

SAPPORO CITY UNIVERSITY

Relationship between urinary incontinence and level of certification of long-term care needs of community-dwelling latter-stage elderly women in Northern Japan

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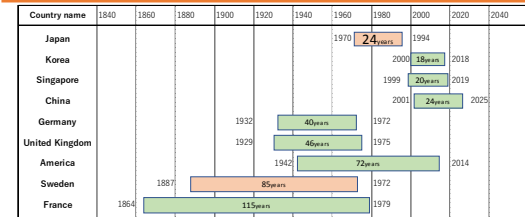
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Introduction

Background

In Japan, the percentage of the elderly population, which is a super-aging society, is 27.7%. The mean life expectancy of women and men is 87.14 and 80.98 years, respectively, and is expected to reach 91.35 and 84.95 years, respectively in 2065 [1].

Table.1 Period required for the population aging ratio increase from 7% to 14% in major countries.
(This arranged table is based on the following sources, and translated from Japanese to English.)



Source: 2018 Annual Report on an Aging Society (Full Version) from the Cabinet Office, Chapter 1 International Trends on Aging [1]

Document: National Institute of Population and Social Security Research "Demographic Statistics" (2018) (Note) Based on UN, The Aging of Population and Its Economic and Social Implications (Population Studies, No.26, 1956) before 1950, Demographic Yearbook, and UN, World Population Prospects: The 2017 Revision (moderate-range projection) from 1950 onward. However, for Japan, it is based on the "National Census" and "Population Projections" by the Statistics Bureau, Ministry of Internal Affairs and Communications. Before 1950, it was the interpolation of estimated data based on known annual data.

In such a super-aging society as Japan, the increase in healthy life expectancy has become an urgent issue.

Table.2 Japanese legal system related to elderly people

	Legal systems in Japan	Period	Purpose
Source[4]	Long-term Care Insurance Law	2000-	prevent decreased self-support and conditions that require long-term care of the elderly establish home-care of the elderly as a mechanism of mutual support by society as a whole, and maintain a community-based symbiotic society
Source[2]	Healthy Japan 21 is being promoted based on the Health Promotion Law	The first (2000-2012) Second (2013-2022)	Reduction of middle-aged death, extension of healthy lifespan and improvement of quality of life
Source[3]	integrated community support and service (integrated community care system)	-2025	Enables elderly individuals to continue their accustomed way of living in the community up to their final stages of life are being promoted

Source: References[2][3][4]

Purpose

In this study, we aimed to investigate the relationship between urinary incontinence (UI) and a level of certification of long-term care needs in community-dwelling old-elderly women in Northern Japan.

Methods

Subjects	400 women aged ≥ 75 years and < 90 years that were randomly selected from the Basic Resident Register of City A in Northern Japan.
Method	An anonymized self-administered questionnaire survey was performed. Four hundred individuals equvalates to 0.003% of the people of this age group in this region.
Definition	The existence of UI was defined as frequent UI when it occurred at least once a week according to the International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF). The Japanese version of the ICIQ-SF was validated by Gotoh et al [5].
Questionnaire	This questionnaire consisted of 19 items in the 2018 survey , such as characteristics , health conditions, past and present illness, family history, and the ICIQ-SF.
Analysis	The Mann-Whitney U test was used for comparison between groups with and without UI, and a level of certification of long-term care needs. IBM SPSS Statistics25 was used for analysis, and statistical significance was set at 5% level.
Ethical considerations	This study was approved by the ethical committee of our own University.
Research fund	This work was supported by JSPS KAKENHI Grant Number JP17K09205.

Results

under certification of long-term care needs	21.0% (84 individuals)
The mean age	81.8 \pm 3.9 years
the rate of self-reported prevalence of urinary incontinence (UI)	54.8% (46 individuals)
The mean age of the subjects with urinary incontinence	No significant ($p=0.144$, Mann-Whitney U-test) Yes: 82.3 \pm 4.0 years None: 81.0 \pm 3.7 years

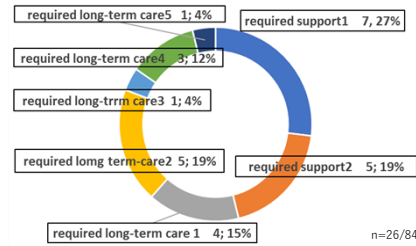


Fig.1 Required support and long-term care

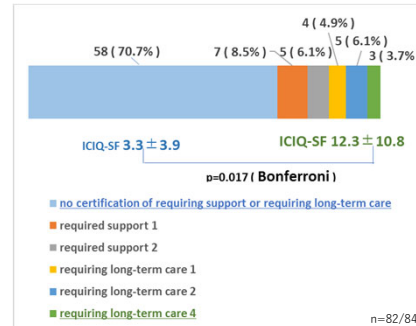


Fig. 2 Relationship between the level of certification of long-term care needs and ICIQ-SF

There was a significant difference in the level of certification of long-term care needs and ICIQ-SF, it became evident that urinary incontinence is a symptom that has a notable effect on QOL. However, a high level of certification of long-term care needs does not necessarily mean that ICIQ-SF is high. The state corresponding to the physical condition of each individual subject needs to be identified.

Conclusions

1. The ratio of women who complained of urinary incontinence based on the self-reporting of latter-stage elderly women living in Northern Japan, which is a super-aging society, was 54.8%.

2. A significant difference was observed between the level of certification of long-term care needs and ICIQ-SF.

The limitations of this study include its low number of respondents and the possibility that there may have been individuals with serious bodily conditions, which was not considered in the study and may have affected the results.

References

- [1] The Cabinet Office. 2018 version of the Annual Report on the Aging Society. <https://www8.cao.go.jp/kourei/whitepaper/w-2018/html/zenbun/index.html>. Accessed on 2019.2.26.
- [2] Ministry of Health, Labor and Welfare. Healthy Japan 21 (Second). <https://www.mhlw.go.jp/english/>. Accessed on 2019.2.26.
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- [5] Gotoh M, Donovan J, Corcos J, et al. Scored ICIQ-SF (International consultation on Incontinence Questionnaire-Short-Form) for symptoms and QOL assessment in patients with urinary incontinence. J Neurogenic Bladder Soc 2003; 14: 248-55 (Japanese text with English abstract).