

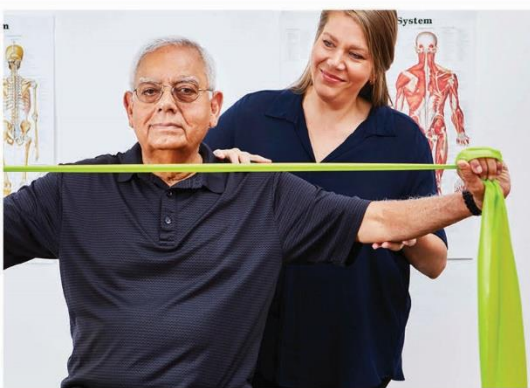
Association
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Canadian
Chiropractic
Association

National Seniors Council

Overview on Older Adults and Musculoskeletal Health



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Introduction

The Canadian Chiropractic Association (CCA) represents the more than 9,000 Doctors of Chiropractic across Canada. Chiropractors are experts in evidence-based, non-invasive, drug-free manual therapies, and are regulated by a college system in all Canadian provinces and are designated to use the title “doctor”, just like physicians, optometrists, and dentists. Chiropractors diagnose, treat and manage musculoskeletal conditions such as back pain, headaches, arm or neck strain and diseases of the muscle and joints that are having a devastating impact on Canadians’ health, quality of life, workforce participation and the economy.

Musculoskeletal (MSK) conditions are typically characterized by pain (often persistent) and limitations in mobility and dexterity, reducing people’s ability to work and participate in society. Each year, according to Health Canada, more than 11 million Canadians suffer from musculoskeletal conditions, and by 2031 Health Canada projects this number is projected to grow to an alarming 15 million.

Every year, 4.7 million Canadians rely on services offered by chiropractors, and 49% of all Canadians will visit a chiropractor at some point in their life. Musculoskeletal conditions are having a devastating impact on the health, quality of life, and workforce participation of Canadians, as well as on Canada’s economy. According to Health Canada, the total direct (healthcare) and indirect (lost production) cost of chronic pain in 2019 was \$38.2 - \$40.3 billion. Over the next decade the total cost is expected to increase by 36.2 per cent and reach \$55 billion.

Aging and Musculoskeletal Health Globally

The World Health Organization estimates that by 2050 the global population of people aged 60 or over will be 2.1 billion.¹ The United Nations Decade of Healthy Aging (2020-2030) outlines a number of development goals for countries to consider implementing in order to support healthy aging. Taking a life-course approach, these goals encourage shifting away from seeing health as the absence of disease, and toward understanding health in relation to function. The Decade of Healthy Living thus encourages systemic and social change that provides opportunities for good health at any age, enabling older adults to stay active and engaged in their communities. Globally, musculoskeletal conditions are estimated to contribute 8% of the total disease burden in persons over 60 years of age.² This burden represents 21.3% of the total years lived with disability, second only to mental health-related disabilities.³

Aging and Musculoskeletal Health In Canada

Musculoskeletal health has a substantial impact on healthy aging in Canada. Epidemiological research has identified relationships between musculoskeletal conditions in older adults and declines in function, independence, frailty, and increased mortality.⁴ In aging populations, musculoskeletal conditions are associated with work loss, early retirement, and loss of retirement wealth as well as increased social isolation, helplessness, and frustration.⁵⁻⁶ Recent research has also demonstrated that the impact of musculoskeletal conditions on aging in Indigenous communities has been grossly underestimated.⁷

It has been suggested that older adults in Canada are not receiving effective and efficient care for musculoskeletal conditions.⁸ This is a striking estimation given that older adults currently account for 45% of Canadian provincial health care expenditures.⁹ These expenditures will continue to rise in relation to the prediction that in 2042, 22% of the Canadian population will be over 65 years of age.¹⁰

Low back pain significantly affects older populations. Low back pain in this population is often moderate to severe in intensity and more likely to be incapacitating in comparison to low back in younger adults.¹¹ It is reported that one fifth of older adults with low back pain experience difficulties caring for themselves, performing their activities of daily living, and engaging in family and social events.¹² Of those older adults who seek care for low back pain, they are more likely to receive ineffective and potentially harmful interventions such as opioid prescriptions or spinal injections.¹³

The Role of Chiropractic in Caring for Older Adults

The utilization of chiropractic care by Canadians continues to increase.¹⁴ Recent evidence suggests that each year 20.9% of adults in Canada seeking care for chronic back pain visit chiropractic care, compared to 16.2% who visit physiotherapists.¹⁵ It is estimated that 19% of all chiropractic patients in Canada are older than 65 years of age.¹⁶ Most commonly these patients present to chiropractors with complaints of neck and low back pain.¹⁷ Researchers indicate that utilization rates of chiropractic compared to primary care for musculoskeletal complaints across Canada likely reflect inequalities in access, and suggest the importance of enabling access to non-pharmacological treatment options for musculoskeletal pain that have demonstrated value.¹⁸

According to the World Federation of Chiropractic (WFC), low back pain and osteoarthritis are the leading contributors of non-communicable diseases amongst older adults.¹⁹ It is the position of the WFC that chiropractic has an important role to play in helping to realize healthy aging initiatives both locally and globally.

Chiropractic care is well poised to play an important role in meeting the evolving musculoskeletal health needs of the aging Canadian population. One of the most important interventions in the prevention, treatment, and management of musculoskeletal conditions affecting older adults is physical activity.²⁰ Chiropractors are adept at using exercise prescription, alongside manual therapy techniques, to provide non-invasive conservative care for musculoskeletal conditions such as low back pain.

Opportunities for Chiropractic Intervention

Physical exercise is also an important intervention in preventing falls amongst older adults.²¹ Each year 20-30% of Canadians over 65 years of age will experience a fall.²² In Canada, the direct health care costs associated with falls in the aging population are estimated to be \$2 billion annually.²³ Fall related injuries are also associated with high morbidity and mortality in older adults, and the risk of falls can be reduced by using evidence and exercise based interventions focused on balance, strength, and mobility.^{24 25} As primary contact care providers, chiropractors are also trained to identify and target increased risk of falls amongst older patients. Risk such as polypharmacy (the simultaneous use of multiple drugs), diminished balance perception, diminished strength, gait issues, and independence are assessed by chiropractors during routine examinations for musculoskeletal complaints. Taking a multi-modal approach, chiropractors can manage or co-manage these risk factors, potentially preventing further risk of fall.²⁶

The use of exercise by chiropractors has demonstrated benefits beyond the vitally important work of falls prevention. Chiropractors are one of several regulated health professionals in Canada currently providing community-based education and exercise programming for older adults living with hip and knee osteoarthritis. The GLA:D® program, originally developed in Denmark, has been demonstrated to improve pain and function associated with osteoarthritis of the hip and knee.²⁷ The overall aim of this program is to provide older adults with exercise training and education that promotes independence and physical activity. Older adults can perform the GLA:D® exercises in a group setting in one of many chiropractic clinics across Canada or on their own at home with direction from their chiropractor.

Similar to the hip and knee osteoarthritis program, GLA:D® BACK implements evidence-based recommendations for the use of exercise in treating back pain in adults. This program also adopts an individualized approach to behavior change focused on addressing and solutioning on some of the motivational barriers associated with low back pain.²⁸ The program combines group exercise, education, and individualized goal setting and is currently offered in the province of Alberta with very positive initial outcomes.²⁹

One of the more painful conditions affecting older adults is neurogenic claudication. This clinical syndrome is characterized by extremity pain, heaviness, weakness, and numbness caused by degenerative lumbar spinal stenosis – an age-related degenerative condition that narrows the spinal canal, causing compression of the spinal nerves.^{30 31} Older adults living with lumbar spinal stenosis experience higher degrees of walking limitations than those with knee and hip osteoarthritis. Lumbar spinal stenosis has been described as more functionally disabling than chronic obstructive lung disease, congestive heart failure, or rheumatological conditions such as systemic lupus erythematosus. The impact of the pain associated with lumbar spinal stenosis on an older adults can lead to sedentary lifestyle and progressive declines in health.³² Because of the severity of this condition, lumbar spinal stenosis represents one of the most common reasons for spinal surgery in adults over 65 years of age.³³

Dr. Carlo Ammendolia , a chiropractor and associate scientist at Mount Sinai Hospital in Toronto, Ontario, along with a team of researchers, has developed a non-surgical, exercise-based self-management program specific for older adults with LSS called the Boot Camp Program for Lumbar Spinal Stenosis. This 6-week program combines manual therapy with home-based exercises that focus on providing older adults with self-management strategies pain relief with the aim of improving mobility and function. Evidence suggests that the boot camp is effective in improving the pain symptoms and functional ability in adults living with moderate neurogenic claudication.³⁴ For some older adults, the boot camp training has been so successful in decreasing pain and improving function that they have not had to undergo spinal surgery to decrease their symptoms of neurogenic claudication.³⁵

The GLA:D® program and the Boot Camp Program for Lumbar Spinal Stenosis are two examples of evidence-based and accessible chiropractic care that aging Canadians can do even from the comfort of their homes.

The Future of Chiropractic in Caring for Older Adults

As more research continues to be conducted on chiropractic care for older adults, we see evidence emerging for the effectiveness of manual therapy on reducing pain and disability associated with low back pain in older adults.³⁶ While more research is needed, manual therapy provided by chiropractors is consistently understood to decrease pain in older adults living with chronic low back pain.³⁷

Recognizing that older adults may face unique barriers to accessing chiropractic care such as cost and location, the WFC, “encourages practitioners to increasingly deliver services where older adults live (e.g. retirement communities, residential aged care facilities, and domiciliary assisted living residences), improve communication with patients who have

sensory impairments (e.g. hearing, vision), enhance ease of access and mobility within chiropractic clinics, and work with other healthcare providers and community services to help reduce the known barriers for older adults receiving care.”³⁸

Conclusion

As part of the care team for older adults, chiropractors can ensure the maintenance of good health and functional independence through the prevention, early detection, and management of musculoskeletal conditions. Including Canada’s experts in musculoskeletal conditions within the development process for an aging at home benefit will help position the initiative for success and improve the quality of life for millions of Canadians. The Canadian Chiropractic Association looks forward to partnering with the National Seniors Council to help support this vitally important initiative.

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