Canadian Physiotherapy Association | Association canadienne de physiothérapie

Access to Physiotherapy

for

Aboriginal Peoples in Canada

Canadian Physiotherapy Association

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Preface:

The Canadian Physiotherapy Association (CPA) is the national professional association for physiotherapists[1] in Canada. Its mission is to advance the profession of physiotherapy in order to improve the health of Canadians.

CPA members - representing Aboriginal[2] physiotherapists, physiotherapists whose practice includes Aboriginal communities and physiotherapists whose research includes analysis of the delivery of physiotherapy to Aboriginal peoples in Canada - requested CPA to develop a position statement that supported the value that access to physiotherapy would add to the provision of health care to Aboriginal peoples.

In response to this request, CPA drafted the following background paper to provide an overview of the health status of Canada's Aboriginal peoples and the role for physiotherapy in their health care. It is a companion document to the 2014 CPA position statement, *The Role of Physiotherapy in Aboriginal Health Care.* It is a living document, and is intended to serve as a resource for subsequent initiatives.

[1] Physiotherapist and related words are official marks used with permission by registered physiotherapists

[2] In this document, the terms *Aboriginal* or *Aboriginal peoples* refer to the indigenous peoples of Canada - the First Nations, Inuit and Métis peoples as defined under s. 35(2) of the Constitution Act, 1982.

Introduction:

All Canadians have a right to timely and reliable access to rehabilitation for treatment of illness, injury, and disease without barriers such as financial restraints or availability of the service.

Physiotherapists are primary care providers who restore function and improve the mobility of Canadians across the lifespan. Early access to physiotherapy treatment can positively impact health outcomes, physical functioning, and quality of life.

2010 CPA Position Statement – Access to Physiotherapy

Aboriginal Peoples in Canada

Over 1.2 million people identified themselves as Aboriginal in the 2006 census, representing 3.8% of the Canadian population. Aboriginal peoples in Canada include First Nations (60%), Métis (33%) and Inuit (4%) peoples.[1]

According to Human Resources and Development Canada, the Aboriginal population is growing faster than the general population, increasing by 20.1% from 2001 to 2006. Based on current population trends, it is anticipated that by 2017 the number will rise to 1.7million.[1]

In 2006, the median age of the total Aboriginal population in Canada was 27 years of age; on average, Aboriginal peoples in Canada are younger than non-Aboriginal Canadians, whose median age was 40.[2] Over the same time span, however, there was a 43% increase in the number of Aboriginal peoples aged 65 and over, which is significantly higher than the 23% increase for that age group in the general Canadian population.[2]

Health Status

First Nations People

The Regional Health Survey (RHS) is a national longitudinal health survey coordinated by the First Nations Information Governance Centre. The survey gathers information about on-reserve and northern First Nation communities as it relates to health, wellness, heath determinants and broad issues for First Nation communities in Canada over time. The 2008/2010 RHS provides information about health conditions facing First Nations peoples and the predisposing factors.[3] The data from the RHS provides more comprehensive data about First Nations than that available for either the Inuit or Métis population.

Findings of the RHS include:

- over 62% of First Nation adults report having at least one chronic health condition. This is unchanged from the 2002/03 RHS. More First Nations women report having at least one chronic condition than men;

- the most commonly reported health conditions were: diabetes, arthritis, back pain, high blood pressure, and allergies;
- the prevalence of chronic disease with a co-morbidity increase with age;
- over 16% of First Nations adults report being diagnosed with diabetes;
- 18.6% of adults reported being injured in the previous 12 months, with the highest proportion of injury reported by young men between 18 and 34 years of age; and
- more than half the number of First Nations adults over 55 reported having an activity limitation.[3]

Métis Peoples

The 2006 Aboriginal Peoples Survey (APS)[1] conducted by Statistics Canada found that 54% of the Métis population aged 15 and over reported being diagnosed with a chronic condition. One quarter of the respondents had one chronic condition, whereas 28% had two or more chronic conditions.

The chronic conditions identified most frequently in the 2006 APS by those 15 or over are: arthritis or rheumatism (21%), high blood pressure (16%), asthma (14%), and stomach problems or intestinal ulcers (12%).[1]

The incidence of disabilities reported for the Métis people in the APS was 32%, which is significantly higher than that of 18% reported for the overall Canadian population. However, it is similar to that of both First Nations and Inuit populations.[1]

More recent studies have shown that the prevalence of diabetes among the Métis population is increasing and is now significantly higher than the general population.[4-6]

Inuit Peoples

APS findings for Inuit populations state that 44% of Inuit adults have one or more chronic conditions.[7] Although this is lower than the other Aboriginal populations, this represents an increase of 10% in just over 5 years.

Arthritis/rheumatism and high blood pressure were the most commonly reported chronic conditions for this population, but at 13% and 12 % respectively, are similar to the rates for non-Aboriginal peoples.[7] Diabetes is a rapidly growing diagnosis for Inuit populations, increasing from 2% to 4% over five years.[7]

The incidence of lung cancer for Inuit peoples is the highest in the world and the rates are rising [8,9] The annual incidence of tuberculosis over an 11 year period (1997-2008) for Inuit peoples was 102 times greater than for non-Aboriginal peoples.[8]

Predisposing factors

The World Health Organization has defined the determinants of health as the "range of personal, social, economic and environmental factors that determine the health status of individuals or populations".[10]

The physiotherapy profession acknowledges the influence of the broader determinants of health on Aboriginal peoples in Canada at both the individual and population level, from socioeconomic status and migration to urban centres to the longer term impact of colonization and self-determination.[11] The following are well documented health inequities that have been associated with poorer health outcomes.

- Health is affected by factors in the individual's living environment. Both Inuit and First Nations peoples report that approximately 25% of their populations live in over-crowded housing and 31 and 37%, respectively, live in houses needing major repairs.[3,8] By comparison, both figures for the general population are 3% and 7%.[8] One of the health impacts of overcrowding, inadequate and/or poor housing conditions is poor indoor air quality and ventilation, which in turn contribute to acute or chronic respiratory conditions.[12]

- Tobacco is also associated with several respiratory health conditions, including COPD and lung cancer, and is also a key risk factor for high blood pressure, cardiovascular disease, stroke, and diabetes.[13] The National Aboriginal Health Organization (NAHO) reported in 2011 that smoking in First Nation communities was double the one in five rate for non-Aboriginals, and even higher in Inuit communities.[11]

- Obesity is a risk factor for a number of chronic conditions, such as diabetes, and is a factor in severity of symptoms in musculoskeletal conditions. A recent study found the prevalence of obesity in the Aboriginal individuals in the sample was significantly higher for all age groups than for the general population.[14] For example, prevalence of obesity in the Aboriginal adult was 37.8% compared to 22.6% in the non-Aboriginal adults, while the prevalence in Aboriginal youth was found to be almost twice that of the non-Aboriginal.[14] The study also reported that inactivity was one predictor for the onset of obesity in both Aboriginal and non-Aboriginal populations.

- Similarly, HIV/AIDS suppresses the immune system making individuals with HIV/AIDS susceptible to a range of infections. Its incidence in Aboriginal peoples is disproportionately high when compared to figures for non-Aboriginal peoples.[15] While the Aboriginal population represented 3.8% of the general Canadian population in 2008; they represented about 8% of all Canadians living with HIV and AIDS.

The prevalence of these conditions, and the higher incidence of chronic disease experienced in Aboriginal communities, support the importance and need for investment in health, education and social services. Through investment, communities and health professionals can work together to develop meaningful health promotion and prevention strategies, chronic disease management, and

increased access to rehabilitation services within Aboriginal communities. This population is relatively young and growing: there is an opportunity to address and limit the future onset of chronic disease, as well as to deliver appropriate care to the older generations.

Role of Physiotherapy in Health Care

This section illustrates the role of physiotherapy in health care across the lifespan, and provides an overview of its value in the management of acute and chronic conditions, as well its contribution to health promotion and disease prevention.

Within the primary health care context, physiotherapy's role is varied and evolving.[16] Physiotherapists have the education and ability to:

- diagnose and treat acute and chronic musculoskeletal conditions;
- manage patients with chronic disease;
- provide education in disease self-management;
- act as case managers;
- participate in health promotion and disease/injury prevention programs;
- provide education and consultation to other health care professionals; and
- participate in research and policy development.[17]

Early treatment by physiotherapists results in better outcomes for their patients, and results in cost-effective care and efficient use of health human resources.[17] Physiotherapy is an important component of care in the prevention and/or management of acute and chronic diseases, and in maintaining and improving mobility and function. Physiotherapy interventions, including exercise prescription, have a positive effect on function, mobility, independence, and quality of life.

I. Acute and Chronic Disease

Physiotherapists are skilled in the assessment of cardiopulmonary, musculoskeletal, and neuromuscular systems and can develop effective treatment plans for the prevention and/or management of acute and chronic diseases. Their treatment focus is on maintenance or improvement of function and the prescription of targeted exercise programs appropriate to the individual's diagnosis and needs.

Physiotherapy interventions can improve quality of life and function for individuals with:

- Cardiovascular and chronic respiratory diseases, through general exercise training, peripheral and respiratory muscle training, breathing exercises and education regarding lifestyle changes;[18-20]

- Arthritis, through exercise prescription to maintain range of motion and strength, education in joint protection and management of pain;[21]

- Diabetes,[22] through prescription of individualized exercise program that factor in any co-existing conditions, vascular or peripheral neuropathies, and education on skin and foot care to maintain mobility;[23] and

- Stroke, through interventions that focus on improving balance, strength, coordination and function.[24] It is a key component in the continuum of care in the transition from hospital to home.

Physiotherapy is effective in reducing pain and function in musculoskeletal injuries, and can aid an individual's early return to work and pre-injury activities.[25] For example, early access to physiotherapy for individuals who have sustained a back injury results in overall better outcomes - the episode is shorter, they require fewer physician visits, they have fewer days off work and on return, need fewer restricted workdays.[26, 27]

In the management of women's health issues, physiotherapy is an effective adjunct in the prevention and treatment of pelvic and back pain during pregnancy, [28] and in the conservative management of urinary incontinence.[29] Furthermore, physiotherapists can prescribe individualized exercise programs to promote safe weight loss in the postnatal period.

Obesity in children can cause high blood pressure, joint problems and contribute to early onset of cardiac disease. Children who are obese are also at risk of developing Type II diabetes as adults. In Aboriginal communities however, children as young as four years of age have been diagnosed with Type II diabetes.[30] This is why intervention is key. Physical activity can prevent or reduce its impact and promotes cardiovascular fitness, healthy bone growth and motor development/coordination. Physiotherapists can be a resource for community or school programs to ensure the program is appropriate for children assessed as obese and at risk.

Similarly, for the adult population physiotherapists prescribe individual exercise programs or offer exercise programs within the community as either a prevention program in terms of weight management or to enhance safe weight loss.[31, 32]

Regular exercise also results in improved health outcomes such as function, strength, fitness, endurance, morbidity and mortality.[33-35] Exercise prescription by physiotherapists, specifically for patients with multiple co-morbidities, has a beneficial impact on quality of life, function and future use of health care resources.[36-41]

Physiotherapists provide guidance and training in mobility strategies, strengthening, flexibility and endurance in order to maintain or improve function for individuals living with disabilities. Additionally, they are able to assess and prescribe adaptive devices and equipment and to perform home assessments that will help improve the autonomy of the individual living with a disability.

II. Health Promotion and Disease/ Injury Prevention

Health promotion initiatives include strategies to enhance implementation and access to physical activity and exercise programs for all ages. Physiotherapists can contribute to multi-disciplinary programs for all ages, supporting the components of community programs that include exercise, weight management and smoking cessation, which are effective strategies in the primary prevention and management of cardiovascular and respiratory diseases.[42,43] Including physiotherapists in pre-screening

programs for sports can be useful to develop a training program that will correct movement patterns that may contribute to injury and limit participation

Falls prevention programs improve quality of life and reduce mortality in seniors. British Columbia's provincial Health Office reported in 2009 that Aboriginals are twice as likely as non-Aboriginals to be hospitalized following a fall.[44] More seriously, falls are the leading cause of death in Aboriginal seniors.[45] Physiotherapists can include falls prevention teaching in general exercise and educations sessions. In other situations, physiotherapists may prescribe individualized exercise programs aimed at regaining or maintaining strength, flexibility, balance and endurance reduce the risk of fall and fall-related injuries.[46]

The physiotherapy profession's focus on lifestyle modifications and exercise prescription, supported by the evidence, is consistent with the promotion of health and wellness and demonstrates the contribution physiotherapists may bring to improving health outcomes for Aboriginal peoples.

In summary, physiotherapy can contribute positively to existing programs and new opportunities to maintain and improve the health of Aboriginal peoples across the life span.

Access to Health Care for Aboriginal Peoples

Canadian health policies support equal access to healthcare across the country; however disparities exist, particularly in on-reserve, northern, rural and remote communities. As 46% of Aboriginal peoples living in Canada reside in remote and rural communities, compared to only 19% of the general population, these inequities directly impact Aboriginal communities.

In addition to the limitations imposed by geographical factors, there are discrepancies in access to health care both in the funding model and in delivery to Aboriginal peoples in Canada. A complex system of health care services and programs exists across federal, provincial, territorial, municipal and Band governments, as well as Aboriginal health and social service agencies, and in some cases the private sector.[47]

Federal funding for Aboriginal health services is through the First Nations and Inuit Health Branch (FNIHB) and primarily addresses public health and prevention programs on reserves and traditional territories. FNIHB also manages the Non-Insured Health Benefits (NIHB) offered to registered First Nations (Status Indians) and Inuit even if they no longer live on reserve or in traditional territories. NIHB provides coverage for a limited number of medically necessary services, including: medical supplies, medical transportation, dental care and mobility aids.[48]

Until the January 2013 Federal Court ruling which recognized their status, [49] the Métis population, non-status First Nations and Inuit peoples no longer living in traditional territories did not have access to these programs. Changes resulting from the Federal Court ruling have not yet been implemented. Currently their health care is funded through the provincial and territory programs for the jurisdiction in which they live. The Northwest Territories boasts the only provincial/territorial health care program with funding for Métis in Canada.[50] It is similar to the NIHB available to First Nations and Inuit.

The Complexity of Care: Gaps in Rehabilitation Services for Aboriginal Peoples Living in Canada

In comparison to the non-Aboriginal population, the health care needs of Aboriginal peoples are significantly greater, in large part due to the higher prevalence of certain chronic diseases and overall poorer health status. As noted earlier, there are higher rates of diabetes, arthritis, heart disease, obesity (adulthood and childhood) and tuberculosis.[51]

However, there are significant gaps in health care service provision. Along with the discrepancies in funding models for the different populations, there are multiple funding delivery formulas that prevent consistency in access and affect efficiency in delivery. Federal funding for First Nations and Inuit peoples is delivered through multiple programs by health condition, setting and reserve status, and may be administered through varying arrangements with the provinces or through First Nations Band Councils, Tribal Councils or Regional Health Authorities. For example, there are nine funding sources for home care provided to the Inuit population, each with different requirements for access and reporting.[52]

Delivery mechanisms may also limit access to health care. One Inuit community in Nunavik borders on Cree territory, which has resulted in duplicate services (e.g. school and health boards etc.). Physiotherapists treat the population by which they are funded and allocation determines frequency of service delivery. For example, in this situation the physiotherapist funded by the First Nations (Cree) program was in the community every three months, while the physiotherapist funded by the Inuit program was present about one week per year.[53]

In northern communities with established health centers or hospitals, physiotherapists rotate between the centres and the travel clinics in outlying areas. Travel clinics range from two to five days and follow up is carried out through telehealth sessions, phone calls or subsequent visits. In some cases, patients are flown to the centre for assessment and treatment and stay one week before returning to their home.[54, 55]

The varying level and models of funding result in unique, community-specific access, and funding issues. Not all communities have the resources to ensure their healthcare needs are well represented: education and socio-economic variables are among the factors contributing to ability to utilize available health services. Health services in Aboriginal communities range from those with multidisciplinary teams offering comprehensive care, to those with a nursing station offering primary care programs with limited rehabilitation services restricted to the aged and those with a disability. In some locations there is no access to community-based rehabilitation at all.

Finally, there is a cultural gap in the quality and delivery of health care offered to Aboriginal peoples in Canada. Modern health systems have focused on the science or evidence behind care and have not seen culture or language as a component in successful health services delivery. The already limited access to health care delivered to Aboriginal peoples is compounded by a lack of cultural appropriateness in its delivery.[56,57] Physiotherapists who practice in these communities report that they recognize the limitations of 'western medicine' and look to Aboriginal leaders and elders for guidance to achieve a more comprehensive approach to care.[55,58]

Examples of specific gaps identified in rehabilitation service include: [56]

1. limited access to rehabilitation services due to lack of health human resources and lack of services
2. lack of identification of rehabilitation needs in the planning and implementation of health care services for remote areas;
3. lack of standardization of access to PT/OT school health services;
4. lack of universal funding for transportation to rehabilitation services by NIHB;
5. lack of culturally appropriate care to address needs of Aboriginal peoples living in Canada;
6. limited access to physiotherapy ranging from primary health care to rehabilitation.
7. limited Aboriginal healthcare workforce.

Barriers in Access to Rehabilitation Services

In 2008, Health Canada reported that increasing physiotherapy service delivery would improve continuing care in First Nation and Inuit communities.[59] However, there are a number of barriers to implementing that recommendation:

- there is no funding for physiotherapy outside hospitals under NIHB.[60]
- for many Aboriginal peoples, geographic access to affordable or publically-funded rehabilitation options is prohibitive;
- NIHB does not recognize physiotherapists and occupational therapists as authorized prescribers for gait, mobility and home safety equipment, unlike provincial heath care programs;[60]
- there is limited availability of heath care professionals skilled in the delivery of culturally competent and safe health care;
- there is limited information on numbers and location of Aboriginal health care professionals practicing in the communities. Although several Canadian physiotherapy programs hold seats for Aboriginal peoples, data on their practice locations is not collected after graduation; and,
- recruitment of health professionals, including physiotherapists, to work in Aboriginal communities [61,62] has had varied levels of success across the country.

Physiotherapy Initiatives

A number of innovative programs have been developed or piloted in attempts to meet the challenge of delivering quality rehabilitation to Aboriginal peoples and examples have been provided below. These initiatives employ a range of delivery methods to provide self-management support and post-discharge physiotherapy consultations to isolated communities with limited health care resources.

- In Manitoba, Community Therapy Services physiotherapists provide Fly-In service to residents living in eight First Nations Communities in Northern and Central Manitoba. Most communities in that part of the province are inaccessible by road most of the year.[63] Community-based rehabilitation programs have also been successfully implemented in the central Arctic, in

conjunction with the University of Manitoba in isolated and remote First Nation communities of northern Manitoba, and in the First Nation community of Sandy Lake, Ontario.[64]

- A needs assessment conducted in 1999 in the Kivalliq region of Nunavut identified gaps in rehabilitation services in the region, which resulted in the provision of services to Rankin Inlet and its seven surrounding communities. The physiotherapists provide education on rehabilitation services and health promotion to the community, as well as treat and manage patients with musculoskeletal, neurological, rheumatologic and cardiovascular conditions. Referrals for physiotherapy originate from Health and Social Services staff, including nurses, physicians, and home care staff; care is delivered in a number of venues, including rehabilitation offices, community health centers, patient's homes, group homes and long term care facilities.[65] Physiotherapists are seen as valuable members of the primary healthcare teams who contribute to the primary prevention and management of a broad range of conditions.

- A community-wide primary stroke prevention program was implemented in the northern Ontario community of Sandy Lake. The consulting physiotherapist worked with a community - based team to identify knowledge gaps and self-management priorities in order to develop and implement a group self-management program and exercise class. In addition, the team developed monthly radio shows on stroke signs and symptoms and prevention strategies; conducted an education, healthy snack and exercise blitz in the elementary school; and held weight-loss competitions focusing on self-management behavioural changes. This community wide, collaborative program is an example of identifying community priorities to deliver health programming in a culturally relevant manner.[66]

- The North Shore Tribal Council (NSTC) represents seven First Nation communities across the North Shore of Lake Huron. In recent years it has developed patient navigator roles specific to long term care and home care; navigators work in collaboration with physiotherapists and occupational therapists to ensure patient needs are addressed. The NSTC has also implemented a care pathway that directs newly diagnosed diabetics to physiotherapy as part of their management.

- Tele-rehabilitation - rehabilitation delivered using telemedicine technology - is becoming an effective way to provide service to rural and remote communities: it is most productive as a complement to existing services.[67] In Northwestern Ontario a self-management program for stroke survivors called "Moving on after Stroke" is delivered by telemedicine - or telerehabilitation. "Moving on after Stroke" is led by two health care professional in an urban area with half of the group's participants connected to up to two remote sites via live, synchronous videoconferencing.[68] The series of 18- two hour sessions focus on program solving, stroke prevention, behavior changes, goal setting and exercise.[68,69] Rural participants found value in participating across videoconference and appreciated access to a program that would otherwise be unavailable.

Telemedicine technology has also been used in other programs to support access to physiotherapy in remote First Nations communities. Physiotherapy service is provided to remote clients either in local community telemedicine studios or in the individual's home. After their return home, this Stroke Tele-Rehab program offers follow-up to people with stroke by an inter-disciplinary team from the regional rehabilitation hospital. The findings of the pilot project demonstrated that Tele-Rehab is a feasible and acceptable approach to community-based consultation. This does not replace 'face to face' care but offers an alternative when direct care is not available.[64, 69]

KO Telemedicine (KOTM) is a holistic First Nations telemedicine program in Northern Ontario that is community -driven and culturally appropriate. Through partnerships with KOTM, it has been possible to initiate both post-discharge and equipment consultations with in-patient therapists and in-home consultations with contracted physiotherapists.[70]

- In Saskatchewan, the Keewatin Yatthé Regional Health Authority (KYRHA) is comprised of many Métis and First Nation communities spread over a large geographical region. The “Stepping Towards Health” health promotion program was developed by physiotherapists to target prevention and management of chronic diseases, such as diabetes and cardiovascular conditions; physical activity promotion through learn to run clinics; cross-country skiing and swimming programs, as well as providing education, support and necessary equipment.[71]

In some centres there has been movement towards inclusion of Aboriginal culture and traditions into health care delivery. Staff at Stanton Territorial Hospital in Yellowknife, NWT, report bringing interpreters to physiotherapy sessions, participating in ceremonies (e.g. Cleansing, Feed the Fire) and being able to consult Leaders and Elders. Steps such as these help them expand their understanding beyond the traditional western approach and recognize that ‘there is more to health than just the physical’.[55]

Initiatives like these examples have begun to improve access to and delivery of physiotherapy to Aboriginal peoples in Canada. Nevertheless, several key initiatives are required to improve the health of Aboriginal peoples including sustainable delivery and access to health care services, sharing of improvements in the Canadian health care system, promoting health and well-being, and inter-professional collaboration.[72]

Conclusion

Aboriginal peoples in Canada have well documented health inequities and poorer health outcomes when compared to the general Canadian population. The reported higher rate of chronic disease and identified gaps in health care services supports the need for health promotion and prevention strategies, education, acute and chronic disease management, as well as increased access to rehabilitation services within Aboriginal communities. Physiotherapists have the knowledge, skills, and competence to support the delivery of quality health care in chronic disease management, health promotion, and disease and injury prevention.

Although there are physiotherapists currently working with Aboriginal patients, groups, and communities to improve both access to physiotherapy and health outcomes, these initiatives would be strengthened if the gaps and barriers identified in this paper were addressed in a consistent manner across all jurisdictions. Program planning to remedy gaps in healthcare for Aboriginal peoples will benefit from inclusion of strategies that increase access to physiotherapy services.

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