

Peer Review

Review of: "Cognitive Screening Tools for Dementia Detection in Primary Healthcare Centers in India: A Scoping Review"

Kasper Jørgensen¹

1. Danish Dementia Research Centre, Capital Region of Denmark, Hillerød, Denmark

This review addresses an important subject matter. I believe it will be helpful for professionals working with the detection of dementia in PHC settings in India and elsewhere.

One of the aims of this review is to highlight the need for culturally and linguistically appropriate cognitive screening tools in PHC settings. In order to achieve this, you may want to expand your search strategy to include cognitive screening tools used in both PHC and secondary health care settings (SHC) in India, as tools validated in SHC may also be relevant in PHC.

For instance, the Picture-Based Memory Impairment Screen (PMIS), which was validated in outpatient clinics in Kerala(1), was reported to have low cultural bias. PMIS has been incorporated into the Brief Assessment of Impaired Cognition (BASIC) instrument, which is also characterized by low cultural bias(2).

Generally speaking, it may be relevant to your review to include cognitive screening tools with favorable cross-cultural properties regardless of whether or not they have yet been used in PHC settings in India.

Table 2 (pages 6–11)

I am not sure that all the included items represent cognitive screening tools. The ICMR-NCB, RBANS, and perhaps ADAS-Cog, are better defined as neuropsychological test batteries.

TMT A is a specific neuropsychological test (of mental processing speed) and not really a cognitive screening tool. Also, the DLB diagnostic criteria are not a cognitive screening tool.

In the column “Available in Indian Languages,” “No” is reported for many tools. How were the tools used in PHC settings in India if they were not available in an Indian language? Was assessment done by means of an interpreter?

The CDT is not quite a specific tool, as numerous versions exist with major differences in administration, scoring, and interpretation. Caution is needed when using the CDT in a multicultural context(3).

3. Effectiveness in Cognitive Impairment Detection (page 12)

The ACE and ACE-III are also effective in identifying MCI.

5.6. Cultural Appropriateness

“Many currently used tools do not account for the diverse cultural and linguistic backgrounds of the Indian population.” Actually, this may be true for all the tools, except the Hindi MMSE and the ICMR-NBC. “The MoCA, Demtec, MMSE, and CAMCOG were originally developed outside India...” Again, this is true for almost all tools.

Please consider elaborating further on the concept of cross-cultural cognitive screening or assessment – see, for instance, the position statement of the European Consortium on Cross-Cultural Neuropsychology (ECCroN):

<https://www.tandfonline.com/doi/full/10.1080/13854046.2021.1981456#abstract>

Minor comments:

On page 8, only an acronym, ACE-III, is presented, but not the full name of the test.

References:

1. Verghese J, Noone ML, Johnson B, Ambrose AF, Wang C, Buschke H, et al. Picture-based memory impairment screen for dementia. *J Am Geriatr Soc.* 2012;60(11):2116–20.
2. Jorgensen K, Nielsen TR, Nielsen A, Waldorff FB, Høgh P, Jakobsen S, et al. Brief Assessment of Impaired Cognition (BASIC)-Validation of a new dementia case-finding instrument integrating cognitive assessment with patient and informant report. *Int J Geriatr Psychiatry.* 2019;34(11):1724–33.

3. Maestri G, Nicotra A, Pomati S, Canevelli M, Pantoni L, Cova I. Cultural influence on clock drawing test: A systematic review. *J Int Neuropsychol Soc.* 2023;29(7):704–14.

Declarations

Potential competing interests: No potential competing interests to declare.