

THE EFFECT OF NOCTURIA ON HEALTH-RELATED QUALITY OF LIFE AND MOS SLEEP SCORE IN FEMALE

Hypothesis / aims of study

Nocturia has been shown to be bothersome, its true effect on the many dimensions of HRQoL and sleep has not been adequately assessed. Nocturia is considered to be the most frequent cause of disturbed sleep. To evaluate effects of nocturia on health-related quality of life (HRQoL) and sleep.

Study design, materials and methods

From January 2007 to December 2007, 180 patients with lower urinary tract symptoms, were prospectively selected for this study. Study was conducted among respondents with nocturia (void/night \geq 1)(n=119) and age matched controls (no nocturia)(n=61), with participants completing a series of questionnaires on HRQoL (OAB-q short form) and Medical Outcomes Study (MOS) sleep scale and frequency voiding chart.

Results

The sample population had a mean age of 57.2 years. In the sample, 58 patients reported 2>void/night \geq 1, 32 patients reported 3>voids/night \geq 2 and 29 patients reported void/night \geq 3. The number of nocturia episodes/night was significantly associated with the OAB symptom score (p=0.001), symptom bother (p=0.001) and the MOS sleep index (p=0.016).

Table 1. The quality of life and symptom bother according to nocturia

	No of nocturia				p-value
	No nocturia	2>nocturia \geq 1	3>nocturia \geq 2	Nocturia \geq 3	
	n=61	n=58	n=32	n=29	
Mean age(years)	57.2 \pm 11.8	55.4 \pm 11.3	56.2 \pm 11.31	61.9 \pm 11.8	
OAB-q SF					
Symptom bother	19.2 \pm 19.0	34.1 \pm 22.9	39.5 \pm 20.8	52.9 \pm 21.2	0.001
HRQoL total	79.9 \pm 19.0	68.6 \pm 19.9	64.2 \pm 16.3	52.2 \pm 21.2	0.001

OAB-q SF: overactive bladder-quality of life short form, HRQoL: health related quality of life

Table 2. The sleep quality according to nocturia

	No of nocturia				p-value
	No nocturia	2>Nocturia \geq 1	3>Nocturia \geq 2	Nocturia \geq 3	
	n=61	n=n=58	n=32	n=29	
Mean age(years)	57.2 \pm 11.8	55.4 \pm 11.3	56.2 \pm 11.31	61.9 \pm 11.8	
MOS sleep subscale					
Hours sleep/night	6.7 \pm 1.5	6.2 \pm 1.8	6.4 \pm 1.7	6.0 \pm 1.7	0.258
Snoring	31.8 \pm 27.9	34.5 \pm 26.4	36.3 \pm 28.0	37.9 \pm 27.1	0.757
Shortness of breath	23.0 \pm 28.2	24.1 \pm 28.7	27.5 \pm 20.2	35.9 \pm 31.8	0.196
Adequacy of sleep	40.0 \pm 19.7	41.2 \pm 20.9	47.2 \pm 22.8	50.0 \pm 25.1	0.025
Somnolence	34.0 \pm 14.6	35.2 \pm 17.1	42.1 \pm 14.2	46.0 \pm 20.3	0.003
Sleep Index 1	33.2 \pm 16.2	37.0 \pm 14.4	40.9 \pm 17.5	44.5 \pm 20.2	0.016

MOS: Medical outcome study, p-values calculated with ANOVA

Interpretation of results

Incremental increases in the number of voids/night have further negative effects on sleep, symptom bother, and HRQoL.

Concluding message

Nocturia has a significant negative effect on health-related quality of life (HRQoL) and sleep in women.

References

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2. Asplund R, Aberg H. Health of the elderly with regard to sleep and nocturnal micturition. Scand J Prim Health Care 1992;10:98-104
3. Brieger GM, Yip SK, Hin LY, Chung TK. The prevalence of urinary dysfunction in Hong Kong Chinese women. Obstet Gynecol 1996;88:1041-4

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Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	Yes
Specify Name of Public Registry, Registration Number	Chonnam National University Hospital Research Institute of Clinical Medicine
What were the subjects in the study?	HUMAN

<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	The Ethics Committee of Chonnam National University Hospital
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes