

THE PREVALENCE OF NOCTURIA IN THE DUTCH ADULT POPULATION

Aims of Study

The goal of this study is to estimate the prevalence of nocturia in the Dutch adult population and its association with sociodemographic, health characteristics and other LUTS. Moreover, problems experienced by persons with nocturia are studied.

Methods

In the spring of 2001 a telephone survey was held among a representative sample of 4721 Dutch respondents. In total 2506 respondents participated (response: 53%). Using questions from the Bristol Lower Urinary Tract Symptoms questionnaire (B-LUTS, Jackson, 1996) respondents were asked about having nocturia. Nocturia was defined as having two micturitions per night or more on average (over the last month). Respondents who had at least one micturition per night were asked whether this was a problem for them. In addition, questions about sociodemographic (sex, age) and health characteristics (general health status and use of medication) were asked. Next, 1000 of the respondents were asked to participate in further research, 859 of them agreed. They filled out a written questionnaire that included questions about other LUTS than nocturia.

Results

The prevalence of nocturia (two or more micturitions per night on average) among Dutch men and women over 18 is 13% (95% confidence interval: 11,9-14,5%) standardised for age and sex. Multivariate logistic regression analysis with sleeping disturbances as a control variable showed that women suffer from nocturia more often than men (OR: 1,7). The prevalence is also positively associated with age: the odd of having nocturia increases 0,04 for every year a person grows older. Moreover, a poor health status increases the odds of having nocturia as well as the use medication (OR: 1,9). Especially users of medication for prostate disorders (57%), medication for bladder inflammation (49%) and benzodiazepines (48%) show a high prevalence of nocturia.

The proportion of Dutch persons who report problems in having nocturia is as follows. 28% of the respondents with two micturitions per night on average do consider it as a problem. This percentage is 49% for those who had three and 56% for those who had four micturitions.

The prevalence of nocturia is clearly associated with the following symptoms: frequent urinating during daytime, the need to rush to the toilet, bladder pain, leaking urine during physical activities, and leaking urine for no obvious reason.

Conclusions

Prevalence rates of Dutch men and women differ more than in earlier studies. The prevalence of nocturia in the Netherlands seems slightly higher than in other Western countries, but Dutch persons with nocturia report less problems. Nocturia is not a symptom that stands on its own. It is associated with poorer health, use of medication, and other LUTS. It is worthwhile for doctors to routinely check whether or not patients who contact them for LUTS also have nocturia. In the Netherlands, this is especially true for older women with a poor health status since they are the most likely to suffer from nocturia.

References

Jackson, S., Donovan, J., Brookes, S., Eckford, S., Swithinbank, L., Abrams, P. The Bristol Female Lower Urinary Tract Symptoms Questionnaire: Development and Psychometric Testing. *British Journal of Urology*, 1996, 77, 805-812.