

Managing people with cognitive decline: validation of a checklist

Key messages

- Globally, demands on the long-term care needs (LTCN) among older persons related to cognitive decline are growing rapidly, presenting a challenge for providing sustainable, equitable and universal health and social care.
- The *Kihon* Checklist (KCL) is a simple, 26-question self-administered questionnaire to identify people with care needs, with three specific questions targeting cognitive functions.
- The study found that this simple questionnaire can quickly and reliably identify people who may need to be assessed and certified for LTCN due to cognitive decline in Japan.
- This may be the first large-scale prospective study to investigate how a simple checklist could provide information about the risk of LTCN.
- These results can be extrapolated to the general population, with implications for future policies and programmes in Japan and other countries.

Background

Dementia is caused by a variety of diseases that affect the brain, influencing cognitive functions and the ability to perform daily tasks. WHO estimates that more than 55 million people are living with dementia, expected to rise to 78 million by 2030.¹ Disability associated with dementia is a key driver of costs related to the condition, estimated at US\$ 1.3 trillion in 2019.¹

Dementia is one of the leading factors influencing LTCN certification required to receive LTC benefits in Japan where the prevalence rate of dementia is projected to reach 3.8% by 2037.² While prior studies recommended focusing on pre-clinical dementia and targeting potential high-risk individuals who might benefit from LTC,³ this approach has had limited success partly due to the lack of efficient screening and evaluation methods for detecting high-risk individuals.

Goal

This study investigated how the *Kihon* Checklist (KCL), specifically the cognitive portion of the tool (Questions 18-20), could predict the risk of long-term care needs among participants.

Cognitive questions:

- Do people around you say that you keep repeating the same questions, or make similar comments about your forgetfulness?
- Can you look up phone numbers to make phone calls by yourself?
- Do you find yourself not knowing today's date?

Methods

In this prospective cohort study (2015 – 2019), the Kobe City Municipal Office distributed the KCL, a self-reported questionnaire, to 77, 879 citizens 70 years and older who had not been certified for LTCN and were of similar age and gender distribution to citizens in Kobe City and Japan.

Findings

By November 2019, 50,154 responses had been received, a response rate of 64.4%. The incidence rate of those certified for LTCN who returned the KCL was calculated annually and totalled 6.7% at the end of four years. The proportion of individuals certified for LTCN based on the responses to questions 18 – 20 rose from 9.4% at baseline to 30.2% by the end of the study. Nearly 28% of people certified for LTCN were assessed to have cognitive decline based on their responses to 3 questions.

Conclusion

This simple instrument can be used to identify citizens at a higher risk for LTCN certification due to cognitive decline. This may be relevant to other countries seeking instruments for early intervention.

Limitations

Individuals who did not return the checklist over the four years were at a higher risk to be certified for LTCN (10.6%) than the whole sample (6.7%). This suggests the need for further investigation in Japan. Self-administered mail questionnaires may not be applicable in settings outside of Japan. The specific questions require validation for applications to other settings to accurately measure instrumental activities in daily living.

For more details about the research, visit the project page on the WHO Kobe Centre's website:

https://extranet.who.int/kobe_centre/en/project-details/kobe-project-exploration-newer-strategies-reduce-social-burden-dementia

References

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