Aging Clin Exp Res (2017) 29:817
DOI 10.1007/s40520-016-0631-5

LETTER TO THE EDITOR

Sleep duration and cognitive impairment in older adults

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Received: 17 August 2016 / Accepted: 15 September 2016 / Published online: 28 September 2016

To the Editor

Malek-Ahmadi et al. [1] evaluated the association between self-reported sleep duration and cognitive impairment in 189 cognitively normal older adults. Adjusted odds ratio (95 % confidence interval) of short sleep duration (≤7 h) against long sleep duration (≥ 9h) for cognitive impairment was 0.86 (0.76–0.98). The authors concluded that old subjects with long sleep duration had a risk of decreased cognitive performance. I have two comments on their study.

First, Chen et al. [2] reported the association between self-reported sleep duration and cognitive decline or mild cognitive impairment (MCI)/dementia in older women. Although they concluded that both short and long sleep duration had a risk for cognitive decline and MCI/dementia, adjusted hazard ratio of short sleep duration against normal sleep duration for MCI/dementia only showed statistical significance. Although Chen et al. presented some biological mechanisms on the association between short sleep duration and MCI/dementia in older women, further study is needed to confirm the association.

Second, the authors used self-reported sleep duration, and sleep evaluation methods should be handled with caution for the risk assessment of cognitive decline or MCI/dementia [3, 4]. Deterioration of sleep was predominantly progressed by psychological distress, and causal association between sleep loss and subsequent cognitive decline or MCI/dementia would be mediated not only by depression but also anxiety [5]. In addition, classification of self-reported short (long) sleep duration needs validation study. Furthermore, Malek-Ahmadi et al. handled cognitively normal older adults. Taken together, the association between sleep duration and cognitive impairment should be evaluated by a cohort or intervention study to confirm the causal association .

Compliance with ethical standards

Conflict of interest None.

Statement of human and animal rights This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent For this type of study formal consent is not required.

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