

INVESTIGATION OF URINARY INCONTINENCE IN MIDDLE-AGED WOMEN LIVING IN THE COLD DISTRICTS OF JAPAN

Hypothesis / aims of study

The aging rate of the Japanese population is 26.0%, and it is predicted to reach 39.4% by 2055 ¹⁾. Utilizing health management during middle-age can help to ensure the good health of the elderly in this super-aged society.

The purpose of this study was to investigate the prevalence of urinary incontinence in middle-aged women living in the cold districts of Japan.

Study design, materials and methods

A survey of 800 middle-aged women who were randomly sampled from city A was conducted in October 2015 using self-administered postal questionnaires. In this study, urinary incontinence was defined as any response other than “none” to the question regarding the frequency of urinary incontinence in the International Consultation on Incontinence Questionnaire—Short Form (ICIQ-SF) ²⁾.

The questionnaire was constructed from the Japanese version of the ICIQ-SF and consisted of 19 items, including basic attributes, activity, physical status, medical history, familial predisposition, and lifestyle habits.

Results

Of the 800 subjects, 156 provided responses (response rate, 19.5%). The prevalence of self-reported incontinence was 37.2%. The frequency of incontinence was reported as “approximately once a week or less” by 43 respondents (27.6%), “2–3 times a week” by 9 respondents (5.8%), “approximately once a day” by 5 respondents (3.2%), and “always” by 1 respondent (0.6%). The circumstances under which incontinence occurred were reported to be “just before I arrive at the toilet” in 12 respondents (7.7%), “when I cough or sneeze” in 45 respondents (28.8%), “when I move my body or perform exercise” in 1 respondent (0.6%), “when I finish urinating and I am putting on my underwear” in 1 respondent (0.6%), and “I am always incontinent, irrespective of the reason” in 1 respondent (0.6%). These findings demonstrated that there was a significant difference in the prevalence of urinary incontinence ($p \leq 0.000$).

The mean ICIQ-SF score was 1.82 ± 2.62 (0–11); a significant difference was observed between the group of respondents with an average daily walking time of <30 min and those with an average daily walking time of ≥ 30 min ($p = 0.021$). We also observed a significant association between a history of diabetes mellitus and incontinence ($p = 0.042$).

Interpretation of results

The results showed that the prevalence of urinary incontinence among middle-aged women in city A was 37.2%. The frequency of incontinence was relatively low because most respondents reported episodes “approximately once a week.”

The most commonly reported condition associated with urinary incontinence was abdominal pressure-induced incontinence such as with coughing or sneezing. Walking time had a significant effect on the quality of life associated with urinary incontinence.

Concluding message

The limitations of this study were that the data obtained were self-reported by the respondents; thus, all data were subjective, and selection bias may have been present due to the small sample size.

During the present study, we investigated the prevalence of urinary incontinence, type of incontinence, and related factors among middle-aged women living in the cold districts of Japan.

References

1. Cabinet Office Director General. National survey on aging population. Chapter 1: Status of Ageing. White Paper on Aging Society, 2015 Ed. http://www8.cao.go.jp/kourei/whitepaper/w-2015/zenbun/pdf/1s1s_1.pdf (Accessed: October 31, 2015)
2. Momokazu Gotoh, Yukio Honma, Yasuhito Funahashi, et al. Psychometric validation of the Japanese version of the International Consultation on Incontinence Questionnaire-Short Form. *Int J Urology* 16:303-306, 2009

Disclosures

Funding: This study was made possible by a Grant-in-Aid for Scientific Research, Basic Research Program: C, awarded from financial year (FY) 2014 to FY 2016. **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Sapporo City University Ethics Committee **Helsinki:** Yes **Informed Consent:** Yes