

Perimenopausal brain fog, mood changes, and metabolic symptoms may correlate with greater complaints of later-life dementia risk markers

Cross-sectional associations of perimenopausal symptoms with clinical markers of dementia risk

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Background

- Menopause may represent a critical biological transition contributing to sex differences in dementia risk¹.
- Vasomotor symptoms (e.g., hot flashes, night sweats) during perimenopause have been associated with biological and cognitive markers of dementia risk^{2,3}. **Whether other perimenopausal symptoms associate with dementia risk is unclear.**
- Alongside cognitive changes, later-life emergent and persistent changes in behaviour⁴ and everyday functioning⁵ may associate with incident dementia and progression.
- Menopause hormone therapy (MHT), used to manage menopausal symptoms, may also influence dementia risk and resilience⁶.
- Whether perimenopausal symptoms are associated with later-life cognition, behaviour, and function remains unclear.**

Study Question

Do individual perimenopausal symptoms associate with later-life cognitive, behavioural, and functional markers of dementia risk in postmenopausal females?

Measures & Analyses

Perimenopausal symptoms (exposures):

1. Vasomotor symptoms
2. Brain fog
3. Mood changes
4. Metabolic symptoms
5. Sleep disturbance
6. Vaginal dryness
7. Other symptoms

Measures & Analyses

Later-life outcomes:

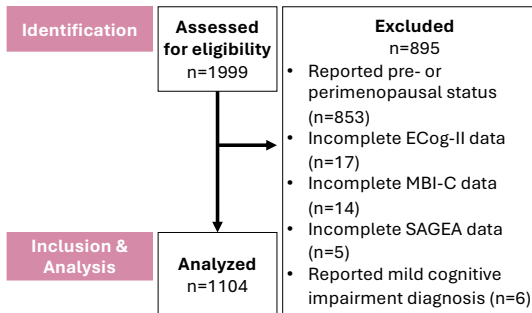
1. **Everyday Cognition scale (ECog-II)**⁷: higher scores = greater subjective cognitive symptoms
2. **Mild Behavioral Impairment Checklist (MBI-C)**⁸: higher scores = greater subjective behavioural symptoms
3. **Standard Assessment of Everyday Activities scale (SAGEA)**⁹: higher scores = greater subjective functional impairment symptoms

Analyses:

3 negative binomial regression models examined associations between perimenopausal symptoms and later-life cognition, behaviour, and function

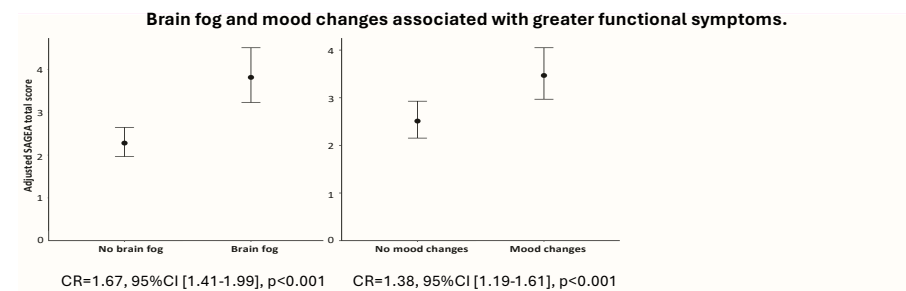
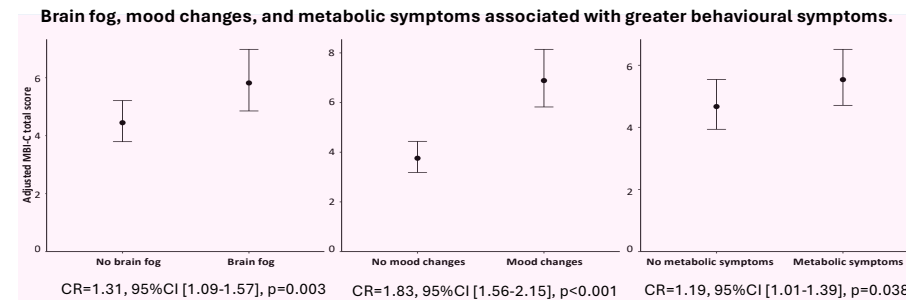
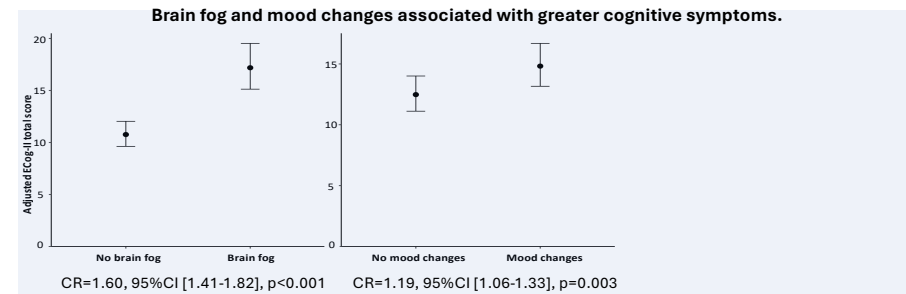
Flowchart:

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Age M(SD)	Education M(SD)	MHT use n(%)	Ethnocultural status (European) n(%)
64.0(7.4)	15.8(4.5)	379(34.3)	940(85.1)

Result



Vaginal dryness associated with fewer behavioural symptoms (CR=0.84, 95%CI [0.72-0.97], p=0.019)

Conclusions

- Brain fog, mood changes, and metabolic symptoms during perimenopause were associated with greater later-life cognitive, behavioural, and functional symptoms.
- Findings suggest that certain perimenopausal symptoms may help identify menopause phenotypes associated with greater vulnerability to dementia risk.

