Prevalence of dementia in people with intellectual

disabilities: cross-sectional study

Running title: Dementia and MCI in intellectual disabilities

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Acknowledgements

We thank the participants and staffs of the social welfare corporation Asahigawa Medical Welfare Center, "Momozono Gakuen" and "Kotoku Gakuen". And, we sincerely thank Ms. Yifei Tang for her skillful assistance.

Funding

This work was partly supported by JSPS KAKENHI (Grant Number

18K07560). We also thank the Zikei Institute of Psychiatry for their research grant.

ABSTRACT

Background: There are only a few studies of the prevalence of dementia in people with intellectual disability (ID) without Down syndrome (DS), and there is a large difference in the prevalences between reported studies. Moreover, the prevalence of mild cognitive impairment (MCI) in ID has not been reported. We aimed to evaluate the prevalence of dementia in adults of all ages and the prevalence of MCI in people with ID. Further, we tried to clarify the differences depending on the various diagnostic criteria.

Methods: The survey included 493 adults with intellectual disability at 28 facilities in Japan. The caregivers answered a questionnaire, and physicians directly examined the participants who were suspected of cognitive decline. Dementia and MCI were diagnosed according to ICD-10, DC-LD, and DSM-5 criteria.

Results: The prevalence of dementia was 0.8% for the 45–54 year old group, 3.5% for the 55–64 year old group, and 13.9% for the 65–74 year old group in people with ID wihout DS. The prevalence of MCI was 3.1% for patients 45–54, 3.5% for patients 55–64, and 2.8% for patients 65–74 with ID wihout DS.

DSM-5 was the most inclusive in diagnosing dementia and MCI in people with ID.

Conclusions: People with ID without DS may develop dementia and MCI at an earlier age and higher rate than the general population. Among the diagnostic criteria, DSM-5 was the most useful for diagnosing their cognitive impairment.

KEYWORDS

dementia, intellectual disability, mental retardation, mild cognitive impairment (MCI), prevalence of dementia

Key points

- There are only a few studies of the prevalence of dementia and mild cognitive impairment (MCI) in people with intellectual disability (ID) without Down syndrome (DS).
- This study investigated 493 adults with ID. The physicians directly examined the participants suspected of cognitive decline and diagnosed them according to various diagnostic criteria (ICD-10, DC-LD, and

DSM-5).

• The prevalence of dementia in people with ID without DS may be higher than in the general population. DSM-5 was more inclusive in diagnosing dementia and MCI in people with ID than ICD-10 and DC-LD.