

LETTER TO THE EDITOR

doi:10.1017/S1041610220003671

Hearing complaint and incident cognitive impairment

Chen and Lu (2020) have elegantly shown that self-rated hearing on a single question was a powerful predictor of incident dementia in 6039 elderly Chinese. Denial of hearing loss is common, so I suspect that many participants who rated their hearing as normal were in fact hearing impaired. The pathway from relying on hearing complaints to measurement hearing impairment is easy and not expensive using a portable pure tone audiometer. It takes me only 90 seconds to measure hearing acuity in both ears with the Siemen's HearCheck Screener, which in September 2020 was sold for 270 Euros. Disposable items such as ear pieces and batteries are inexpensive. The only patients who cannot be tested are those with severe inattention and who do not follow the command to speak every time they hear a beep.

We explored hearing by pure tone audiometry in 124 elderly Australians in a memory clinic (Regal and Lange, 2020). The 32% with severely impaired hearing had a much higher prevalence of dementia (72% vs. 34%) and of low IADL function (IADL \leq 6/22; 44% vs. 23%) than those who did not have severely impaired hearing. Hearing acuity was significantly correlated with over 90% of the 21 cognitive tests employed even after Bonferroni correction for multiple comparisons. In conclusion,


hearing acuity functions as if it was a cognitive test. We recommend pure tone audiometry for all elderly populations. When hearing loss is identified, portable amplifiers can be used for subsequent cognitive tests. Such amplifiers are inexpensive to purchase and run.

Conflict of interest

The authors report no conflicts of interest.

References

- Chen, L. and Lu, B.** (2020). Cognitive reserve regulates the association between hearing difficulties and incident cognitive impairment: evidence from a longitudinal study in China. *International Psychogeriatrics*, 32, 635-643.
- Regal, P. and Lange, P.** (2020). Is hearing impairment by audiometry as much as cognitive core as cognitive domain batteries? *European Geriatric Medicine*, <https://doi.org/10.1007/s41999-020-00341-y>

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