Subjective memory deterioration in elderly people is associated with future dementia


Does subjective memory deterioration predict future dementia in elderly people with normal, non-demented, cognitive function?

**METHODS**

**Design:** Prospective cohort study.

**Follow up period:** 5.2 years (mean follow up).

**Setting:** One health maintenance organisation, Seattle, USA; 1994–2002.

**People:** 1883 community-dwelling elderly adults (65 years and over) without dementia and with normal cognitive function (score >90 out of 100 on the Cognitive Ability Screening Instrument, CASI). Exclusions: already enrolled in a clinical study or lacking baseline data on subjective memory change. Refusal to participate was more common in people >84 years old, African-Americans and people from minority ethnic groups.

**Risk factors:** Participants were screened every 2 years and people with a CASI score <86 underwent clinical examination for dementia. People diagnosed with DSM-IV dementia were reassessed yearly to confirm the diagnosis. The Subjective Memory Rating Scale (SMRS, score range 5–25, higher score means greater deterioration) was used to measure subjective memory change. It assesses whether participants’ ability to remember faces, names and appointments and judge time had changed in the past 10–20 years (at baseline) or since their last assessment (at follow up). Subjective memory change was defined as an SMRS score of 20 and over. Cox regression was carried out to calculate hazard ratios and 95% confidence intervals.

**Outcomes:** Dementia (National Institute of Neurological and Communicative Disease and Stroke/Alzheimer’s Disease and Related Disorder classification for Alzheimer’s disease; DSM-IV for other dementia types).

**MAIN RESULTS**

At 5 years, 126 participants (6.7%) developed dementia. People with subjective memory deterioration (SMD) at baseline were more likely to develop dementia than those without SMD at baseline (absolute risk of dementia: 15% in people with SMD baseline v 6% in people without SMD, significance not stated). People reporting subjective memory deterioration at age 70 or 75 were significantly more likely to develop dementia than those not reporting subjective memory deterioration at these ages (age 70; HR 6, 95% CI 2.1 to 18; age 75: HR 3, 95% CI 1.6 to 6.2). However, there was no significant difference in the risk of dementia between people with and without subjective memory deterioration at age 80 (HR 2, 95% CI 0.9 to 3.1).

**CONCLUSIONS**

Subjective memory deterioration among younger elderly people (age 70 or 75) with normal cognitive function is associated with an increased risk of developing dementia. Measuring subjective memory may help identify people at high risk of developing dementia. However, there was no significant difference in the risk of dementia between people with and without subjective memory deterioration at age 80 (HR 2, 95% CI 0.9 to 3.1).

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**NOTES**

Authors note that the SMRS has limited clinical use in its present form and that better instruments for measuring subjective memory are needed.
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