

Mind Matt[Hers]

Alzheimer's Disease in Women



Alzheimer's disease (AD) is a progressive, irreversible neurodegenerative disorder in which biological changes may begin up to 20 years before clinical symptoms appear. This long preclinical phase presents a critical window for early detection and intervention.

Prevalence and Burden of Care

Women are disproportionately affected by Alzheimer's disease (AD)—both as patients and as caregivers. In the United States, more than 12 million women are either living with or caring for someone with AD, and they make up over 60% of dementia caregivers. Emerging evidence suggests that women may experience a more rapid clinical decline than men. This imbalance creates a substantial personal, societal, and economic burden.

Women also have a longer life expectancy than men, and advancing age remains the most significant risk factor for AD. Beyond longevity, sex-specific cognitive differences also shape disease presentation. The higher burden of AD in women reflects a complex interaction of biological, vascular, and psychosocial factors:

- Postmenopausal estrogen decline may reduce neuroprotection and increase vulnerability to cognitive decline.
- Cardiovascular disease (CVD) is an underrecognized, modifiable driver of AD risk, linked through vascular and metabolic pathways. Hypertension, hyperlipidemia, diabetes, and obesity may contribute to chronic vascular injury, impaired cerebral perfusion, inflammation, and blood-brain barrier disruption, accelerating neurodegeneration and cognitive decline.
- Women have a relatively stronger baseline verbal memory that may mask early cognitive deficits, potentially delaying symptom recognition and diagnosis.
- Female caregivers face increased psychosocial challenges such as chronic stress, depression, and sleep disruption, which are associated with an increased risk of cognitive decline.

Can Earlier Diagnosis and Management Make a Difference?

Presymptomatic identification allows for timely initiation of newer disease-modifying therapies, which have demonstrated benefit when introduced early in the disease continuum. It also enables the introduction of personalized cognitive and lifestyle interventions tailored to individual risk profiles, including targeted cognitive training, multidomain lifestyle programs, and cardiovascular risk factor management. These preventive strategies have demonstrated benefits in cognitive outcomes (e.g., SPRINT MIND). Early diagnosis may give patients and families more time to plan for the future and access supportive resources. Early-stage patients are more likely to qualify for clinical trials that evaluate emerging therapies.

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Recommended Lifestyle Behaviors

Structured programs incorporating physical activity, Mediterranean or MIND-style diets, social engagement, and cardiovascular risk management have demonstrated measurable cognitive benefits in at-risk older adults. Early treatment and proactive risk reduction are key strategies associated with delayed cognitive decline and may help mitigate the impact of Alzheimer's disease--particularly for women, who bear a disproportionate share of the burden.

Resources

Alzheimer's Association. <https://www.alz.org>

AMWA Brain Health Hub bit.ly/amwabrainhealthhub

References

Alzheimer's Association. 2024 Alzheimer's disease facts and figures. *Alzheimers Dement.* 2024;20(5):3708-3821.

Carrillo MC, Snyder HM, Baumgart M, Pike KJ. U.S. POINTER: public health implications of multidomain lifestyle interventions for cognitive decline prevention. *Alzheimers Dement.* 2025;21(7):e70556.

Saadmaan G, Dalmaso MC, Ramirez A, et al. Alzheimer's disease genetic risk score and neuroimaging outcomes in the FINGER lifestyle trial. *Alzheimers Dement.* 2024;20(6):4345-4350.

Livingston G, Huntley J, Sommerlad A, et al. Dementia prevention, intervention, and care: 2020 Report update and implications for risk reduction. *Lancet Healthy Longev.* 2021;2(7):e436-e455.

Sweeney MD, Montagne A, Sagare AP, et al. Vascular dysfunction and blood-brain barrier breakdown in Alzheimer's disease. *Nat Rev Neurol.* 2022;18(3):133-150.

Ferretti MT, Cavado E, Chiesa PA, et al. Sex differences in Alzheimer disease: clinical and biomarker implications. *Alzheimers Dement.* 2021;17(5):833-850.

Sundermann EE, Panizzon MS, Chen X, et al. Sex differences in Alzheimer's disease progression and cognitive resilience. *Biol Psychiatry.* 2022;91(3):277-287.

Snyder HM, Corriveau RA, Craft S, et al. Vascular contributions to cognitive impairment and dementia: Recent advances. *Alzheimers Dement.* 2022;18(11):2339-2353.

Deckers K, van Boxtel MPJ, Schiepers OJG, et al. Target risk factors for dementia prevention: a systematic review and meta-analysis. *Alzheimers Dement.* 2021;17(12):1865-1877.

van Dyck CH, Swanson CJ, Aisen P, et al. Lecanemab in early Alzheimer's disease. *N Engl J Med.* 2023;388(1):9-21.

Mintun MA, et al. Donanemab in early Alzheimer's disease. *N Engl J Med.* 2021;384(18):1691-1704.

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