THE PREVALENCE AND BOTHERSOMENESS OF NOCTURIA IN WOMEN AND MEN AGED 60-80 YEARS.

Aims of Study
To study the prevalence and bothersomeness of nocturia in a normal population of women and men aged 60-80 years in Denmark.

Methods
A postal questionnaire was sent to 2000 women and 2000 men aged 60, 65, 70, 75, and 80 years. The population was selected at random from The Danish Civil Registration System (CPR), in which every person living in Denmark is identified by a unique ten digit number. Since no validated questionnaire addressing nocturia was available, a new questionnaire was generated and tested addressing nocturia and associated factors. Nocturia was defined as waking up at night to void (ICS 2002). This study focus on the association between prevalence of nocturia and age, sex, and bothersomeness.

Results
Ninety two percent (3,664) returned the questionnaire; 70.8% completed the questionnaire and was included in the study. The prevalence of nocturia increased with age (Fig.1). Overall prevalence of nocturia was 77% and no difference between men (M) and women (F) was observed (p= 0.11). However, with nocturia two or more times more men (40%) than women (35%) were affected (p= 0.0009)(Fig.2). Among all possible reasons, nocturia was the most frequent reason to wake up at night (Fig.3). Fig. 4 shows that the bothersomeness of nocturia in women and men increases with the severity of nocturia.

Fig. 1 Prevalence of nocturia increases with age.

Fig. 2. The severity of nocturia.
**Fig. 3. Reasons to wake up at night.**

- a: have to smoke
- b: are wet because of urinary incontinence
- c: other
- d: have worries
- e: feel pain
- f: noise
- g: freeze or sweat
- h: thirst
- i: do not get awake
- j: wake up to void

**Fig. 4.** The association between severity of nocturia and related bothersomeness.

**Conclusion**

To the best of our knowledge this is one of the largest studies addressing prevalence of nocturia in an elderly population of men and women. The amount of respondents in each age group was equal. Our data confirmed that the prevalence of nocturia increased with age. Nocturia was the major reason for waking up at night followed by thirst. No difference between sex was observed in the overall prevalence of nocturia, but when nocturia $\geq 2$ more men then women were affected. The degree of bother increased with the severity of nocturia.