift toward creating more resources for delivery of preventive care, as well as moving away from institution-based delivery systems to what has been called a network of caregivers approach.⁵ This includes an inter-disciplinary model of care involving the integration of services provided by health professionals providing the complex care required for older adults with chronic conditions.⁵ Creating an efficiently integrated system would include utilizing all health professionals to the full scope of their practice.⁵

Naturopathic Medicine and Health Promotion

Naturopathic doctors could readily play a role in this collaborative model. NDs are well positioned in terms of education and philosophy to fill a current and future gap by providing holistic primary care, from a health promotion perspective, to Canada's aging population. The current underutilization of NDs could be turned around to find a ready source of professionals poised to provide health promotion and preventative healthcare to the senior population.

Health promotion is foundational to naturopathic philosophy. One of the principles within the Naturopathic Doctors' Oath is to teach

the principles of healthy living and preventive medicine.⁶ In other words, the profession is founded on educating patients in health promotion and disease prevention along with providing patients the tools to make this attainable. Another principle, address the fundamental causes of disease,⁶ indicates that health promotion for seniors starts with primary care interactions that can occur in the early senior years and even earlier. Similarly, the principle of healing the whole person through individualized treatment illustrates the holistic perspective of naturopathic medicine that lends itself towards the unique considerations of each senior's care.⁶

In an increasing number of regulated Canadian provinces, NDs have additional training to meet standards for prescriptive authority, providing a framework to balance naturopathic and conventional therapeutics.⁷ When this additional level of therapeutic knowledge is added to lifestyle-based education and a philosophy of patient-centred care, there is reason to believe that over-reliance on medications will lessen, reducing the risk of adverse events related to drug interactions.^{8,9} This is an issue of particular concern to seniors' care. In 2010–2011, 1 in 200 Canadian seniors (more than 27,000 seniors) experienced an adverse drug reaction (ADR)-related hospitalization.¹⁰ With advanced training in prescribing, it can be argued that NDs could provide an extra layer of protection for elderly patients to identify and correct adverse effects of medication, minimizing the risks associated with polypharmacy.

Gaps in the Current Healthcare System

Ninety two percent of Canadian seniors currently live independently in their communities.¹¹ In most Canadian communities however, (particularly acute in rural settings), having access to family doctors

does not actually ensure timely access to primary care. Canada continues to perform below the international average for timely access to primary care (44%), with almost two-thirds (59%) of seniors unable to get a same- or next-day appointment and 1 out of 8 Canadian seniors waiting at least 2 weeks to see their family doctor.¹²

Even those who can access primary care often find that these visits do not provide them with adequate time to have their complex concerns addressed. In 2012, this challenge was clearly stated by the College of Family Physicians of Canada (CFPC) when discussing the impact of chronic or complex conditions on a physician's caseload, summarizing that 15-minute visits are just not enough.¹³ Patients with chronic care disease management cases require routine patient visits, greater time requirements and more resources. In their report, the CFPC referenced that it would take 7.4 hours per working day to provide all recommended preventive care to the average roster of daily patients, plus 10.6 hours to adequately manage chronic conditions.¹³

As well, in response to constraints on billing for family practice visits in many provinces, many physicians have similarly had to limit time spent managing individual complaints. In Ontario, this trend has been increasing in recent years.³ There are concerns from the CFPC and many patient care advocacy groups that setting limits to one or two concerns per visit may prevent seniors from sharing symptoms that could potentially be indicative of more serious health problems.³ This becomes more challenging when there are often multiple chronic conditions and overlapping symptom pictures.

Health Promotion and the Chronic Diseases of Aging

Poor management of chronic conditions can lead to declining health, reduced independence and ultimately death. In Canada, one third of seniors live with at least 3 chronic conditions, 32% take 5 or more regular medications and 14% face a mental health problem such as depression or anxiety.¹³ Hypertension, the most prevalent condition amongst Canadians over 65, affects over 50% of Canadian seniors. Urinary incontinence, the eighth most common chronic disease of the elderly, affects one in ten Canadian seniors.¹²

FIGURE 1:
The top 8 chronic diseases being faced by Canadian seniors¹²

Hypertension	Coronary Heart Disease
Osteoarthritis	Osteoporosis
Low back pain	Type 2 diabetes
Ophthalmic problems	Urinary incontinence

According to the World Health Organization (WHO), the top three causes of chronic disease worldwide are unhealthy diet, physical inactivity, and tobacco use, all addressable from a health promotion perspective.¹⁴ Increased intake of vegetables and fruits has shown many positive effects in terms of chronic disease outcomes including hypertension, CHD, and stroke.¹⁵ A prospective cohort study of over 96,000 people, The Adventist Health Study 2, investigated

the impact of plant-based diets on all-cause mortality and showed a decreased mortality risk with plant-based diets in comparison with non-vegetarian diets.¹⁶ In terms of more specific conditions, the increased consumption of fruit and vegetables has a risk-reducing influence on dementia and diabetes.^{15, 17}

In addition to diet, physical activity primarily prevents or delays the onset of chronic diseases, indicating that chronic disease may not be the foregone conclusion of the aging process.¹⁸ In the case of dementia, exercise has been shown to not only reduce the incidence, but also slow the progression of this disease.¹⁹ In China, a program combining lifestyle counselling and exercise was effective in lowering the blood pressure of medicated hypertensive patients aged 55 and older.²⁰

Health Promotion and Mental/Emotional Health

A primary care environment is many seniors' first line of health promotion when it comes to their mental/emotional well-being. Because this can be time consuming for primary care physicians, screenings and brief interventions can be effectively delivered by other health professionals in primary care settings.²¹ There are many key conditions to be assessed for in the senior population, including dementia, depression and anxiety.

More than 419,000 Canadians (6.9%) aged 65 years or older are living with diagnosed dementia²² and this number is expected to double in the next 20 years.²³ Twelve modifiable risk factors in early life (e.g. education), midlife (e.g. hypertension, hearing loss) and later life (e.g. depression, physical inactivity, social isolation) account for around 40% of dementia worldwide, many of which can be assessed and addressed through not only public health professionals, but also through individual interventions throughout the life course.²²

Mental health and cognitive problems among older adults are still commonly under-diagnosed in primary care in part due to patients not seeking help when symptoms appear, and hurried office care visits.²⁵ These are significant risks; loneliness and depression are two factors that have been found to increase cognitive decline over time, independent of age, education, socioeconomic status and initial health status.²⁷ It is important for naturopathic doctors to look for potential precursors to depression, such as loneliness or social isolation, as older adults who have strong personal networks, with a large and diverse set of social contacts, have been found to have the overall lowest risk of all-cause mortality.²⁶

Additionally, there are many tools available for the primary care assessment of dementia symptoms, each having their own benefits and limitations. Currently, the Mini Mental State Exam remains the most frequently used cognitive screening instrument but may not be best for identifying mild cognitive impairment (MCI) in a primary care setting.²⁴ In terms of tests that can be delivered in a short time in a primary care setting, the Quick mild cognitive impairment screen (Qmci) and Phototest were found to be preferable tools for detecting MCI.²⁴ Although it takes longer, the Montreal Cognitive Assessment (MoCA) seems to be a promising (pencil and paper)

screening test,²⁴ and, with longer appointment times, could be feasible for administration in a naturopathic setting.

With the recent COVID-19 pandemic, and the social distancing measures that have resulted from efforts to limit community transmission, social isolation and loneliness are disproportionately affecting older adults' health outcomes.^{28,29} One proposed solution to this challenge is to develop methods to identify and address social isolation and loneliness in health care settings.²⁹ The tools used to identify mental health and cognition changes are all ones that could easily be delivered by NDs within a primary health care team setting or independent practice. This extended time with patients in typical naturopathic clinical encounters also allows time to build rapport, which is essential so that patients feel more comfortable sharing symptoms of a mental/emotional nature.

Health Promotion and Life Satisfaction

In 2010, 97% of Canadian seniors expressed general satisfaction with their lives³¹ and 8 out of 10 Canadian seniors, a higher proportion than the international average, rate their health as excellent, very good or good.¹² This is despite one third living with at least 3 chronic conditions, 32% taking 5 or more regular medications, and 14% facing a mental health problem such as depression or anxiety.¹² However, this can also be seen as encouraging as it indicates that life satisfaction is based on something more than physical health.

In face of the social isolation and mental health challenges related to the COVID-19 pandemic, it is important to implement strategies to maintain life satisfaction among seniors. There is evidence of a significant relationship between self-care and self-esteem in the elderly. Discussing and implementing strategies that promote individualized self-care routines for physical and mental well-being of elders in a primary care setting leads to increases in health and significant reduction of physical and mental complications.³² During the intake process, NDs should encourage discussion of life satisfaction and challenges through open-ended questioning. This provides seniors with an environment to discuss these sometimes-sensitive topics in a non-rushed and non-judgmental way.

Conclusion

As the population ages, the need for a health promotion approach to seniors' care continues to grow. It is evident that there are gaps in the current system as primary care struggles to provide both acute care and a health promotion approach to seniors' health. Licensed health professionals to fill these gaps already exist in the form of naturopathic physicians/doctors (NDs). As health promotion and disease prevention is the cornerstone of naturopathic practice, NDs are ideally suited to this role. Incorporating health promotion into a collaborative care model that includes NDs and beginning health promotion and lifestyle education at an earlier age, we may be able to decrease negative chronic disease outcomes amongst seniors in the future. 🌱

About the Author

Erika Buckley Strobel, BSc, ND graduated from the Canadian College of Naturopathic Medicine in Toronto where she completed the ND (Naturopathic Doctor) program in 2004. A member of the “sandwich generation”, she now balances her time between family and practice in beautiful Golden, British Columbia. In the spring of 2018, she completed the two-year Advanced Certificate in Gerontology from Selkirk College. She not only brings this knowledge to her practice, but to her community as well by sitting on the Golden Age Friendly Committee. Her goal is to inspire and educate seniors and NDs alike of the vital role that naturopathic medicine can play in healthy, active aging.

Competing interests: none declared

Correspondence: Dr. Buckley-Strobel, ND; email erikabuckleynd@aquavitalis.ca

References

- Duplaga M, Grysar M, Rodzinka M, Kopec A. Scoping review of health promotion and disease prevention interventions addressed to elderly people. *BMC Health Services Research*. 2016;16(S5). doi:10.1186/s12913-016-1521-4.
- Bucher S, Maury A, Rosso J, et al. Time and feasibility of prevention in primary care. *Fam Pract*. 2017;34(1):49-56. doi:10.1093/fampra/cmw108
- College of Physicians and Surgeons of Ontario. *One Issue Per Visit Strategy Could Pose a Safety Risk*. eDialogue. Published October 13, 2019. Accessed October 16, 2020. <https://dialogue.cpsso.on.ca/2019/10/one-issue-per-visit-strategy-could-pose-a-safety-risk/>
- Yarnall KSH, Pollak KI, Ostbye T, Krause KM, Michener JL. Primary Care: Is There Enough Time for Prevention? *American Journal of Public Health*. 2003;93(4):635-641. doi:10.2105/ajph.93.4.635.
- Standing Committee on Health. *Chronic Diseases Related to Aging and Health Promotion and Disease Prevention: Report of the Standing Committee on Health*. The House of Commons; 2012. Accessed October 2, 2020. <http://www.parl.gc.ca/content/hoc/Committee/411/HESA/Reports/RP5600467/hesarp08/hesarp08-e.pdf>
- Naturopathic Philosophy. In: Hetchman L, ed. *Clinical Naturopathic Medicine*. 2nd ed. Chatsworth, NSW: Elsevier; 2018:3-16.
- Litzy AP. Naturopathic Physicians: Holistic Primary Care and Integrative Medicine Specialists. *Journal of Dietary Supplements*. 2011;8(4):369-377. doi:10.3109/19390211.2011.623148.
- Canadian Medical Association. *A Policy Framework to Guide a National Seniors Strategy for Canada*. Canadian Medical Association; 2015. Accessed October 2, 2020. https://cma.ca/sites/default/files/pdf/News/policy-framework-to-guide-seniors_en.pdf
- Canadian Institute for Health Information. *Drug use among Seniors, 2016*. Canadian Institute for Health Information; 2016. Accessed October 2, 2020. <https://www.cihi.ca/sites/default/files/document/drug-use-among-seniors-2016-en-web.pdf>
- Canadian Institute for Health Information. *Adverse Drug Reaction-Related Hospitalizations Among Seniors, 2006 to 2011*. Canadian Institute for Health Information; 2013. Accessed October 2, 2020. https://secure.cihi.ca/free_products/Hospitalizations%20for%20ADR-EN%20web.pdf
- Government of Canada SC. *Research Highlights on Health and Aging*. Government of Canada, Statistics Canada. Published July 28, 2016. Accessed October 3, 2020. <https://www150.statcan.gc.ca/n1/pub/11-631-x/11-631-x2016001-eng.htm>
- Canadian Institute for Health Information. *How Canada Compares: Results from The Commonwealth Fund's 2017 International Health Policy Survey of Seniors — Accessible Report*. Canadian Institute for Health Information; 2017. Accessed October 3, 2020. <https://www.cihi.ca/sites/default/files/document/text-alternative-version-2016-cmwf-en-web.pdf>
- College of Family Physicians of Canada. *Best advice. Panel size*. College of Family Physicians of Canada; 2012. Accessed October 3, 2020. http://www.cfpc.ca/uploadedFiles/Health_Policy_PDFs/Final%20June%209%202011%20Final%20Panel%20Size%20Best%20Advice.pdf
- World Health Organization. *Overview - Preventing chronic diseases: a vital investment*. World Health Organization. Published December 21, 2015. Accessed October 16, 2020. https://www.who.int/chp/chronic_disease_report/part1/en/index3.html
- Boeing H, Bechthold A, Bub A, et al. Critical review: vegetables and fruit in the prevention of chronic diseases. *Eur J Nutr*. 2012;51(6):637-663. doi:10.1007/s00394-012-0380-y
- Orlich MJ, Singh PN, Sabatè J, et al. Vegetarian dietary patterns and mortality in Adventist Health Study 2. *JAMA Intern Med*. 2013;173(13):1230-1238. doi:10.1001/jamainternmed.2013.6473
- Tonstad S, Stewart K, Oda K, Batech M, Herring RP, Fraser GE. Vegetarian diets and incidence of diabetes in the Adventist Health Study-2. *Nutr Metab Cardiovasc Dis*. 2013;23(4):292-299. doi:10.1016/j.numecd.2011.07.004
- Booth FW, Roberts CK, Laye MJ. Lack of Exercise Is a Major Cause of Chronic Diseases. *Comprehensive Physiology*. 2012. doi:10.1002/cphy.c110025.
- Ahlskog JE, Geda YE, Graff-Radford NR, Petersen RC. Physical exercise as a preventive or disease-modifying treatment of dementia and brain aging. *Mayo Clin Proc*. 2011;86(9):876-884. doi:10.4065/mcp.2011.0252
- Gong J, Chen X, Li S. Efficacy of a Community-Based Physical Activity Program KM2H2 for Stroke and Heart Attack Prevention among Senior Hypertensive Patients: A Cluster Randomized Controlled Phase-II Trial. *PLoS One*. 2015;10(10):e0139442. Published 2015 Oct 1. doi:10.1371/journal.pone.0139442
- Bartels SJ, Naslund JA. The Underside of the Silver Tsunami — Older Adults and Mental Health Care. *New England Journal of Medicine*. 2013;368(14):1366-1366. doi:10.1056/nejmx130007.
- National Institute on Ageing. *An Evidence Informed National Seniors Strategy for Canada*. 3rd ed. National Institute on Ageing; 2020. Accessed October 16, 2020. http://nationalseniorsstrategy.ca/wp-content/uploads/2020/09/INSS_2020_Third_Edition.pdf
- Public Health Agency of Canada. *Health Status of Canadians 2016: A report of the Chief Public Health Officer*. Her Majesty the Queen in Right of Canada (Minister of Health); 2016. Accessed October 14, 2020. <https://healthycanadians.gc.ca/publications/departement-ministere-sante-publique-status-2016-etat-sante-publique-statut-atl/pdf-eng.pdf>
- Roeck EED, Deyn PPD, Dierckx E, Engelborghs S. Brief cognitive screening instruments for early detection of Alzheimer's disease: a systematic review. *Alzheimer's Research & Therapy*. 2019;11(1). doi:10.1186/s13195-019-0474-3.
- Segal DL, Granier KL, Pifer MA, Stone LE. Mental health in older adults: an introduction for integrated care professionals. *Clinics in Integrated Care*. 2020;2:100015. doi:10.1016/j.intcar.2020.100015.
- Ellwardt L, Tilburg TV, Aartsen M, Wittek R, Steverink N. Personal Networks and Mortality Risk in Older Adults: A Twenty-Year Longitudinal Study. *PLoS One*. 2015;10(3). doi:10.1371/journal.pone.0116731.
- Donovan NJ, Wu Q, Reutz DM, Sperling RA, Marshall GA, Clymour MM. Loneliness, depression and cognitive function in older U.S. adults. *Int J Geriatr Psychiatry*. 2017;32(5):564-573. doi:10.1002/gps.4495.
- Wu B. Social isolation and loneliness among older adults in the context of COVID-19: a global challenge. *Global Health Research and Policy*. 2020;5(1). doi:10.1186/s41256-020-00154-3.
- Armitage R, Nellums LB. COVID-19 and the consequences of isolating the elderly. *The Lancet Public Health*. 2020;5(5). doi:10.1016/S2468-2667(20)30061-x.
- Lim C, Putnam RD. Religion, Social Networks, and Life Satisfaction. *American Sociological Review*. 2010;75(6):914-933. doi:10.1177/0003122410386686.
- Public Health Agency of Canada. *The Chief Public Health Officer's Report on the State of Public Health in Canada, 2010: Growing Older - Adding Life to Years*. Her Majesty the Queen in Right of Canada; 2010. Accessed October 16, 2020. http://www.phac-aspc.gc.ca/cphorhc-respcsp/2010/fr-rc/pdf/cpho_report_2010_c.pdf
- Bagheri-Sami M, Goudarzi A, Mirani H, Jouybari S, Nasiri D. Association Between Self-care Behaviors and Self-esteem of Rural Elders; Necessity of Health Promotion. *Materia Socio Medica*. 2016;28(1):41. doi:10.5455/msm.2016.28.41-45.
- MacDonald, B.J., Wolfson, M., and Hirdes, J. *The Future CoSt of Long-Term Care in Canada*. National Institute on Ageing, Ryerson University; 2019. Accessed October 16, 2020. <https://static1.squarespace.com/static/5c2fa7b03917ced9b52a426d8/1/5d8ad6f6c6598c340e0278015722279898977/TheFutureCoStofLongTermCareinCanada.pdf>
- Ministry of Health. *Supplementary Benefits: Province of British Columbia*. Published March 13, 2020. Accessed October 23, 2020. <https://www2.gov.bc.ca/gov/content/health/health-drug-coverage/msp/bc-residents/benefits/services-covered-by-msp/supplementary-benefits>