

## LONGITUDINAL STUDY OF URINARY INCONTINENCE AND RELATED UROGENITAL DISORDERS IN ELDERLY WOMEN

### Hypothesis / aims of study

The aim of the present study was to investigate, using a longitudinal study design, the prevalence of urinary incontinence and other urogenital symptoms in a sample of women born 1900-1940 over time.

### Study design, materials and methods

Prospective, longitudinal, population-based study in a random sample of women from the following birth cohorts: 1900, 1905, 1910, 1915, 1920, 1930 and 1940. The women were invited by letter in 1986 to cooperate in a study of urinary incontinence and other urogenital problems by completing and returning a postal questionnaire. In 2004 the responders who were still alive and still living in Göteborg were requested to complete a similar questionnaire.

### Results

In 1986, 10 000 women received the invitation (1200 from each of the birth cohorts 1900, 1905, 1910, 1915 and 1920 ie a total of 6000 women and 2000 from the birth cohorts 1930 and 1940 ie a total of 4000 women). The response rate was 74.6% (n = 7459), see Table 1 for response rate for each sample. In 2004, 5108 of the original women were alive and still living in Göteborg and were sent a similar questionnaire as the one sent in 1986. The overall response rate was 71.7% (n = 3660), in the Table the sample is grouped according to birth cohort. The prevalence of urinary incontinence in the same women was 16.9% in 1986 and had increased to 39.0% in 2004. The prevalence of at least one treatment for a urinary tract infection during the previous 2 years was 17.1% in 1986 and 20.3% in 2004. A history of urinary tract infections in 1986 was positively answered to by 22.7% of the women in 1986 and in 2004 the corresponding figure was 64.7%. The prevalence of urogenital symptoms in 1986 was 11.0% and had increased to 25.6% in 2004.

### Interpretation of results

The prevalence of urinary incontinence had increased with increasing age and had increased from 17% to 39% during the observation period. An increased prevalence of urinary tract infections and other urogenital disorders was also recorded over time.

### Concluding message

This sample of women, aged 46-86 years in 1986 was assessed again in 2004 when the women were aged 64-104 years of age. A large number of the original responders were already dead but among the women available the response rate was high (above 70%) and the prevalence of urinary incontinence, urinary tract infections and urogenital disorders had increased during the 18 year period, between 1986 and 2004.

Table. Response rates in 1986 and 2004.

Birth cohort	Response rate (%) in 1986	Responders (n) in 1986	Response rate in (%) 2004	Response rate, (n), in 2004
1900	54,8	299	-	-
1905	64,8	591	27,0	10
1910	70,9	911	39,0	75
1915	74,6	1063	48,4	259
1920	75,0	1374	58,3	604
1930	81,7	1674	78,8	1288
1940	79,3	1547	82,3	1703