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The Knowledge, Awareness and Primary Care Applications of Women about Urinary Incontinence: A Survey in Primary Care

Duygu Ayhan Baser,[1] Murat Çevik,[2] Elif Hilal Ünverdi,[1]
Raziye Şule Gümüştakım,[3] Mustafa Cankurtaran[4]

[1]Department of Family Medicine, Hacettepe University Faculty of Medicine, Ankara, Turkey
[2]Güdül Family Health Center, Ankara, Turkey
[3]Department of Family Medicine, Sütçü İmam University Faculty of Medicine, Kahramanmaraş, Turkey
[4]Department of Internal Medicine, Division of Geriatric Medicine, Hacettepe University Faculty of Medicine, Ankara, Turkey

ABSTRACT

Objectives: The aim of study was to evaluate the prevalence, knowledge, and awareness of urinary incontinence (UI) in women, to examine women's primary care applications for UI, and their reasons for not applying even if they had complaints.

Methods: This observational study was conducted in two different family health centers in Turkey. The data were collected using a self-administered questionnaire consisting of two parts prepared by the investigators. For illiterate participants, the questionnaire was completed by the investigators through a face-to-face interview.

Results: Three hundred eighty women participated in this study. Of the participants, 75 (19.7%) had UI problems in the past and163 (42.8%) were found to have UI, of whom 69 (42.3%) described the condition as a "UI/health problem". Thirteen (28.3%) of the participants who not applying to health center for UI complaints were thinking that "UI is normal with advancing age."

Conclusion: Despite the high prevalence of UI, this study suggests that women's awareness about UI was low. Although the study was conducted with patients who applied to the family health centers, the low awareness of the patients about the disease and the low rates of admissions to family physicians indicate that awareness-raising studies should be started as primary care.

Keywords: Awareness, knowledge, primary health care, urinary incontinence, women

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Address for correspondence:
Dr. Duygu Ayhan Baser. Department of Family Medicine, Hacettepe University Faculty of Medicine, Ankara, Turkey

Phone: +90 505 664 52 10

E-mail:
duyguayhan@outlook.com

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INTRODUCTION

Women's life expectancy has been extended gradually, however, prolongation of life does not imply an increase in quality of life, as quality time spent and healthy life are more important.[1] Urinary incontinence (UI), which is an important problem affecting quality of life, can occur at any age in women.[1-3] Several causes have been identified that increase the incidence of UI.[1-4] The risk factors of UI are age, menopause, parity, obesity, vaginal delivery, and previous hysterectomy.[4] It is emphasized in guidelines and studies that the most important factor in the diagnosis of UI is the anamnesis to be taken from the patient.[3-5]

The most common types of UI are urge and mixed types, especially stress incontinence.[1] Various studies have examined the incidence of UI in Turkey.[2,3,5-7] One of the largest stud-

ies on this subject is the study of 7.807 women aged ≥18 years, which reported that the incidence of women with UI was 28.3%.[5] Of these patients, 9.3% reported that they had moderate or excessive UI. In a study conducted in Istanbul, the incidence of UI was 68.8%.[6] In the study conducted by Öztürk, the incidence of UI in 201 women was 42.8%.[7] The prevalence of UI in women in Turkey varies as reported in previous studies. However, the certainty of these incidences is controversial because some women do not see incontinence as a health problem, and some of them may have problems disclosing complaints to health professionals.[8] UI may not be defined as a disease by women due to some cultural, economic, and traditional factors.

When the studies on UI in women in our country were examined, most were generally conducted in gynecology and obstetrics outpatient clinics, in a certain age group, or related to the incidence and factors affecting UI.[6-12] The aim of study was to evaluate the prevalence, knowledge, and awareness of UI in women, to examine women's primary care applications because of UI, and their reasons for not applying even if they had complaints.

METHOD

This was designed as an observational cross-sectional study. The universe of this study was composed of women who applied for primary care in family health centers in two different provinces (Ankara and Sakarya). There were 2563 registered women in family health centers. The study was conducted between November 1, 2019 and February 1, 2020. Women who were ≥18 years and did not have any cognitive problems were included to the study. During the study period, 1321 women applied for primary care in two polyclinics. Only one application made by the same person was included. Patients who visited a nurse but not a physician were not included. All the women who met the inclusion criteria and applied for primary care in a polyclinic during the study period were offered to participate in the study without any prior evaluation regarding the problem of UI. When the frequency of UI was determined as 50% and the reliability rate was determined as 95%, at least 302 patients who applied in the family health center were planned to be included in the study.

Data were collected using a questionnaire consisting of two parts, which were prepared by the investigators. There were 25 questions in total. In the first part of the questionnaire, the participants were expected to provide information related to their sociodemographic characteristics, health status, risk factors of incontinence, and obstetric history. In the second part, information was collected on the women's knowledge and awareness of UI, health center application, and reasons for not applying, and the physician they consult and for what reasons and whether they received any treatment for this condition.

Considering the age of the elderly (65 years and old) and the menopause limit (50 years in Turkey), the ages of the patients classified as were 18–34 years, 35–49 years, 50–64 years and ≥65years.[13,14] The height and weight of the patients were measured, and body mass index (BMI) was calculated using the weight in kilograms divided by the square of height in meters. Accordingly, underweight and normal-weight for adults is defined as a BMI less than 24.9 kg/m^2, overweight as a BMI 25.0-29.9kg/m^2, and obesity as a BMI of 30.0kg/m^2 or greater.[15] The patients were questioned whether they had any symptoms related to UI. If they had any symptoms of UI, then according to their history, the UI type was classified as urge, stress, and mixed.

Statistical analyses were performed with SPSS 25 package program. Normality was tested with Kolmogorov-Smirnov and Shapiro-Wilk tests. In the evaluation of the data, mean and standard deviation were used for continuous variables and, frequency, percentage were used as categorical variables. A Chi-square test was used to investigate the relationship between qualitative data. Separate bivariate logistic regression models were used to calculate odds ratios for each of the incontinence case definitions. In all analysis results, $p<0.05$ was considered significant.

RESULTS

Three hundred eighty women participated in this study. The mean age of the participants was 44.1±14.3 years and 285 (75.0%) of the participants were married. Of the participants, 68 (17.9%) had no pregnancy, 143 (37.7%) had three or more pregnancies. The sociodemographic, gynecologic and obstetric features of the participants are presented in Table 1.

The proportion of patients who reported that they had UI problems was 75 (19.7%). According to the type of complaint, 163 (42.8%) participants were found to have UI. Those who described this condition as a "UI/health problem" accounted for 69 (42.3%) of the patients. Accordingly, 64 (16.8%) of women had mixed UI. Of those with mixed and urge UI, 43 (67.2%) and 57 (52.3%) described the condition as a "UI/ health problem," respectively. The distribution of UI symptoms among the women is presented in Table 2.

Among the women who reported that they had UI problems, 29 (38.7%) applied for primary care for this complaint in a health-care center. Those who reported that they applied in a health institution within the first 3 months after the onset of the complaint accounted for 12 (16.0%) of the patients. The proportion of patients who consulted urologists was 15 (51.7%), while 11 (37.9%) consulted gynecolo-

Table 1. Sociodemographic, gynecologic and obstetric features of the participants

	n (%)
Age groups	
18-34 years	116 (30.5)
35-49 years	132 (34.8)
50-64 years	97 (25.5)
≥65 years	35 (9.2)
BMI groups	
≤24.9 kg/m^2	159 (43.1)
25.0-29.9 kg/m^2	119 (32.2)
≥30.0 kg/m^2	92 (24.7)
Education status	
Primary school	18 (4.7)
Secondary and high school	109 (28.7)
University	253 (66.6)
Marital status	
Single	52 (14.1)
Married	285 (75.0)
Divorced and widowed	43 (10.9)
Chronic disease	
Yes	103 (27.1)
No	277 (72.9)
History of vaginal surgery	
Yes	23 (6.1)
No	357 (93.9)
Other gynecological problems	
Yes	36 (9.5)
No	344 (90.5)
Menstruation	
Regular	207 (54.5)
Irregular	60 (15.8)
Menaupose	113 (29.7)
Uterine/Bladder/Bowel prolapse	
Yes	31 (8.2)
No	349 (91.8)
Sexual problem	
Yes	43 (11.3)
No	337 (88.7)
Abortus	
Yes	67 (18.4)
No	313 (81.6)
Curettage	
Yes	61 (16.2)
No	319 (83.8)
Repeated NVD	
Yes	74 (19.6)
No	306 (81.4)

BMI: Body mass index; NVD: Normal vaginal delivery.

gists and obstetricians and 10 (34.4%) consulted family physicians. The reasons for not applying for complaints are summarized in Table 3.

Table 2. The distribution of urinary incontinence symptoms among the participants

	n (%)
Do you have gaita incontinence problem?	
Yes	3 (0.8)
No	377 (99.2)
Do you have UI problem?	
Yes	75 (19.7)
No	305 (80.3)
Do you have incontinence problem during coughing, sneezing, laughing and daily activities?	
Yes	118 (31.1)
No	262 (68.9)
Do you have suddenly UI when you are urging?	
Yes	109 (28.7)
No	271 (71.3)
Do you have incontinence problems while sleeping?	
Yes	6 (1.6)
No	374 (98.4)

UI: Urinary incontinence.

UI has a statistically significant relationship with age groups, BMI groups, educational status, history of vaginal surgery, female disease, menstruation status, uterine/bladder/bowel prolapse, sexual problems, abortus, curettage, and repeated NVD. The comparison of potential risk factors with the presence of UI is shown in Table 4.

According to the binary logistic regression analysis, the risk of UI was approximately 1.36 times higher in obese women, 4.20 times higher in women who had curettage history, 4.02 times higher in women who had other gynecological problems, 4.32 times higher in women who had uterine/bladder/bowel prolapse than in others. The assessment of the characteristics affecting UI is shown in Table 5.

Table 3. The reasons for not applying for complaints

	n (%)
Thinking that UI is normal with advancing age	13 (28.3)
Failure to find time to visit physicians	14 (30.4)
Do not be too bothered by urinary incontinence	9 (17.4)
Avoid being examined	8 (17.4)
Other reasons	3 (6.5)

UI: Urinary incontinence.

Table 4. The comparison of potential risk factors with the presence of urinary incontinence

	Without UI (n=217)	With UI (n=163)	p
Age groups			
18-34 years	88 (40.5)	28 (17.2)	<0.001
35-49 years	75 (34.6)	57 (35.0)	
50-64 years	40 (18.5)	57 (34.9)	
≥65 years	14 (6.4)	21 (12.9)	
BMI groups			
≤24.9 kg/m^2	111 (51.1)	48 (29.4)	<0.001
25.0-29.9 kg/m^2	71 (33.7)	48 (29.4)	
≥30.0 kg/m^2	33 (15.2)	67(41.2)	
Education status			
Primary school	7 (3.2)	11 (6.7)	0.001
Secondary and high school	48 (22.1)	61 (37.5)	
University	162 (74.7)	91 (55.8)	
Marital status			
Single	32 (14.7)	20 (12.3)	0.595
Married	163 (75.1)	122 (74.8)	
Divorced and widowed	22 (10.2)	21 (12.9)	
Chronic disease			
Yes	51 (23.5)	52 (31.9)	0.068
No	166 (76.5)	111 (68.1)	
History of vaginal surgery			
Yes	8 (3.7)	15 (9.2)	0.026
No	209 (96.3)	148 (90.8)	
Other gynecological problems			
Yes	11 (5.0)	25 (15.3)	0.001
No	206 (95.0)	138 (84.7)	
Menstruation			
Regular	141 (64.9)	66 (40.4)	<0.001
Irregular	29 (13.4)	31 (19.2)	
Menaupose	47 (21.7)	66 (40.4)	
Uterine/Bladder/Bowel prolapse			
Yes	4 (1.8)	27 (16.5)	<0.001
No	213 (98.2)	136 (83.5)	
Sexual problem			
Yes	15 (6.9)	28 (17.1)	0.002
No	202 (93.1)	135 (82.9)	
Abortus			
Yes	29 (13.3)	38 (23.3)	0.009
No	188 (86.7)	125 (76.7)	
Curettage			
Yes	23 (10.6)	38 (23.3)	0.001
No	194 (89.4)	122 (76.7)	
Repeated NVD			
Yes	31 (14.2)	43 (26.3)	0.003
No	186 (85.8)	118 (73.7)	

BMI: Body mass index; NVD: Normal vaginal delivery; UI: Urinary incontinence.

Data were given as n (%); Chi-square test.

DISCUSSION

UI is a common condition worldwide, however, despite its high prevalence, this study suggests that women's awareness about UI was low. In this study, despite most participants defining UI as a health problem, one of five women who applied in a family health center stated that they had UI problems, and some women with UI did not define the condition as a disease and very few women who lived with UI consulted a health institution.

In this study, 31.1% of the women had stress UI, 28.7% had urge UI, and 16.8% had mixed UI. In Turkey, various studies were conducted in different samples and showed that these frequencies ranged from 25% to 55%.[7,9,10,16] In the literature, the prevalence of UI was reported to range from 3% to 53% among women.[17,18] The most common types of UI are the urge and mixed types, especially stress incontinence. The results of this study are similar to those of previous global and national studies and indicated that the most common UI type is stress incontinence.

In this study, 42.8% of the participants had UI, of whom 42.3% accepted UI as a health problem. This result is important and essential for elucidating the awareness of women. Considering the high educational level of the study population, this result can be considered significant. In a survey conducted on family physicians about their awareness of UI, most physicians stated that UI does not impair quality of life much.[19] It is not an unexpected result that patients would not be aware of UI even when UI was diagnosed by a physician.

Among those who reported that they had UI problems, 38.7% applied for primary care in a health-care center owing to this complaint in this study. Almost half of them consulted urologists, others consulted gynecologists or family physicians. Family physicians play a major role in the management of UI owing to their high chance of reaching the whole population. The first evaluation of a patient with UI by a family physician should primarily focus on obtaining the patient's history and performing physical examination. The study was conducted with patients who applied to the family health centers, this means, each patient had the chance to contact with their family physician. However, the rate of application to family physicians with this problem was low, which is a thought-provoking result. The most common reasons for not applying in health centers were failure to find time to visit physicians, thinking that UI is normal with advancing age, avoiding examination, and uncomfortable with the situation. The results were in accordance with those of other studies.[20-23] In a study of Kök et al., 80.0% of the participants with UI

Table 5. The assessment of the characteristics affecting urinary incontinence

	β	S.E.	Wald	p	Odds ratio	95% confidence interval	
						Lower	Upper
Age	0.052	0.198	0.069	0.669	1.091	0.731	1.629
BMI	0.542	0.168	10.376	0.001	1.361	1.092	1.698
Education status	0.120	0.137	0.764	0.324	1.150	0.871	1.518
History of vaginal surgery	0.287	0.575	0.250	0.361	1.771	0.520	6.030
Other gynecological problems	0.938	0.462	4.110	0.043	4.024	1.129	12.572
Menstruation	0.093	0.196	0.222	0.545	1.128	0.763	1.668
Uterine/Bladder/Bowel prolapse	1.515	0.611	6.157	0.002	4.324	1.309	14.688
Sexual problem	0.583	0.402	2.100	0.114	1.953	0.851	4.479
Abortus	-0.014	0.221	0.004	0.681	1.107	0.683	1.793
Curettage	0.519	0.255	4.138	0.035	4.203	1.117	13.851
Repeated NVD	0.266	0.111	5.786	0.089	1.268	1.012	1.588

BMI: Body mass index; NVD: Normal vaginal delivery.
Bivariate logistic regression.

did not apply to primary care for UI with the reasons of acceptance of UI as normal with increasing age, not having time for examination, and uncomfortable with the UI.[8] In a study about the reasons of women with long-term UI for not seeking professional help, the most common reason identified was that the disorder was considered as a minor problem, which they felt they could cope with on their own.[20] Increasing the sensitivity of women in this regard is the best action that can be made to improve the quality of life of women.

Numerous risk factors of UI have been identified. UI is positively associated with high BMI, curettage history, history of other gynecological problems, and uterine/bladder/bowel prolapse in this study. In a study conducted by Danforth et al., increased age, BMI, and parity were positively associated with incontinence.[21] Aging, obesity, and smoking appear to have consistent causal relationships with the condition.[22] Obesity is shown as a common risk factor in all the studies. Like vaginal delivery, curettage history, history of other gynecological problems, and uterine/bladder/bowel prolapse causes the greatest damage to the pelvic floor and the mechanisms involved in urinary continence. Knowledge of the risk factors is of great importance in revealing these problems in people with these risk factors by showing a more sensitive approach to this disease.

There were some limitations to this study. Sampling methods were not used in this study, so the number of participants is insufficient to reflect the society. Further studies can be conducted with a wider and heterogenic population, with consideration of the aforementioned limitations.

CONCLUSION

UI is a disease that can be diagnosed and managed in primary care. The results of the present study suggest that although all the study participants were accessed from family health centers, the low awareness of the patients about the disease and the low rates of admission to health centers indicate that awareness-raising studies should be started as primary care. In providing comprehensive care to individuals and raising awareness about UI in the society, family physicians play an important role in improving public health.

Disclosures

Peer-review: Externally peer-reviewed.

Conflict of Interest: None declared.

Ethics Committee Approval: The local ethics committee at Hacettepe University, Faculty of Medicine approved the study (Approval date: Oct 22, 2019 and Approval number: GO19/1050-25-24) and informed consent was obtained from all participants. Then the participants were informed about the study and individual informed consent was obtained according to the principles of the Declaration of Helsinki.

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