REPORT SUMMARY

ALZHEIMER'S DISEASE AND RELATED DEMENTIAS IN INDIGENOUS POPULATIONS IN CANADA: PREVALENCE AND RISK FACTORS

Alzheimer's disease and related dementias (ADRDs) are an emerging health issue in Indigenous[1] populations in Canada. The rates of ADRDs are expected to grow more rapidly among Indigenous Peoples compared to the non-Indigenous population, due to a higher prevalence of risk factors. These diseases also appear to develop at an earlier age among Indigenous Peoples.

There are various reasons for this discrepancy. Older Indigenous adults are considered to be among the most vulnerable in Canada. They often face complex health issues that can stem from socio-economic marginalization and a legacy of colonialism. They also face barriers accessing health services, including poverty, cultural and language differences, racism, and geography. These factors contribute to the risk of developing dementias, as well as create challenges with proper diagnosis and receiving timely and appropriate care.

This fact sheet provides a brief overview on the prevalence and risk factors of dementias among Indigenous Peoples in Canada. Information is derived from the National Collaborating Centre for Indigenous Health's 2018 report, *Alzheimer's Disease and Related Dementias in Indigenous populations in Canada: Prevalence and Risk Factors.*[2]

Types of dementia

Dementia is not considered a natural part of aging. While it is normal to experience some memory loss with age, dementia impairs critical thinking, judgement, problem-solving, and memory so much that it interferes with an individual's daily functioning. Five types of dementia are typically recognized:

1. Alzheimer's disease (AD) is the most common cause of dementia, accounting for 60-80% of all cases of dementia. It comes in two forms: Familial AD and sporadic AD. The first is inherited genetically, while the second is due to a combination of genes, environment, and lifestyle.
2. Vascular dementia occurs when the brain cells are deprived of oxygen, similar to a stroke, and usually comes on suddenly. It is estimated to account for about 10 per cent of all dementia.

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[1] The term 'Indigenous' is used through this document to refer to First Nations peoples, Inuit, and Métis peoples collectively, regardless of registered status or location of residence. When referring to specific Indigenous groups, the terms 'First Nations,' 'Inuit,' and 'Métis' will be used.

[2] Please refer to this report for a full reference list for the information provided in this fact sheet

3. Lewy body dementia results from abnormal deposits of a protein inside the brain's nerve cells, which interrupt the brain's messages. It is estimated to account for 5-15 per cent of all dementias. Little is known about the cause, though genetics may be a factor.
4. Frontotemporal dementia is estimated to account for 2-5% of all dementia cases. While similar to AD, symptoms tend to occur at a younger age and generally affect only the frontal and temporal lobes of the brain. Because of this, early symptoms typically affect behavior or speech rather than memory. Little is known about the risk factors for this form of dementia.

Prevalence of ADRDs among Indigenous peoples in Canada

There is little research on ADRDs related to Indigenous Peoples in Canada. The limited available evidence suggests that while rates of dementia amongst Indigenous Peoples were formerly lower than the general population, they are now similar to or higher than non-Indigenous people. In Canada, the rates of ADRDs are expected to increase 4.2 times for First Nations people and 3.3 times for Inuit between 2006 and 2031.[3]

Challenges with recognizing and diagnosing dementias in Indigenous communities

Early diagnosis of dementias is critical to ensure the safety of Elders and help maintain their quality of life. Diagnosis is also necessary to understand the true prevalence of ADRDs among Indigenous Peoples and ensure adequate supports are in place for those with dementia and their caregivers.

However, dementias often go undiagnosed due to several challenges in Indigenous communities. These can include a lack of awareness and knowledge about dementias, a lack of geriatric care in Indigenous communities, and the need for those in rural and remote areas to travel far distances for specialized health services. There's a lack of access to specialists in rural and remote areas and general health care providers can lack knowledge about dementia. Some Indigenous people may have multiple chronic conditions and other health issues that they consider a higher priority. Other factors that can delay diagnosis are the fear or mistrust of western systems or health care personnel due to previous negative interactions with the mainstream healthcare system, fear of a diagnosis, or fear or its repercussions.

Another challenge is the lack of culturally appropriate diagnostic tools. Most measures for assessing mental cognition have been developed for White, educated, and urban-dwelling individuals and as a result, contain language and cultural biases. Some work has been done to develop more culturally appropriate screening tools. For example, Lanting et al. (2011) worked with Indigenous grandmothers in Saskatchewan to modify the Pyramids and Palm Trees cognitive screening tool into the Grasshoppers and Geese test to prompt conversation and relaxation in Indigenous patients. It is important that diagnostic tools be used in culturally appropriate ways, such as observing cultural etiquette, respecting informal rules of communications, offering or translating services in Indigenous languages, and considering the inclusion of family members in assessments to help reduce stress.

[3] No similar data is available for Métis peoples.

Risk factors for ADRDs

Risk factors do not cause a disease; rather, they increase the likelihood of developing a disease. Risk factors for ADRDs can be grouped into three categories: modifiable (meaning they can be changed), non-modifiable, and potentially modifiable. (See Table 1 below)

Indigenous Peoples have more risk factors for ADRDs due to the impacts of colonialism on their physical and mental health. These include poverty, loss of traditional lifestyle, and the impacts of intergenerational trauma. Many of these risk factors are modifiable – for example, one study estimates that as many as 75% of Alzheimer disease cases amongst the Indigenous population could be caused by modifiable risk factors.[4]

Physical inactivity and low education are considered the highest risk factors for developing AD in the Indigenous population.

TABLE 1: RISK FACTORS FOR ADRDS

Modifiable risk factors	Potentially modifiable risk factors	Non-modifiable risk factors
• Physical inactivity • Diabetes • Hypertension • Obesity • Smoking • Diet	• Alcohol • Depression • Low education • Head injuries • Stress/PTSD	• Age • Family history/genetics • Gender

Conclusion

Rates of ADRDs in the Indigenous population in Canada are not well known, despite the increase in the prevalence of ADRDs worldwide. However, several features create serious concerns. ADRDs are occurring at a younger age among Indigenous Peoples and the rates are increasing faster. Higher rates of chronic disease and modifiable risk factors put Indigenous Peoples at increased risk of developing dementias. Many of these diseases and risk factors are the result of colonialism, which has created health and socio-economic disparities among Indigenous Peoples. This situation highlights the need for more attention to address these disparities. Action is critical in order to prevent a dementia "epidemic" in the population of Indigenous Peoples.

[4] Petrasek MacDonald et al. (2015). Implications of risk factors for Alzheimer's Disease in Canada's Indigenous Population. Canadian Geriatrics Journal, 18(3), 152-159.

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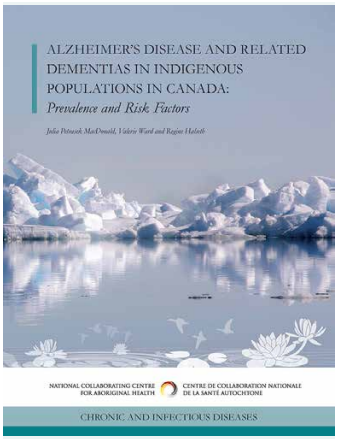

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La version française est également disponible sur le site Web **ccnsa.ca** sous le titre : *La maladie d'Alzheimer et les démences apparentées dans les populations autochtones du Canada : Prévalence et facteurs de risque.*

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