



Community-based Epidemiological Survey of Lower Urinary Tract Symptoms in Taiwanese Residents Aged 40 Years and Above

Soo-Cheen Ng, Suh-Woan Hu, Gin-Den Chen
Gin-Den Chen

ABSTRACT

We evaluated the prevalence of Lower Urinary Tract symptoms (LUTS) and the impact of LUTS on quality of life (QoL) in different genders using validated questionnaires as well as identifying the potential risk factors that were associated with the occurrence of LUTS in these community residents.

METHODS

This study was carried out in three communities located in the west and south area of central Taiwan. Community residents of both sexes, aged 40 years and above were invited to participate in this three-year study. The residents who agreed to participate in this study were asked to fill in a set of validated questionnaires such as the IPSS and OABSS (Homma's version) for subjective perception of LUTS, the UDI-6 and IIQ-7 questionnaires for the impact of LUTS on QoL, and the SF-36 questionnaire for general health status.

RESULTS

A total of 2,411 community residents aged 40 years and above who completed all the questionnaires in the initial survey were recruited, of which 1469(60.9%) were women and 942 (39.1%) were men. The percentage distributions of participants in different age cohorts (e.g. 40-49 years, 50-59 years etc.) were similar among both genders. Prevalence of stress urinary incontinence, urge urinary incontinence, mixed incontinence, overactive bladder, and voiding difficulty between female and male residents were significantly different (46.7% vs.2%; 26.8%vs. 16.1%; 21.2% vs. 1.2%; 33.1% vs. 26.5%; 28.3% vs. 39%; all $P < 0.05$) (Table 1).

Prevalence of overactive bladder increased with age in both genders ($P < 0.05$) and was higher in women than men in each age cohort except those at ages ≥ 70 years (Table 2).

CONCLUSIONS

Our results imply that prevalence of stress urinary incontinence, urge urinary incontinence, mixed urinary incontinence, overactive bladder and voiding difficulty have significant gender diversity. Prevalence of overactive bladder increased with age in both genders ($P < 0.05$) but was higher in women than men in each age cohort. Age ≥ 60 years was the common factor associated with the occurrence of overactive bladder and voiding difficulty.

Table 1. Prevalence of lower urinary tract symptoms (LUTS) in community residents (N= 2411)

	Overall, n (%)	Female, n (%)	Male, n (%)
Stress urinary incontinence*	705(29.2)	686(46.7)	19(2)
Urge urinary incontinence*	546(22.6)	394(26.8)	152(16.1)
Mixed incontinence*	322(13.4)	311(21.2)	11(1.2)
Overactive bladder*	735(30.5)	486(33.1)	249(26.5)
Voiding difficulty*	783(32.5)	416(28.3)	367(39)

* $P < 0.05$

Table 2. Prevalence of overactive bladder in each age cohort and gender in community residents

Age cohort	40-49	50-59	60-69	≥ 70	P value
Female	83(21.3)	159(29.7)	137(41.6)	107(49.8)	$<0.001^a$
Male	44(16.1)	70(23.4)	75(30.9)	60(48)	$<0.001^a$

Overactive bladder(OAB) was defined as OABSS ≥ 4

^aCochran-Armitage trend test and chi-square test for prevalence of OAB among residents of different genders and age groups

REFERENCES

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