

Depressive Symptoms Among Older Adults Whose Partners Develop Alzheimer’s Disease or Related Dementias: Evidence from the English Longitudinal Study of Ageing



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Introduction

- Alzheimer’s disease and related dementias (ADRD) affect not only patients but also their spouses and family caregivers.
- As cognitive and functional impairments progress, spouses often assume increasing caregiving responsibilities, placing them at risk for poorer mental health, including elevated depressive symptoms.
- However, it remains unclear when depressive symptoms begin to emerge and how they evolve before and after ADRD onset.

Study Question

When do depressive symptoms emerge among spouses of individuals who develop ADRD, and are these changes distinct from other chronic conditions?

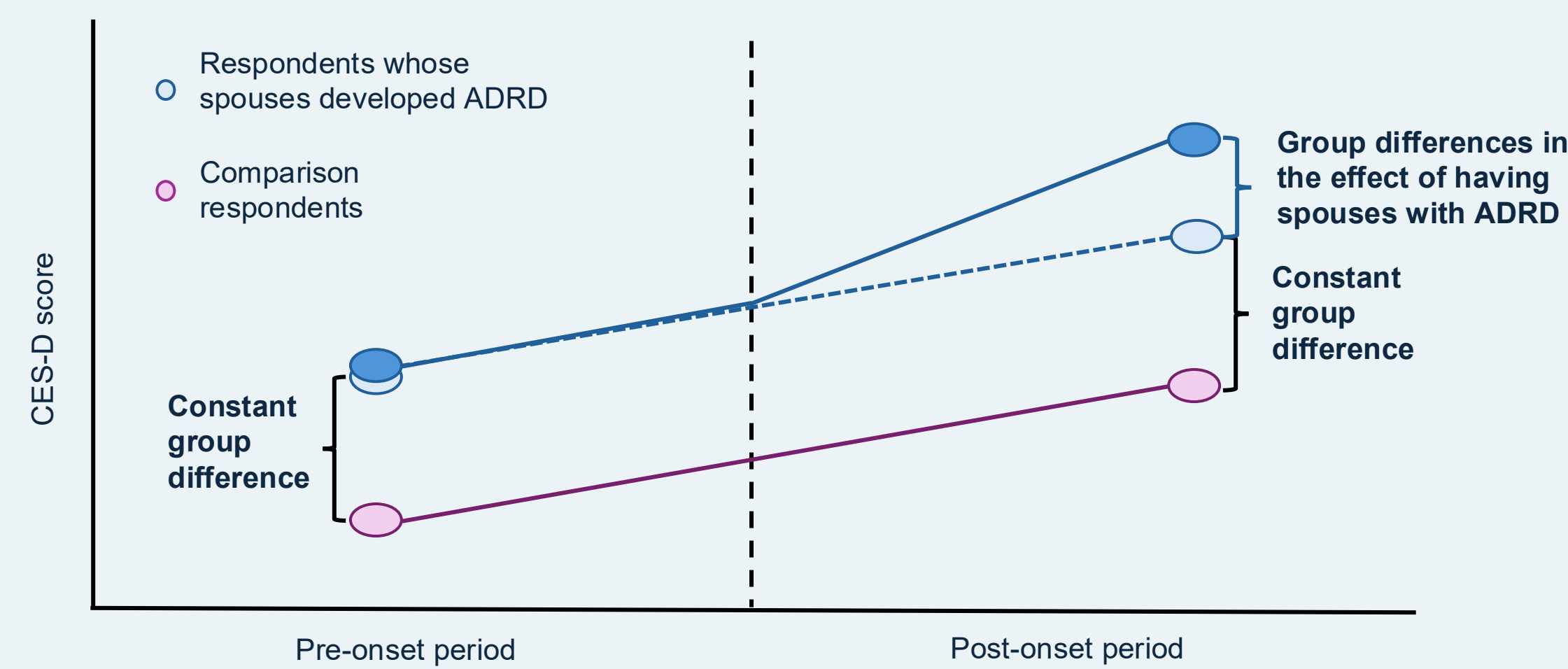
Methods

- Data Source:**
- English Longitudinal Study of Ageing (ELSA)⁺
 - wave 1 (2002/03) – 9 (2018/19)
 - National longitudinal cohort of adults aged 50+ in England
 - Respondents interviewed every two years

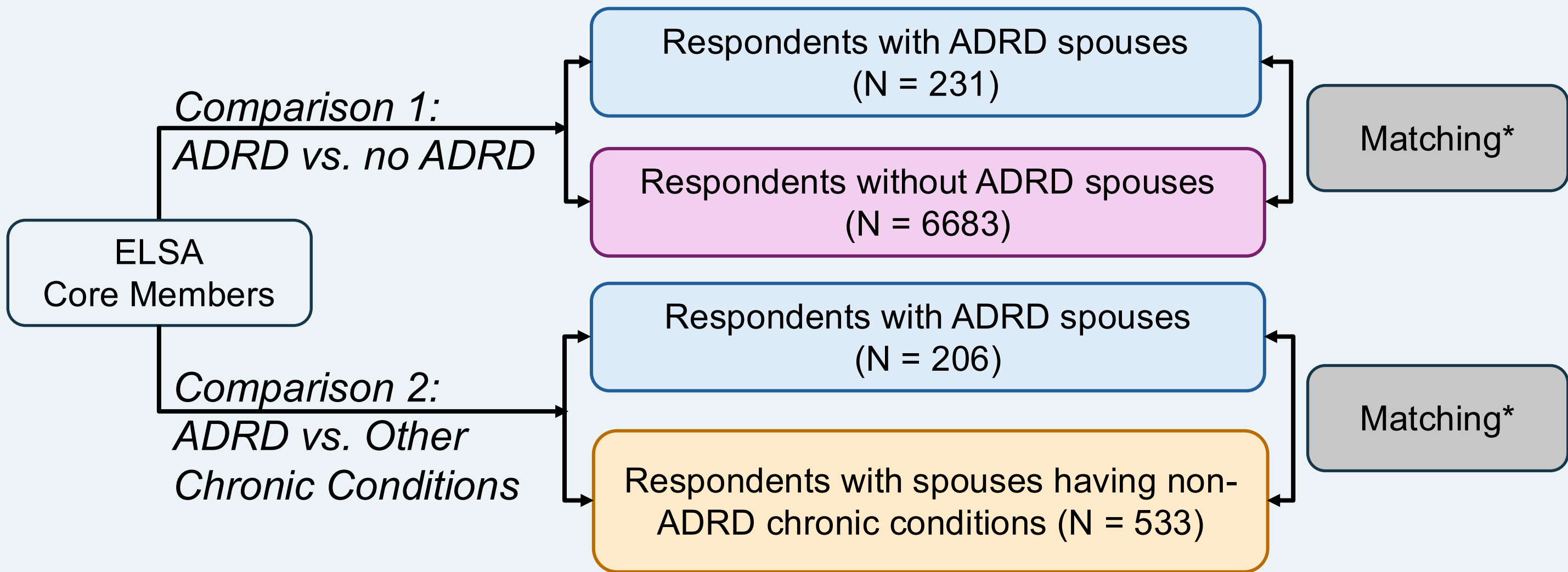
- Ascertainment of ADRD and other chronic conditions:**
- Self-reported** physician diagnoses collected at each wave
 - Non-ADRD chronic conditions include:
 - Arthritis
 - Chronic lung disease
 - Osteoporosis
 - Cancer
 - Parkinson’s disease

- Measure of outcome – Depressive symptoms:**
- The 8-item Center for Epidemiologic Studies Depression (CES-D) Scale
 - Higher scores = More depressive symptoms

Difference-in-Difference (DiD) framework



Results



*Matching variables include age group, gender, household wealth quartiles, self-rated health at baseline.

- Depressive symptoms began diverging approximately two waves before partner ADRD onset.
- Differences widened following ADRD onset and remained elevated thereafter.
- Similar differences were observed relative to partners of individuals with other chronic conditions.

Limitations

- Attrition during follow-up may have introduced selection bias.
- ADRD and chronic conditions were identified only using self-reported diagnoses.
- Documented ADRD onset may not reflect the true onset of cognitive decline.
- Residual confounding may remain despite matching and fixed-effects adjustment.

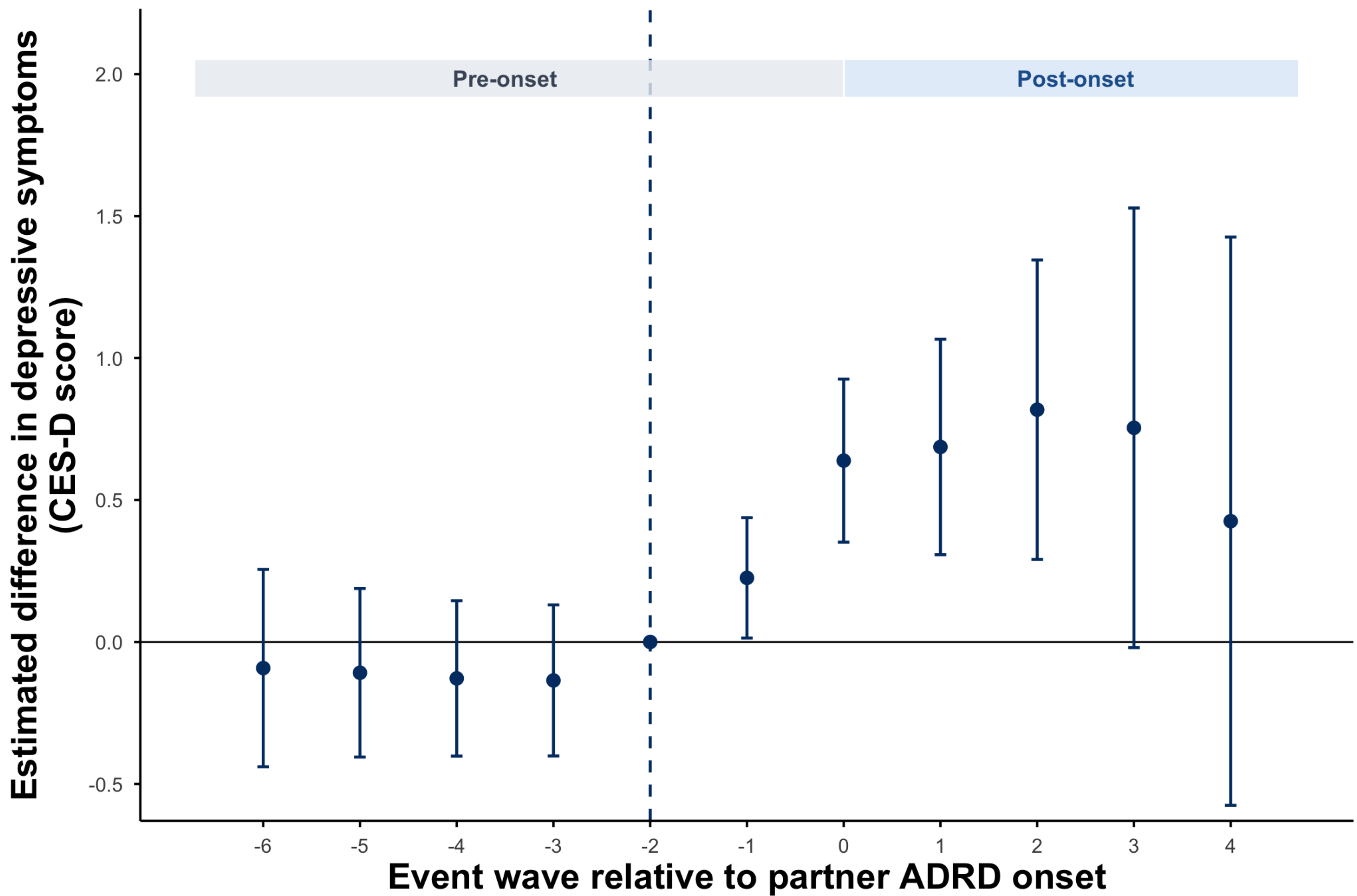
Conclusion

- There was an ADRD-related increase in depressive symptoms among partners of individuals who developed ADRD.
- Increases in depressive symptoms began prior to documented ADRD onset, suggesting anticipatory psychological stress associated with emerging cognitive decline and caregiving burden.
- Differences in depressive symptom trajectories were also found when compared with partners of individuals with other chronic conditions, suggesting a potentially unique psychological burden associated with ADRD caregiving.

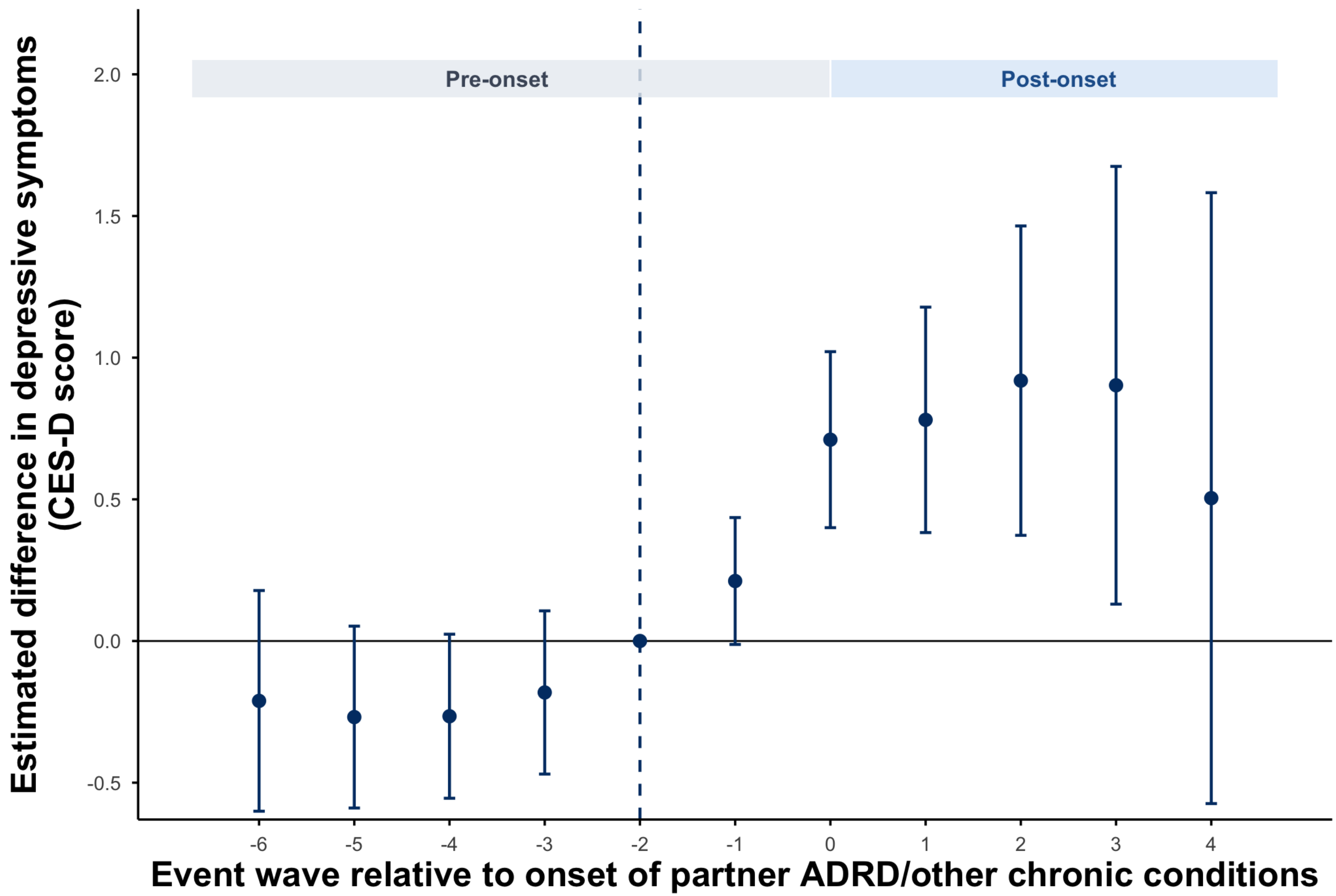
Implication

- Depressive symptoms increased prior to and following partner ADRD onset, highlighting the need for earlier mental health support for partners and caregivers.
- Persistent differences compared with other chronic conditions suggest that ADRD caregiving may impose unique psychological burdens requiring targeted caregiver interventions.

Estimated differences in depressive symptoms among individuals whose partners developed ADRD relative to those whose partners did not



Estimated differences in depressive symptoms among individuals whose partners developed ADRD relative to those whose partners developed non-ADRD chronic conditions



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⁺Acknowledgments: ELSA is developed by a team of researchers based at University College London, the NatCen Social Research, the Institute for Fiscal Studies, and the University of Manchester. ELSA is funded by the National Institute on Aging (Grant R01AG017644) and by a consortium of UK Government departments coordinated by the National Institute for Health Research (NIHR). Data are distributed via the UK Data Service.