

THE PREVALENCE, RISK FACTORS OF URINARY INCONTINENCE AND ITS INFLUENCE ON THE QUALITY OF LIFE IN 20 YEARS OR OLDER OF WOMEN IN ESKİŞEHİR, AFYON, KÜTAHYA , BİLECİK CITIES OF TURKEY

Aims of Study

Urinary incontinence (UI) is a commonly encountered symptom in women, every age. However, the prevalence of UI has been shown to increase with the increasing age. UI, particularly is one of the most common health problems in the elderly. Urinary incontinence does not lead to death, but it may cause physical, psychosocial, and economical problems, often resulting in a detrimental effect on the quality of life for the afflicted individual and in some cases for her nearest relatives. The risk factors of urinary incontinence were determined, may help to significantly reduce the prevalence of urinary incontinence and cost for the public health system. The aim of this population-based cross-sectional study was to determine the prevalence, risk factors of urinary incontinence on 20 year or older women and assess its influence on the quality of life.

Methods

Subjects were recruited from a total population of 686760 ≥20 year aged women living within four cities; Eskişehir, Afyon, Kütahya and Bilecik in Turkey. We used the national health registrations for to determine the women population to each cities. The study group (625 women) was comprised of 625 women designated with the stratified sampling technique according to age and settlement region. The data were collected by using a 36-item questionnaire and the Urinary Incontinence Quality of Life Instrument. The interviews were conducted in the respondents' homes. The researcher face-to face interviewed the women and filled in the "structured questionnaire". The assessment of quality of life the women with urinary incontinence was done according to questions of the Incontinence-Quality of Life Instrument (I-QOL). The questionnaire study was completed between November 2001 and July 2002. The reliability of the I-QOL was assessed by its internal consistency and by measurement of its test-retest reliability. The results obtained from 625 participants were analysed. Statistical analysis was made using χ^2 , logistic regression analysis for categorical data or t-test and one-way variance analysis for continuous data. The significance level was set at $p < 0.05$. All statistical procedures were calculated by using the computer software SPSS (version 10.0 for windows).

Results

The prevalence of urinary incontinence was 25.8%. The prevalence of urinary incontinence increased with the increasing age ($p < 0.001$) from 9.6% in the cohort of 20-29 year old women, to 40% in the cohort of women aged ≥70 years. Stress urinary incontinence was the most frequently encountered type. χ^2 analysis showed that while the increasing age ($p < 0.001$), high number of parity ($p < 0.001$), vaginal delivery ($p < 0.05$), the delivery of at least one baby weighing more than 4000gr ($p < 0.01$), delivery at home ($p < 0.01$), high body mass index ($p < 0.001$), diabetes mellitus ($p < 0.001$), neurologic disorders ($p < 0.001$), recurrent urinary tract infections ($p < 0.001$), chronic constipation ($p < 0.05$), to use drug during long period ($p < 0.001$), gynaecological surgery ($p < 0.01$) were all significantly associated with urinary incontinence. Incontinence occurred more often among women delivered without episiotomy, but the episiotomy group was younger than other women. Smoking, duration of menopause, centre of population, hormone replacement therapy did not have any relation to incontinence. Logistic regression analysis showed that, urinary incontinence was significantly associated with body mass index (OR 12.75, 95% CI 6.68-24.6), diabetes mellitus (OR 3.55, 95% CI 1.44-8.73), neurologic disorders (OR 3.80, 95% CI 1.69-8.58), recurrent urinary tract infections (OR 4.73, 95% CI 2.52-8.88). Women with mixed incontinence and women with urge incontinence reported a poorer quality of life compared to women with stress incontinence ($p < 0.001$). Impairment of quality of life was related as statistically significant to type of

urinary incontinence ($p<0.001$), frequency of incontinence episodes ($p<0.001$), amount of leakage ($p<0.001$), incontinence at during sexual intercourse ($p<0.001$) but not to duration of incontinence, help-seeking behaviour, age and education level of women. The prevalence of urinary incontinence occurring during intercourse was 10.6%. Only 27.3% of the women with urinary incontinence had sought medical attention for urinary incontinence.

Conclusions

Urinary incontinence is a prevalent condition on ≥ 20 year aged women, particularly among the elderly. Urinary incontinence have different risk factors, a negative influence on the quality of life. Only a small number of women seek medical care. Community education on UI may be needed to increase the number of UI patients who receive treatment. In addition to risk factors should be prevention.

References

- Patrick DL, Martin ML, Bushnell DM, Yalcin I, Wagner TH, Buesching DP. Quality of Life of Women with Urinary Incontinence: Further Development of the Incontinence Quality of Life Instrument (I-QOL). *Urology*. 1999; 53: 71-76.
- Persson J, Wolner-Hanssen P, Rydhstroem. Obstetric Risk Factors for Urinary Incontinence: A Population-Based Study. *Obstetrics & Gynecology*. August 2000; 96 (3): 440-445.
- Simeonova Z, Milsom I, Kullendorf AM, Molander U, Bengtsson C. The Prevalence of Urinary Incontinence and Its Influence on the Quality of Life in Women from an Urban Swedish Population. *Acta Obstetrica et Gynecologica Scandinavica*. 1999; 78: 546-551.
- Switinkbank LV, Abrams P. The Impact of Urinary Incontinence on the Quality of Women. *World Journal Urology*. 1999; 17: 225-229.
- Temml C, Haidinger G, Schmidbaver J, Schatzl G, Madersbacher S. Urinary Incontinence in Both Sexes. Prevalence Rates and Impact on Quality of life and Sexual life. *Neurourology and Urodynamics*. 2000;19: 259-271.
- Thomas TM, Plymat KR, Blannin J, Meade TW. Prevalence of Urinary Incontinence. *Br Med J*. 1980;281: 1243-1245.