

Dementia Risk in South-Asian Women

Pregnancy Complications and Prevention Strategies

Dr. Saleema Allana, Assistant Professor, Western University

Land Acknowledgement

We/I acknowledge that Western University is located on the traditional lands of the Anishinaabek (Ah-nish-in-a-bek) and Haudenosaunee (Ho-den-no-show-nee) peoples, on lands connected with the London Township and Sombra Treaties. This land continues to be home to diverse Indigenous peoples (e.g. First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society.

Learning Objectives

1

Recognize the increased risk of dementia among South-Asian women

2

Understand the association between pregnancy complications and dementia risk

3

Identify preventive strategies to reduce risk

Dementia Overview

- Progressive cognitive decline affecting memory, thinking, and behavior
- 55 million people worldwide
 - 1/3 of all people aged 85 or older may have some form of dementia
 - 771,939 people living with dementia in Canada
 - Projected to reach nearly a million by 2030
- NOT a normal part of aging

Why Focus on South-Asian Women?

- Women are at higher risk of dementia
 - Associated with age, menopause, and pregnancy complications
- South Asians have higher rates of cardiovascular disease, diabetes, and hypertension
 - Considered risk factors for dementia
- Cultural factors: diet, stigma, health-seeking behaviors
 - South Asian diets (high on salt, fats and low on greens, fish [omega 3]) are associated with these diseases
 - Poor awareness and understanding of dementia
 - Stigma associated with dementia, which adds pressure on family caregivers and patients not to seek care
- Barriers: Limited culturally relevant care

The Intersection of Ethnicity and Gender & The Risk of Dementia

- **Women have a 50% greater risk of dementia than men**
 - associated with pregnancy complications, menopause and having longer lifespans
- Studies have shown evidence that **being South Asian confers a greater risk of dementia** for many risk factors compared to White people
 - Hypertension, obesity, diabetes and low HDL seemed particularly important in South Asians
- ***The intersection of these two identities (being a South Asian women) greatly increases the risk and incidence of dementia***

Key Pregnancy Complications Linked to Dementia

- 5 or more complete pregnancies = 1.7-fold higher risk of Alzheimer's disease
- Preeclampsia → 2.65-fold increased risk of young-onset dementia risk
 - Increases risk of CVD, which in turn increases the risk of dementia
- Gestational diabetes → ↑ risk of type 2 diabetes & dementia
 - 67% increased risk of dementia
- Preterm birth/low birth weight → linked to maternal cognitive decline

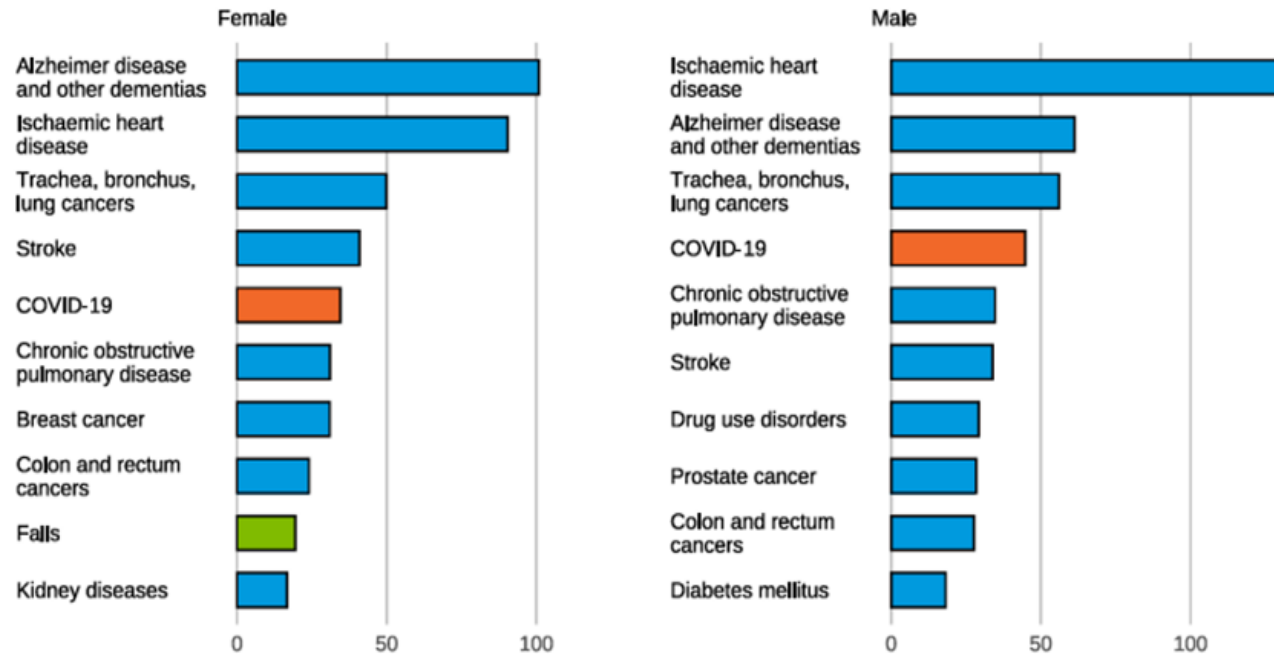
Dementia: #1 cause of mortality for women in Canada

Health at a glance | Canada

4

Communicable diseases Noncommunicable diseases Injuries Other COVID-19 pandemic-related outcomes

Top 10 detailed causes of death by sex, 2021 (deaths per 100 000 population)



<https://www.who.int/data/global-health-estimates>

<https://www.mckinsey.com/mhi/our-insights/blueprint-to-close-the-womens-health-gap-how-to-improve-lives-and-economies-for-all>

Sanders AE, et al., Vascular Dementia: StatPearls. 2025 Jan: <https://www.ncbi.nlm.nih.gov/books/NBK430817/>

Tini G, Scagliola R, Monacelli F, La Malfa G, Porto I, Brunelli C, Rosa GM. Alzheimer's Disease and Cardiovascular Disease: A Particular Association. Cardiol Res Pract. 2020 May 5;2020:2617970. doi: 10.1155/2020/2617970.

Preventive Strategies (before symptoms/diagnosis)

- Lifestyle modifications: diet, exercise
 - Exercise has been shown to negate the increased risk of dementia in women with gestational diabetes
- Control hypertension, diabetes, cholesterol
 - South Asian women at greater risk for these risk factors
- Early screening for cognitive decline
- Monitor South Asian women post-pregnancy with complications

Preventive Strategies (continued)

- Community-based health education tailored for South-Asian women
- Address stigma around dementia in South-Asian communities
- Provide resources in native languages

Summary

1

South-Asian women = higher dementia risk due to vascular, cultural, gendered factors, and risk factors

2

Pregnancy complications = early markers of dementia risk

3

Prevention: lifestyle, screening, culturally tailored interventions

References

- Carey, C., Mulcahy, E., McCarthy, F. P., Jennings, E., Kublickiene, K., Khashan, A., & Barrett, P. (2024). Hypertensive disorders of pregnancy and the risk of maternal dementia: A systematic review and meta-analysis. *American Journal of Obstetrics and Gynecology*, 231(2), 196–210. <https://doi.org/10.1016/j.ajog.2024.01.013>
- *Dementia*. (n.d.). Retrieved September 10, 2025, from <https://www.who.int/news-room/fact-sheets/detail/dementia>
- *Dementia numbers in Canada | Alzheimer Society of Canada*. (n.d.). Retrieved September 10, 2025, from <https://alzheimer.ca/en/about-dementia/what-dementia/dementia-numbers-canada>
- *For Your Patients-Alzheimer's Disease: 5 or More Pregnancies... : Neurology Today*. (n.d.). Retrieved September 10, 2025, from https://journals.lww.com/neurotodayonline/fulltext/2018/08160/for_your_patients_alzheimer_s_disease__5_or_more.6.aspx
- Hand, L. K., Taylor, M. K., Sullivan, D. K., Siengsukon, C. F., Morris, J. K., Martin, L. E., & Hull, H. R. (2025). Pregnancy as a window of opportunity for dementia prevention: A narrative review. *Nutritional Neuroscience*, 28(3), 347–359. <https://doi.org/10.1080/1028415X.2024.2371727>
- Mukadam, N., Marston, L., Lewis, G., Mathur, R., Lowther, E., Rait, G., & Livingston, G. (2023). South Asian, Black and White ethnicity and the effect of potentially modifiable risk factors for dementia: A study in English electronic health records. *PLOS ONE*, 18(10), e0289893. <https://doi.org/10.1371/journal.pone.0289893>
- Palliyaguru, D. L., Palliyaguru, N., Teixeira, C. V. L., Armstrong, N. M., Liyanage, S., Senarath, U., Arambepola, C., Jayasinghe, S., & Dalpatadu, C. (2024). *Status, determinants and risk factors of all-cause dementia in South Asia: Findings from a preliminary analysis of global health data* (p. 2024.03.06.24303854). medRxiv. <https://doi.org/10.1101/2024.03.06.24303854>
- Poole, C., Harrison, J., & Hill, J. (2021). Understanding dementia in South Asian populations, an exploration of knowledge and awareness. *British Journal of Neuroscience Nursing*, 17(4), 156–159. <https://doi.org/10.12968/bjnn.2021.17.4.156>
- *Preeclampsia: Knowing the Signs*. (n.d.). Cleveland Clinic. Retrieved September 10, 2025, from <https://my.clevelandclinic.org/health/diseases/17952-preeclampsia>
- Tong, S., & Hastie, R. (2024). Preeclampsia and the Risk of Young-Onset Dementia. *JAMA Network Open*, 7(5), e2412780. <https://doi.org/10.1001/jamanetworkopen.2024.12780>
- *What Is Dementia? Symptoms, Types, and Diagnosis*. (2022, December 8). National Institute on Aging. <https://www.nia.nih.gov/health/alzheimers-and-dementia/what-dementia-symptoms-types-and-diagnosis>
- Wolfova, K., & Miller, E. C. (2024). Impact of adverse pregnancy outcomes on brain vascular health and cognition. *Research and Practice in Thrombosis and Haemostasis*, 8(1), 102331. <https://doi.org/10.1016/j.rpth.2024.102331>
- Zhang, Y., Gao, D., Gao, Y., Li, J., Li, C., Pan, Y., Wang, Y., Zhang, J., Zheng, F., & Xie, W. (2024). Gestational diabetes mellitus is associated with greater incidence of dementia during long-term post-partum follow-up. *Journal of Internal Medicine*, 295(6), 774–784. <https://doi.org/10.1111/joim.13787>

THANK YOU