

A Cross-Sectional Examination of Napping, Sleep Apnea and Cognitive Decline in the US POINTER Trial

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Aim: To evaluate associations between napping and cognitive function by sleep apnea status

Methods:

- Secondary analysis of baseline sleep assessments conducted using home apnea-screening device and wrist actigraphy w/ concurrent sleep diaries in 686 older adult participants in US POINTER-zzz Sleep Ancillary Study
- Naps: Periods of sleep consisting of at least 30 continuous minutes outside of primary sleep period, which is longest duration of sleep
- Linear regression analysis: testing association of average minutes of napping per day for up to six days and six nights on outcomes: global cognitive function and domains: executive function, episodic memory, and processing speed

Results:

- Greater duration of napping associated w/ slower processing speed in total sample and in smaller sample w/ sleep apnea
- Men wo/ sleep apnea: protective relationship w/ episodic memory
- Women wo/ sleep apnea: slower processing speed
- Participants not in under-represented group (URG) wo/ sleep apnea: protective of episodic memory but not processing speed
- Participants in URG w/ sleep apnea: poor executive function

Associations between daytime napping and cognition

Outcome	Change in Cognition for 1 SD Increase in Napping (95% CI)	p-value
Global Composite	-0.0089 (-0.073, 0.0551)	0.785
Episodic Memory Domain	0.0555 (-0.0118, 0.1229)	0.106
Executive Function Domain	0.0206 (-0.0498, 0.091)	0.566
Processing Speed Domain	-0.0973 (-0.1664, -0.0282)	0.006

Funding:

US POINTER-zzz Sleep Ancillary Study: National Institute on Aging: R01 AG064440
US POINTER Main Trial: Alzheimer's Association 19-611541