

Modifiable Factors In The Effect Of Menopause Age On Dementia Outcomes: A UK Biobank Study

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BACKGROUND

- o Earlier menopause is associated with higher dementia risk (1).
- o Late menopause appears protective (1,2).
- o Dementia has been associated with lifestyle, psychosocial and clinical factors (3).

AIM

To examine whether modifiable psychosocial and lifestyle factors influence dementia risk across menopause age groups.

METHODS

- UK Biobank postmenopausal participants (n =166,736).
- Cox proportional hazards models across four menopause age groups: premature (<40), early (40–44), average (45–54), late (55+).
- Progressive adjustment for demographic, reproductive, genetic, psychosocial, lifestyle and clinical factors.
- Interaction analyses assessed HRT, smoking, diet, sleep, hearing loss, loneliness, isolation, exercise, alcohol, supplements and mental health variables compared to the reference average menopause group.

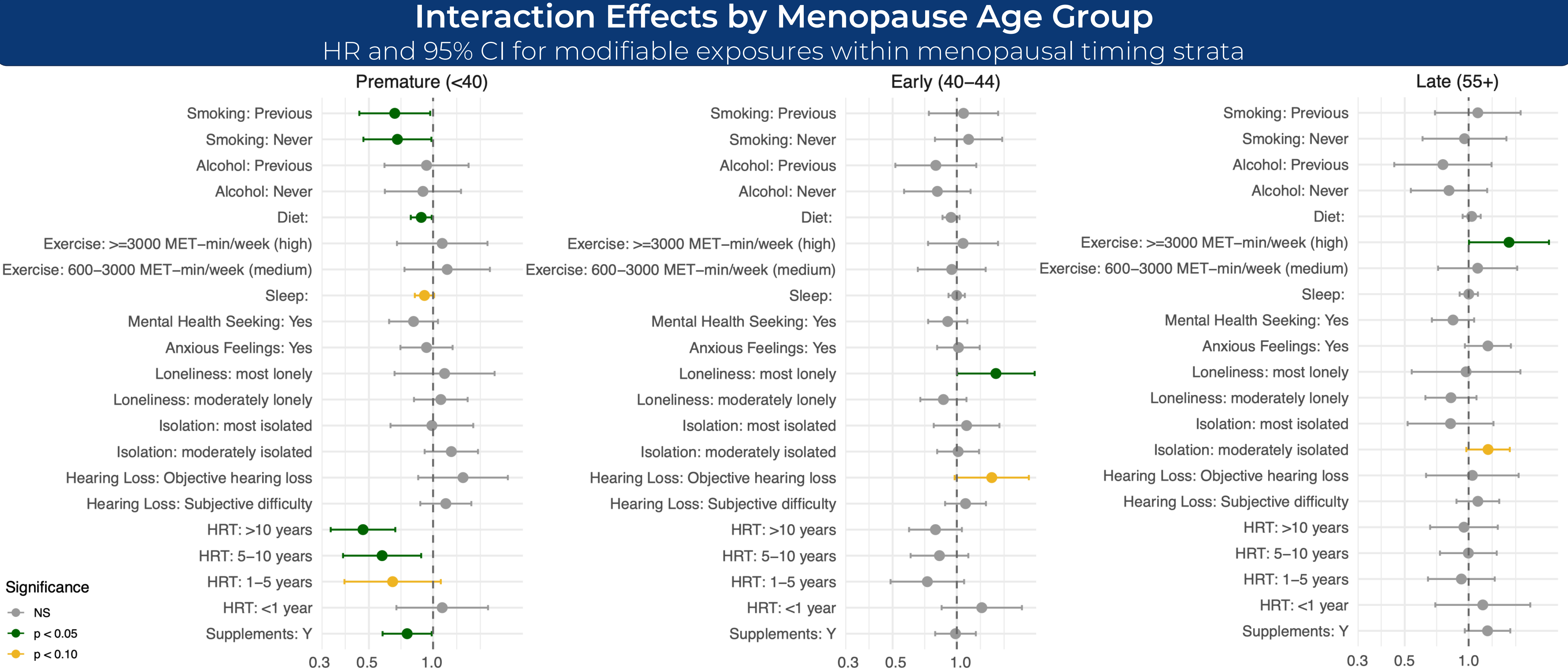


Figure 1. Interaction effects of modifiable exposures on all-cause dementia hazard ratios within menopause timing strata. Models adjusted for demographic, reproductive, genetic, psychosocial, lifestyle and clinical factors. HRT= Hormone Replacement Therapy; HR = hazard ratio; CI = confidence interval; MET = metabolic equivalent

Progressive Cox Models

Dementia risk associated with premature menopause attenuated by 68% after adjustment.

Isolation, hearing loss, anxiousness, mental health seeking, diabetes, APOE4 and deprivation increased dementia risk.

Early menopause showed only a slight increase in dementia risk that attenuated after adjustment.

Never smoking, higher education, adequate sleep, oral contraceptive use and 5+ years of HRT were protective for dementia risk.

Late menopause remained protective for dementia risk after adjustment.

CONCLUSION

- o Targeting hearing loss, loneliness, smoking, diet, sleep and HRT use could reduce dementia risk associated with earlier menopause.
- o Social and behavioural factors may also influence the protective association of late menopause.

INTERPETATION

- o Dementia risk associated with earlier menopause before the age of 45 may be modifiable.
- o Lifestyle and psychosocial interventions could reduce dementia risk in women with premature and early menopause.

PREMATURE MENOPAUSE

Adequate sleep, abstaining from smoking, healthy diet, dietary supplements and 5+ years of HRT were protective.

EARLY MENOPAUSE

Objective hearing loss and loneliness increased dementia risk.

LATE MENOPAUSE

Moderate isolation and heavy exercise levels increased dementia risk.

Scan for Emails, References and Supplementary Data