

Research Article

GPs should actively ask about Symptoms of Urinary or Faecal Incontinence in Ageing Female Patients

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Abstract

Objectives: To investigate how common incontinence problem is and how it could be detected in an unselected population.

Methods: Cross-sectional study in primary care population. A population survey of women born in 1948 or 1950 and living in a municipality with 19,535 inhabitants in south-western Finland in 2017. Main outcome measures were incidence of urinary or faecal incontinence.

Results: After analyzing the questionnaires and research findings, we found that urinary incontinence is a common phenomenon, reported by 50.3% of participants. According to the Urinary Incontinence Severity Score (UISS), 12.7% of them believed that the degree of disability was remarkable, and according to the Visual Analogue Scale (VAS), 18.3% considered the degree of disability to be difficult. In this study obesity was the most common feature affecting urinary incontinence.

Conclusion: Urinary incontinence is a common problem and will increase as the population ages. It can deteriorate a person's quality of life, increase her need of care and involve considerable costs. Preventing the problem and treating it as early as possible in primary health-care is both reasonable and saves time and money.

Keywords: Conservative Treatment, Lifestyle, Medication, Quality of life, Urinary incontinence

Key message

Urinary incontinence is a common problem in the ageing female population. Many women are ashamed of their incontinence and do not even mention it during the GP's consultation. Preventing the problem and treating it as early as possible in primary healthcare is important.

Introduction

The ageing of the population has changed morbidity rates. Part of this change can be explained by lifestyle, but part is connected only to ageing. Furthermore, some of the changes can impair one's health related quality of life. Urinary or faecal incontinence affects many women. Based on a broad population survey, Norwegian researchers estimate that the prevalence of incontinence problems is about 25%. Estimating the extent of the problem is difficult due to the embarrassment connected with incontinence. Furthermore, diverse definitions of incontinence may complicate the estimation. According to the survey, 25% of participants experienced inconvenience that lessened their quality of life while 7% had significant incontinence problems. These women should be regarded as potential patients. Those with fewer problems should be offered information and advice on self-care [1]. Traditional predisposing factors for incontinence include ageing, childbearing, obesity and menopause [2]. Examples of lifestyle factors possibly associated with incontinence include smoking and a low level of physical activity [3]. Norwegian researchers have also found a strong association between diabetes and urinary

incontinence, especially for urge incontinence and a severe degree of incontinence [4]. Many drugs can also cause incontinence, such as diuretics, cholinergics, sedatives or combinations of drugs. This pilot study aims to investigate how women needing medical treatment for their symptoms of incontinence might be detected in an unselected population. According to researchers, urinary incontinence may improve considerably through conservative treatment in general practice [5], and therefore it is important to find easy and cost-effective methods to relieve women's symptoms.

Methods

Selection of study subjects

Information for women born in 1948 or 1950 and living in a municipality with 19,535 inhabitants (as of 31.8.2017) in south-western Finland was obtained from the Population Register Centre. The researchers mailed an information letter about the study and a consent form with a return envelope to all women in these age groups. Those who accepted the invitation and provided informed consent received questionnaires about pelvic-floor symptoms and

were scheduled for an appointment during consulting hours at the gynaecological clinic of Turku University Hospital.

Questionnaires and measurements

Sociodemographic data including date of birth, marital status, education and occupation, were collected. Marital status was coded as solitary (single, divorced, widowed) or in a relationship (married, cohabiting). The participants were asked about smoking, alcohol use and medication (including systemic or local hormone treatment). Also, inquiries were made about parity and possible diseases. Height and weight were measured, and body-mass index (BMI) was calculated. BMIs were classified according to WHO criteria [6]. A trained research nurse measured blood pressure and checked the questionnaires with the examinees. Symptoms related to incontinence and their degrees of inconvenience were retrieved from the following validated questionnaires: the Urogenital Distress Inventory(UDI-6) [7], the Incontinence Impact Questionnaire (IIQ-7) [7], the Urinary Incontinence Severity Score (UISS) [8] and the Detrusor Instability Score (DIS) [9]. Quality of life was classified according to the Finnish 15-dimensional measure of health-related quality of life questionnaire (15D) [10]. We classified the results of UISS as follows: <25% indicated slight disability, 25–75% indicated clear disability and >75% indicated remarkable disability. The degree of disability with regard to incontinence was also evaluated using the Visual Analogue Scale (VAS) (10), with the degree of disability being classified from 0 to 10. We considered values 0–2 as insignificant disability, values 3–5 as remarkable disability and values 6–10 as difficult disability. A gynaecologist examined all participants and gynaecological vaginal ultrasound was performed. The cough stress test was performed with a comfortably filled bladder. In addition, general muscle condition was evaluated in this research according to the chair-stand 5 test. We used Finnish population norms for 60- to 69-year-old women. The norms are based on the Health 2000 health examination survey [11].

Statistical analysis

The research data were coded in Excel format without personal identifiers and statistical analyses were performed using the SPSS program. The data are presented as counts with percentages. Statistical comparisons of the baseline characteristics between groups were made by the χ^2 test. The significance level of P-values was set at 0.05.

Ethics

The research is registered with the Clinical Trials gov. ID: NCT02338726. The Ethics Committee of the Hospital District of Southwest Finland approved the study.

Results

The invitation to participate in the study was sent to 242 women, of whom 143 accepted, resulting in a participation rate of 59%. Urinary incontinence was a common phenomenon, with 72 women (50.3%) reporting that they suffered from it. The characteristics of the participants are presented in (Table 1). Faecal incontinence was suffered by 18 women (12.6%) and this had a correlation to urinary incontinence (P=0.013). According to the Finnish UISS questionnaire

evaluating the degree of disability, 12.7% of the participants believed that the inconvenience of their incontinence was remarkable. One questionnaire of those that reported urinary incontinence was omitted because the answers were missing to all the questions concerning the subject at issue. According to the VAS, 41 participants (57.7%) who had reported having urinary incontinence believed that the inconvenience was insignificant, while 13 participants (18.3%) described the problem as difficult.

Table 1. Characteristics of the participants (n=143) in a population survey of Finnish women at menopause in order to detect urinary or faecal incontinence.

	Women with urinary incontinence n = 72 (50.3%)	Women without urinary incontinence n = 71 (49.7%)	P-value
Demographics			
solitary	19 (61.3%)	12 (38.7%)	0.17
in a relationship	53 (47.3%)	59 (52.7%)	
BMI			0.40
normal weight	28 (46.7%)	32 (53.3%)	
overweight	25 (46.3%)	29 (53.7%)	
obese	12 (60.0%)	8 (40.0%)	
severely obese	5 (83.3%)	1 (16.7%)	
morbidly obese	1 (50.0%)	1 (50.0%)	
Current smokers	9 (50.0%)	9 (50.0%)	0.98
Education			0.37
comprehensive school	22 (47.8%)	24 (52.2%)	
vocational school	46 (54.1%)	39 (45.9%)	
college	4 (33.3%)	8 (66.7%)	
RR systolic			0.57
normal	17 (54.8%)	14 (45.2%)	
high	55 (49.1%)	57 (50.9%)	
RR diastolic			0.79
normal	42 (49.4%)	43 (50.6%)	
high	30 (51.7%)	28 (48.3%)	
Parity			0.48
nulliparous	5 (55.6%)	4 (44.4%)	
1–2parturitions	52 (53.1%)	46 (46.9%)	
3–5parturitions	15 (41.7%)	21 (58.3%)	

Forty-two percent of the participants (n=60) were of normal weight. The combined proportion of obese, very obese or morbidly obese participants was 19.7% (n=28). Obese women reported significantly more severe urinary incontinence. In our data 4 from 60 women (8.2%) of normal weight and two from 54 overweight women (4.1%) believed that the inconvenience was extreme, while five obese women (31.3%) and two severely obese women (33.3%) estimated that the inconvenience was difficult (P=0.035). In the chair-stand 5

test measuring muscle strength, 69 women (50.0%) had a result that was better than average while 28 (20.3%) had a worse than average result. Muscle condition and urinary incontinence had no significant correlation in this population, and parity also had no influence on incontinence in this research. The number of current smokers was quite small and was equal in the group that suffered from incontinence and the group that did not, with nine (50%) found in each group. According to the AUDIT-C evaluation unhealthy alcohol use was rare. Only six women consumed more than five measures of alcohol per week which is estimated to be largest safe quantity for women [12]. Medications for hypertension, diabetes, hyperlipidaemia and thyroid insufficiency were the most commonly used: 29.6% of participants used no medication, and 54.9% used from one to four medications. No statistical correlation was found between urinary incontinence and multi-medication. The effects of hormone replacement therapy (HRT) on urinary incontinence was also studied. During the time of research, 49 women (34.27%) used HRT: 26 of those women (53.06%) used vaginal oestrogen, 12 (24.49%) used systemic therapy and 11 (22.45%) used both. The use of any type of HRT did not have a statistically significant influence on urinary incontinence ($P=0.81$).

Discussion

This article aims to describe the problem of incontinence from the GP's point of view. Urinary incontinence is known to be a common problem in the ageing female population. However, its assessment is complicated by the nature of the problem. Many women are ashamed of it and do not even mention their complaint if they are not asked about it during the GP's consultation [13]. Even more hidden problem is faecal incontinence, which was quite rare in our material but was correlated to urinary incontinence. Participation rates in incontinence studies vary. In a large postal survey of 29,500 women in France, Germany, the United Kingdom and Spain, the response rate varied from 45–64% [14]. Strong evidential data suggest, however, the existence of a potentially high level of expressed but unmet need [15], so further research is needed to assess the knowledge and attitudes of primary-care staff [15]. The participation rate in our research was quite good. In a semi-urban population, such as ours, many women regularly visit their private gynaecologist and perhaps consequently might not want to participate in a study of this kind. However, better participation rates of 86% and 78% were reported in the Norwegian HUNT2 and EPINCONT studies, respectively, among women of corresponding age [1]. The complete HUNT 2 survey covered many topics, for example, mental health, cardiovascular diseases, asthma and urinary incontinence [1]. The EPINCONT study is part of a large survey (HUNT 2) where women answered a questionnaire concerning urinary incontinence [1]. The patients didn't participate any clinical examination. The participants in our study were slightly more slender than the women in the FINRISKI 2012-study [16], but otherwise the participants were representative of the ordinary Finnish female population of corresponding age. The percentage of urinary incontinence problems was quite high in our material. This could be due to selection bias. Because we wanted to study urinary incontinence, it may be that women who suffered from the problem wanted especially to participate. On the other hand, the degree of

problem can be considered quite insignificant in over half of the participants. Excess weight turned out to be a significant variable. According to international studies, obesity is the condition chiefly associated with urinary incontinence, and waist circumference is also a strong predictor for the incident of urinary incontinence [17]. Weight loss may be associated with improvement of the problem and also of the patient's quality of life [18]. Public-health professionals should bring up the problem of incontinence when they are dealing with overweight and obese patients. People may feel that the risks of overweight are distant, particularly with regard to disease, but incontinence is often a practical concern and causes deterioration of health-related quality of life.

The benefits of sport for general health are well-known. Women should learn and practice exercises for the pelvic-floor muscles for the whole of their life, not only after giving birth. Overweight and diabetic women particularly, as well as pregnant women and those who exercise regularly for high-level athletics should remember the importance of training these muscles [19]. Although manual work is less common and working life has become easier, some occupations are still dominated by women. Lower urinary-tract symptoms are reported to be a significant concern among the female nursing workforce [20]. In our study, the participants were on average in good condition. Our research data offer much material for specialists, but the family doctor must remember the problem and ask about it. Initial diagnostic testing, such as the cough stress test, can be conducted by the general practitioner in addition to a gynaecological examination. However, this does not reveal women with an overactive bladder or urgency incontinence. There are helpful questionnaires available for this purpose. Patient education is the first step in the management of urinary incontinence. The patient can be sent to a physiotherapist for instructions in pelvic-floor muscle training. Anticholinergic medication or vaginal oestrogen therapy [21] can be initiated in general practice as well as mirabegron which is a beta-3-agonist and its efficiency on urge incontinence is like anticholinergics but side effects are different [22]. A simple questionnaire could be an easy and time-saving method for detecting patients with urinary incontinence who could be helped in primary healthcare. Correspondingly, there should be simple regional guidelines for referrals to specialist healthcare. In a recent Dutch study, it has been assumed that the prevalence and incidence of urinary incontinence will rise in an ageing population. It is therefore vital to address this problem in order to reduce it and improve the quality of life of the elderly and reduce the costs and time invested in healthcare [23]. Public health nurses play a key role in this work together with general practitioners. The weakness of our pilot study is the small size of the sample. On the other hand, the strengths of the study include the random group of population-based respondents, the fact that every participant was examined objectively and the fact that the questionnaires could be completed with the assistance of the research nurse when needed.

Conclusion

Urinary incontinence is a common problem, and it will increase with the ageing of the population, especially among those who have any other chronic problem. Urinary incontinence can lessen a person's

quality of life, increase her need of care and involve considerable costs. Preventing the problem and treating it as early as possible in primary healthcare is both reasonable and time and cost effective.

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