

Modifiable Risk Factors and 10-Year Dementia Incidence: Evidence from the Health and Retirement Study

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Less education, depressive symptoms, physical inactivity, and visual impairment are key modifiable targets associated with 10-year dementia incidence.

INTRODUCTION	METHODS	RESULTS	CONCLUSIONS	REFERENCES
Dementia is one of the leading causes of disability in older adults and represents a growing challenge for healthcare systems. The 2024 Lancet Commission identified 14 modifiable risk factors (less education, hypertension, obesity, hearing impairment, traumatic brain injury, excessive alcohol use, smoking, depression, physical inactivity, social isolation, air pollution, diabetes, visual impairment, cholesterol) potentially responsible for up to 45% of dementia cases; however, longitudinal studies evaluating the combined effect of these factors on dementia incidence in large population cohorts remain scarce.	Data from the Health and Retirement Study from 2008 to 2018 were used; participants aged ≥50 years were included, and those with incomplete data for exposure variables or with a diagnosis of dementia in 2008 were excluded. Dementia was identified using the Langa–Weir Classification of Cognitive Function algorithm. Associations between the 14 modifiable risk factors and the incidence of dementia over 10 years were assessed using multivariate Cox regression adjusted for age, sex, and the 14 risk factors.	A total of 16,981 participants were included. During follow-up, 2,260 participants developed dementia. Increasing age was strongly associated with higher dementia incidence, particularly among those aged 70–74 years, 75–79 years, and ≥80 years. Among modifiable factors, less education, depressive symptoms, physical inactivity, and visual impairment were associated with higher dementia incidence. Excessive alcohol use was protective, possibly reflecting survival bias rather than a protective effect.	Besides old age, modifiable factors, particularly less education, depressive symptoms, physical inactivity, and visual impairment, were independently associated with 10-year dementia incidence in the HRS.	Livingston G, Huntley J, Liu KY, Costafreda SG, Selbæk G, Alladi S, et al. Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission. The Lancet. 2024 Aug 10;404(10452):572–628. doi:10.1016/S0140-6736(24)01296-0. Langa KM, Weir DR, Kabeto M, Sonnega A. Langa-Weir Classification of Cognitive Function (1995-2020) [Internet]. Survey Research Center; 2023.
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