

## SEX DIFFERENCES IN QUALITY OF LIFE IMPACT AND TREATMENT SEEKING AMONG THE ELDERLY WITH NOCTURIA

### Hypothesis / aims of study

Nocturia is a very prevalent and bothersome problem in the elderly. We compared the quality of life (QOL) impact and treatment seeking behaviours of nocturia between the elderly of both genders.

### Study design, materials and methods

Between October 2004 and February 2005, adults 60 years or older indwelling in two communities (Matsu and Tan-Suei) were invited to participate in an in-face questionnaire interview, which covered socio-demographics, medical co-morbidities, and the QOL impact and treatment seeking behaviours associated with nocturia. We used a validated 13-item nocturia-specific QOL (N-QOL) questionnaire [1] to evaluate the QOL impact. Multivariate regression analyses were used to explore factors associated with the N-QOL score and treatment seeking.

### Results

A total of 875 individuals (470 men and 405 women) aged 60 to 95 years completed this study. Mean age, nocturia voids and the proportion of individuals reporting nocturia voids of twice or more were similar between both genders (Table 1). Among those who reported nocturia voids of twice or more, a significantly lower N-QOL score and a higher percentage of treatment seeking were observed in men than those in women (Table 1). On multiple linear regression analysis, male gender ( $p=0.01$ ), nocturia voids ( $P<0.001$ ), difficulty of falling asleep after urination ( $P<0.001$ ), and nocturia information from media ( $P=0.03$ ) were independent factors associated with N-QOL score. Multivariate logistic regression analysis revealed that coexisting benign prostatic hyperplasia (odds ratio [OR] 4.6, 95% confidence interval [CI] 2.4 – 9.0), nocturia information from media (OR 1.8, 95% CI 1.3 – 5.8), N-QOL score (OR 0.97, 95% CI 0.95-0.98) and considering nocturia as a normal ageing process (OR 0.50, 95% CI 0.29 – 0.87) were independent factor associated with treatment seeking.

**Table 1.** Comparisons of nocturia profiles between men and women

	Men		Women	P value
Number	470		405	
Age, mean SD	67.5	7.1	67.2 ±6.6	0.54
Nocturia voids, mean ± SD	1.5	1.2	1.5 ± 1.1	0.45
Nocturia twice or more, %	23.6		24.2	0.87
QOL score, mean ± SD	78.8	17.9	83.1± 16.2	0.01
Treatment seeking, %	34.2		19.2	0.00

### Interpretation of results

Although the prevalence of nocturia was similar between the elderly of both genders, multivariate linear regression analysis indicates that male gender itself is an independent factor associated with a higher QOL impact. While the percentage of treatment seeking was also significantly higher in men than in women, results from multivariate logistic regression

analysis suggest that coexisting benign prostatic hyperplasia is an important factor accounting for this gender difference.

#### Concluding message

Among the elderly with nocturia, a significantly greater impact on the QOL and a higher percentage of treatment seeking are observed in men. Several potential factors accounting for these sex differences are identified in the present study.

#### **References**

1. Development and validation of a quality-of-life measure for men with nocturia. *Urology*. 2004;63:481-6.