Prevalence, Affecting Factors, and Impact of Urinary Incontinence on Quality of Life

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Abstract

Background: Urinary incontinence is an important problem that is frequently seen in women and affects women's health physically, psychologically, and socially and reduces women's quality of life.

Aim: This study was carried out to determine the incidence of urinary incontinence in women, its affecting factors, and its effect on quality of life.

Methods: This study was conducted descriptively and cross-sectionally in the gynecology polyclinic of a university hospital in Izmir. The sample of the study consisted of 304 volunteer women living with urinary incontinence. The data were collected with urinary incontinence form, individual description form, and urinary incontinence quality of life scale. The number and percentage distributions, means, standard deviation, *t*-test, and one-way analysis of variance were used to analyze the data.

Results: The mean age of the women was 47.61 ± 11.43, 27% of them had stress, 35.2% of urgency, and 37.8% of mixed urinary incontinence. The majority of women experience urinary incontinence 1-2 times a day (42.4%) and for 1-2 years (33.2%). The mean total score of women urinary incontinence quality of life scale was 79.57 ± 15.05 and the mean of the total scores obtained from the subscales was as follows: behavioral restriction was 27.03 ± 5.86, psychological effect was 36.14 ± 6.50, and restriction of social life was 16.39 ± 3.97. A statistically significant difference was found between urinary incontinence quality of life scale total score means of women and some factors affecting women's urinary incontinence (urgency and mixed urinary incontinence, duration, and frequency of urinary incontinence and such) ($P < .05$).

Conclusion: In the study, it was determined that all types of urinary incontinence are seen in one-third of women, are affected by many factors, and cause deterioration in the quality of life. Nurses should inquire urinary incontinence, which is frequently seen in women, know the factors affecting urinary incontinence, and screen women of all age groups. Thus, nurses will be able to take preventive measures regarding urinary incontinence, determine the factors affecting urinary incontinence, and provide necessary training and counseling by identifying risky women.

Keywords: Female, prevalence, quality of life, urinary incontinence

Introduction

Urinary incontinence (UI) is a social and hygienic problem that can occur in women of all age groups, which can cause deterioration in the quality of life and can significantly affect the family and social life of women physically and psychologically.[1-4] The UI is defined as "any type of UI or involuntary urine leakage" in the terminology report of the International Continence Society (ICS). In this report, ICS classified UI under 6 headings according to symptoms: stress, urgency, mixed, dormant, persistent, and other types of UI.[5] The most common types of UI are stress, urgency, and mixed type.[6,7]

Stress-type UI (SUI) is characterized by symptoms of "involuntary UI experienced during coughing, sneezing, exertion, or physical exercise and due to disruption of the pelvic floor support that the bladder and/or urethra" classified by ICS. Urgency-type UI (UUI) is defined as "involuntary loss of urine that occurs due to neurogenic or idiopathic overactivity of the detrusor muscle and occurs with or immediately after urgency." Mixed-type UI (MUI) is a combination of stress and urgency UI.[5] The prevalence of UI in women (5%-69%) is higher than in men; however, it increases with age.[2,8-14] Risk factors for UI are defined as age, smoking and alcohol use, chronic disease, chronic constipation

and urinary tract infection, menopause, hormone replacement therapy, parity, obesity, vaginal and interventions at delivery, previous hysterectomy, and pelvic prolapses.[1,2,8,15-17] As in our country, many women are at risk for UI. For this reason, most women's pelvic support structures are deteriorated, and the prevalence of UI and these problems seriously affect the quality of life increases with age.[2,11,14,18-21] The most important problems experienced by women with UI are not being able to maintain their social relationships, experiencing social isolation, feeling anxious about the possibility of incontinence at any moment, experiencing skin problems (irritation, sensitivity, redness, etc), feeling the need to constantly clean themselves, experiencing odor problems, and feeling incurable and insufficient. At the same time, although UI does not directly threaten women's lives, it can cause a decrease in self-confidence and social activities in women, deterioration in the quality of sexual life and sleep, a sense of embarrassment, depression, and negatively affect the quality of life.[4,18,20-26]

Since UI is a health problem that significantly affects the quality of life, the basic responsibilities of nurses are to prevent the development of incontinence and to take an active role in the care and treatment of women who have this problem. For this reason, nurses who aim to improve holistic care, human health, and quality of life should provide nursing care and education to women in line with preventive healthcare services. Nurses should know well the preventive practices and treatment options related to UI. Nurses need to integrate preventive health behaviors into women's lives and increase women's quality of life.[3,4,9,13,27,28] The UI is a serious problem that is frequently seen in women, progresses when preventive measures are not taken, limits the behavior of women in cases of not treated, has psychological effects, and negatively affects their social lives. Furthermore, UI impairs women's quality of life.[14,15,21] However, women ignore the problems related to UI they experience, do not perform preventive practices, do not receive treatment, and ignore the UI they experience. In this context, it is very important to investigate this problem, which is very common in women, to determine its incidence in different populations, to determine the factors affecting it, and to determine its negative impact on quality of life. This study determined the incidence of UI, its influencing factors, and its effect on the quality of life in Izmir, Western Türkiye. It is very important to determine the problems experienced by women with UI, to investigate the factors affecting UI, to diagnose UI, and to start the treatment as soon as possible in terms of increasing the quality of life of women.

Aim

The aim of this study is to determine the frequency of UI seen in women, its affecting factors, and its effect on the quality of life.

Questions of Research

- Does UI in women have an effect on the quality of life?
- Do the factors affecting UI in women have an effect on the quality of life?

Materials and Methods

Type of the Research

The research was conducted as a descriptive and cross-sectional study with women who applied to the gynecology polyclinic of a university hospital in Izmir, Western Türkiye, between June and December 2016.

Population and Sample of the Research

The population of the study consisted of 1100 women who applied to the gynecology polyclinic of a university hospital in Izmir in the last year. The sample population of the study was calculated with the known population sampling method (n=t2pq/d2 (N − 1)+t2pq) and was determined as approximately 285 women. A random sampling method was used to reach this number. The study was completed with 304 volunteer women who did not have any communication barriers, did not have life-threatening serious psychiatric illness, and answered "yes" to any of the first 4 questions in the UI form prepared by the researchers.

Data Collection Tools

The data of the study were collected with the "UI form," the "individual introduction form," and the "UI quality of life scale" (I-QOL). "UI form" and "individual introduction form" were prepared by the researchers.

Urinary Incontinence Form

The UI form was prepared by the researchers in line with the literature[2,16,18,22] and consists of 6 closed-ended questions to determine the presence, type, severity, and duration of incontinence in women.

Individual Introduction Form

The individual introduction form was prepared by the researchers in line with the literature.[2,16,23] and consists of a total of 29 questions, 13 open-ended and 16 closed-ended, aimed at determining the sociodemographic and obstetric characteristics of women and the factors affecting UI. To ensure the content and appearance validity of the UI form and the individual introduction form, the opinions of 5 faculty members who are experts in the field of Obstetrics and Gynecology were taken and the forms were rearranged in line with the suggestions made. In addition, to improve the comprehensibility and applicability of the forms, a preliminary application (pilot interview) was conducted with 10 women with UI and the questions that were difficult to understand in the forms were rearranged.

Urinary Incontinence Quality of Life Scale

The scale was developed by Wagner et al[29] to determine the quality of life of patients with UI. The Turkish validity and reliability of the scale were performed by Özerdoğan and Kızılkaya.[30] The Cronbach alpha value of the scale was 0.96. The answers in the scale are numbered from 1 "too much" to 5 "none" and are in a 5-point Likert type. The calculated total score is converted to a scale value from 0 to 100 for better understanding. The scale has 3 subgroups. These are the Behavioral Restriction (1., 2., 3., 4., 10., 11., 13., 20. items); Psychological effect (5., 6., 7., 9., 15.,16.,17., 21., 22. items); and Social Life Restriction (8.,12.,14.,18.,19. items). Higher scores indicate a better level of quality of life.[29,30] In this study, Cronbach's alpha value of the scale was 0.95.

Data Collection

Data were collected through face-to-face interviews with women who visit the gynecology polyclinic of the hospital and agreed to participate in the study. Filling out the forms took approximately 20-25 minutes. Before giving the forms, the researchers made explanations about the purpose of the study, the benefits to be obtained from the research, the time they would spend for the interview, and obtained verbal and written consent from the women. The data were

collected with the women in a suitable room on the floor of the gynecology polyclinic of the hospital.

Data Analysis

The analysis of the data that were obtained from the research was carried out in the Statistical Package for the Social Sciences 25.0 program. The Kolmogorov–Smirnov test was used to evaluate normality. Number (n), percentages (%), mean, standard deviation (SD), *t*-test, and one-way analysis of variance (ANOVA) test were used in the analysis of the data. The distribution of the data regarding the introductory information of the women in the study was given as number-percentage. One-way ANOVA test was used to compare the mean scores of the I-QOL according to UI types. One-way ANOVA test and *t*-test were used to compare the mean scores of the I-QOL according to the factors affecting UI. Statistical significance was given as $P < .05$.

Ethical Aspects of the Research

Ethical approval was obtained from the Ege University Faculty of Nursing Ethics Committee (Approval No: 137, Date: 25.11.2015) and permission from the Tepecik Training and Research Hospital where the study was conducted (Approval No: 67938315/604.02, Date: 30.12.2015). The purpose, nature, confidentiality, anonymity, and right of women to refuse to participate in the study were explained to the participants. Written and verbal consent was obtained from women who voluntarily agreed to participate in the study and met the inclusion criteria. It was stated that no fee will be charged and/or no fee will be paid from the women for research purposes. There was no conflict of interest between the researchers and the participants.

Results

A total of 304 women were included in this study. The mean age of the women was 47.61 ± 11.43 years (minimum: 18, maximum: 74). The majority of the women were married (88.5%), had a primary school level (36.5%), were nonworking (78.3%), had middle income (78.6%), had a nuclear family (67.1%), and lived in the city center (43.4%).

One-fifth of women did not delivery (19.7%). It was determined that 33% of the women did not have miscarriage, 43.2% did not have abortion, 16.8% had the first delivery age 25 years and over, and 11.5% had the last delivery age 25 years and under. Of the women, 25.4% had cesarean section delivery, 43% had deep episiotomy, 31.1% had deep laceration, 13.5% had labor that lasted 24 hours, and 44.7% delivered babies over 4000 g.

Of the women, 22% were smokers, 6.2% had used alcohol, 44.7% were at menopause, 32.6% were at menopause for 10 years or more, and 3.6% had used hormone replacement therapy (HRT). In this study, 41.1% of women had chronic disease, 42.4% had chronic drug use, 39.8% had chronic constipation, 29.6% had chronic cough, 31.9% had family history of incontinence or prolapse, 29.3% of women had a gynecological operation, 2% had received chemotherapy or radiotherapy, 65.5% had chronic urinary tract infection, and 34.9% had nocturnal UI as children.

The vast majority of women consumed tea (98%) and coffee (68.4%). It was determined that 39.1% of the women have not had an active sexual life, 2.7% had a sexual intercourse frequency of 1/day, and 32.6% were obese in the study.

In the study, I-QOL mean score was 9.57 ± 15.05 (minimum: 22; maximum: 210) and the psychological effect was 36.14 ± 6.50

Table 1. I-QOL Total and Subgroup Scores of Women

I-QOL	Mean ± SD	Score of scale
I-QOL behavioral restriction	27.03 ± 5.86	minimum: 8-maximum: 90
I-QOL psychological effect	36.14 ± 6.50	minimum: 9-maximum: 95
I-QOL social life restriction	16.39 ± 3.97	minimum: 5-maximum: 75
I-QOL total score	79.57 ± 15.05	minimum: 22-maximum: 210

I-QOL, urinary incontinence quality of life scale; SD, standard deviation.

(minimum: 9; maximum: 95), the behavioral restriction was 27.03 ± 5.86 (minimum: 8; maximum: 90), and the social life restriction was 16.39 ± 3.97 (minimum: 5; maximum: 75) (Table 1).

The women had SUI, UUI, and MUI 27%, 35.2%, and 37.8%, respectively, and it was determined that 3.6% of them had a duration of UI of 11 years or more and 24% of cases experienced UI 3 or more/days.

The difference between the duration and frequency of UUI, MUI, UI, and I-QOL total score of women was statistically significant ($P < .05$). While I-QOL total and subgroup mean scores of women living with SUI and UUI were higher, I-QOL total and subgroup mean scores were lower for women living with MUI. The I-QOL total and subgroup mean scores of women who had UI for 11 years or more and those who experienced UI for 3 or more/days were lower ($P < .05$). The distribution of the I-QOL total and subgroup mean scores according to UI findings and the analysis results obtained is shown in Table 2.

The factors affecting UI and I-QOL total and subgroup mean scores of women are compared in Table 3. Women who were 60 years or older, were illiterate, had low income, were at menopause, had used HRT, had chronic drug use, had chronic constipation and had chronic cough, had family history of incontinence or prolapse, had a gynecological operation, did not having an active sexual life, sexual intercourse frequency at 1/month, were obese, delivered, had miscarriage, had abortion, and whose last birth age was 35 years or older were lower I-QOL total and subgroup mean scores of women ($P < .05$).

Discussion

The UI is an important social and hygienic problem that affects women physically, emotionally, and socially at different levels and reduces the quality of life of women.[21] The I-QOL total score and psychological effect (36.14 ± 6.50), behavioral restriction (27.03 ± 5.86), and social life restriction (16.39 ± 3.97) subgroup mean scores were low for the women included in the study. In our study, it was determined that as the quality of life of women deteriorated, their behaviors were limited, their psychological effects increased, their social lives were negatively affected, and their quality of life decreased. In the study conducted by Demirci et al.[31] I-QOL total and subgroup mean scores of women in rest homes were lower than in our study. In the study of Çiloğlu and Zaybak,[35] I-QOL total scores of women were lower than in our study. On the contrary, in the study of Demirci et al.[32] Yılmaz et al.[33] Aylaz et al.[34] and Örsal et al.[26] I-QOL total and subgroup mean scores of women were higher than in our study. In the previous studies, I-QOL total and subgroup mean scores of women differed.

Table 2. Comparison of Women's Urinary Incontinence Findings and I-QOL Total and Subgroup Scores (n=304)

	n	%	Behavioral Restriction		Psychological Effect		Social Life Restriction		Total I-QOL	
			Mean ± SD	P	Mean ± SD	P	Mean ± SD	P	Mean ± SD	P
SUI										
Yes	82	27.0	28.15 ± 5.89	**.045**	36.42 ± 6.53	.648	17.18 ± 3.63	**.027**	81.76 ± 15.07	.125
No	222	73.0	26.62 ± 5.81		36.04 ± 6.50		16.09 ± 4.06		78.76 ± 14.99	
UUI								.299		
Yes	107	35.2	28.54 ± 4.99	**.000**	37.52 ± 5.75	**.004**	16.71 ± 3.89		82.77 ± 13.47	**.004**
No	197	64.8	26.22 ± 6.14		35.39 ± 6.77		16.21 ± 4.02		77.83 ± 15.59	
MUI								**.004**		
Yes	115	37.8	24.84 ± 5.97	**.000**	34.66 ± 6.87	**.002**	15.53 ± 4.15		75.03 ± 15.41	**.000**
No	189	62.2	28.37 ± 5.39		37.04 ± 6.11		16.91 ± 3.78		82.33 ± 14.16	
Duration of UI (years)										
Less than 1 year	67	22.0	29.83 ± 6.12	**.000**	38.14 ± 6.20	**.001**	18.56 ± 3.77	**.000**	86.55 ± 14.82	**.000**
	101	33.2	28.49 ± 5.22		37.11 ± 6.08		17.12 ± 3.66		82.74 ± 13.85	
1-2	82	27.0	25.41 ± 5.12		34.73 ± 6.33		15.31 ± 3.31		75.46 ± 13.25	
3-5	43	14.1	23.46 ± 5.30		34.00 ± 7.01		13.86 ± 3.79		71.32 ± 14.64	
6-10	11	3.6	22.72 ± 4.58		33.91 ± 6.99		14.27 ± 4.73		70.91 ± 15.06	
11 and above										
Frequency of UI										
Several times/week	102	33.6	28.32 ± 5.71	**.000**	36.24 ± 6.81	.158	17.34 ± 3.74	**.000**	81.91 ± 15.39	**.001**
1-2 times/day	129	42.4	27.52 ± 5.98		36.75 ± 6.23		16.60 ± 3.96		80.88 ± 14.80	
3 or more/day	73	24.0	24.38 ± 5.06		34.93 ± 6.45		14.68 ± 3.82		74.00 ± 13.74	

I-QOL, urinary incontinence quality of life scale; MUI, mixed urinary incontinence; SD, standard deviation; SUI, stress urinary incontinence; UUI, urgency urinary incontinence; .

It can be said that this difference stems from the differences in age groups of the women, how they define UI and perceive the problem they experience with UI.

In studies in the literature, the prevalence of UI among women varied in a wide range of 26.6%-88%.[2,31,32,34-37] In our study, 27% of the women were experiencing SUI, 35.2% were experiencing SUI, and 37.8% were experiencing MUI. In the previous studies, it was stated that women experienced SUI in the range of 29%-44.8%, UUI in the range of 18.5%-44.8%, and MUI in the range of 2.6%-52.5%.[2,36-40] It is thought that the differences in the prevalence of UI in the studies are caused by the extent to which UI affects the quality of life of women, the differences in the sociodemographic data of the women in the sample group, and the interventions and practices for diagnosing UI in these regions.

In our study, while the I-QOL total and subgroup mean scores of women with SUI and UUI were higher, those of women with MUI were lower. In our study, it was determined that the difference between the duration and frequency of experiencing UUI, MUI, UI, and I-QOL total mean scores was statistically significant (P < .05). It was found that the quality of life of women with MUI, 11 years or more of UI, and 3 or more/days of UI were negatively affected and their I-QOL total mean

scores were found to be lower. In the study, the mean scores of quality of life of women who experienced SUI and SUI were higher. Some studies in the literature were similar to our study.[21,33,35] In a study, however, the I-QOL total scores of women did not differ significantly according to incontinence types.[39] In the study, it can be said that the differences between the mean scores of quality of life are related to how women perceive the severity of UI, how much they experience UI and how often they experience it, and how it affects their lives.

Women who aged 60 or older, were illiterate, had low income, were at menopause, had used HRT, had chronic drug use, had chronic constipation and had chronic cough, had family history of incontinence or prolapse, had gynecological operation, did not having an active sexual life, sexual intercourse frequency at 1/month, were obese, had delivery, a miscarriage and abortion history, and whose last birth age was 35 years or older were lower I-QOL total and subgroup mean scores of women and the difference between them was significant (P < .05).

In the previous studies; there was a statistically significant difference between women's age, menopausal status,[33] education level, number of children, frequency, amount and type of incontinence,[34] age, amount of incontinence and increase in BMI,[41] age, with chronic

Table 3. Comparison of Women's Factors Affecting Urinary Incontinence and I-QOL Total and Subgroup Scores (n=304)									
			Behavioral Restriction		Psychological Effect		Social Life Restriction		Total I-QOL	
	n	%	Mean ± SD	P	Mean ± SD	P	Mean ± SD	P	Mean ± SD	P
Age										
‹29	18	5.9	31.50 ± 5.72	**.000**	40.33 ± 3.48	**.002**	20.11 ± 2.34	**.000**	91.94 ± 9.69	**.000**
30-39	69	22.7	29.68 ± 5.36		37.26 ± 6.52		18.01 ± 3.54		84.95 ± 14.49	
40-49	80	26.3	27.23 ± 5.28		36.23 ± 6.29		16.66 ± 3.58		80.13 ± 13.92	
50-59	84	27.6	25.80 ± 5.41		35.75 ± 6.19		15.28 ± 3.63		76.84 ± 13.97	
›60	53	17.4	23.73 ± 5.75		33.75 ± 7.18		14.35 ± 4.33		71.84 ± 15.60	
Level of education										
Illiterate	67	22.0	25.40 ± 6.30	**.000**	35.43 ± 6.36	**.032**	15.35 ± 4.34	**.000**	76.19 ± 16.00	**.001**
Primary school	111	36.5	26.40 ± 5.18		36.24 ± 6.20		16.04 ± 3.69		78.69 ± 13.53	
Middle school	44	14.5	26.61 ± 6.34		34.63 ± 7.29		16.20 ± 4.36		77.45 ± 16.69	
High school	57	18.8	28.96 ± 5.71		36.42 ± 6.89		17.15 ± 3.72		82.54 ± 15.15	
University	25	8.2	30.60 ± 4.75		39.64 ± 4.61		19.28 ± 2.26		89.52 ± 10.61	
Income										
Low	49	16.1	23.81 ± 5.99	**.000**	32.26 ± 7.52	**.000**	15.44 ± 3.93	.127	71.53 ± 15.74	**.000**
Middle	239	78.6	27.84 ± 5.64		37.18 ± 5.94		16.63 ± 3.96		81.66 ± 14.36	
High	16	5.3	24.81 ± 4.99		32.43 ± 5.59		15.68 ± 4.01		72.93 ± 13.33	
Menopause status										
Yes	136	44.7	24.83 ± 5.48	**.000**	34.56 ± 6.78	**.000**	14.88 ± 4.01	**.000**	74.29 ± 14.82	**.000**
No	168	55.3	28.82 ± 5.56		37.42 ± 5.99		17.60 ± 3.51		83.85 ± 13.86	
HRT use										
Yes	11	3.6	23.81 ± 5.67	.082	28.63 ± 7.99	**.009**	15.27 ± 3.28	.279	67.72 ± 15.00	**.022**
No	293	96.4	27.16 ± 5.84		36.42 ± 6.28		16.43 ± 3.99		80.02 ± 14.89	
Chronic drug use										
Yes	129	42.4	25.68 ± 5.99	**.001**	35.69 ± 6.50	.304	16.19 ± 4.22	.465	77.58 ± 15.17	**.048**
No	175	57.6	28.03 ± 5.58		36.47 ± 6.51		16.53 ± 3.79		81.04 ± 14.82	
Chronic constipation										
Yes	121	39.8	25.21 ± 5.55	**.000**	34.93 ± 6.60	**.009**	15.19 ± 3.94	**.000**	75.34 ± 14.72	**.000**
No	183	60.2	28.24 ± 5.77		36.94 ± 6.32		17.18 ± 3.80		82.37 ± 14.64	
Chronic cough										
Yes	90	29.6	24.38 ± 5.66	**.000**	33.53 ± 6.67	**.000**	14.58 ± 3.64	**.000**	72.51 ± 14.47	**.000**
No	214	70.4	28.15 ± 5.59		37.24 ± 6.12		17.14 ± 3.87		82.54 ± 14.30	
Incontinence or prolapse in family										
Yes	97	31.9	25.43 ± 5.43	**.001**	34.16 ± 7.08	**.001**	15.44 ± 3.86	**.004**	75.04 ± 14.95	**.000**
No	207	68.1	27.79 ± 5.92		37.07 ± 6.01		16.83 ± 3.96		81.70 ± 14.65	
Gynecological operation										
Yes	89	29.3	25.03 ± 5.84	**.000**	34.21 ± 6.61	**.001**	15.19 ± 3.93	**.001**	74.43 ± 15.01	**.000**
No	215	70.7	27.86 ± 5.68		36.94 ± 6.30		16.88 ± 3.89		81.70 ± 14.58	

(*Continued*)

Table 3. Comparison of Women's Factors Affecting Urinary Incontinence and I-QOL Total and Subgroup Scores (n = 304) (*Continued*)

	n	%	Behavioral Restriction Mean ± SD	P	Psychological Effect Mean ± SD	P	Social Life Restriction Mean ± SD	P	Total I-QOL Mean ± SD	P
Active sexual life (n=185)										
Yes	185	60.9	28.08 ± 5.34	.000	36.77 ± 5.96	.044	16.97 ± 3.78	.002	81.83 ± 13.83	.002
No	119	39.1	25.42 ± 6.28		35.16 ± 7.18		15.47 ± 4.11		76.06 ± 16.21	
Sexual intercourse frequency (n=185)										
1/day	5	2.7	30.60 ± 7.56	.000	40.40 ± 4.50	.000	20.40 ± 2.88	.000	91.40 ± 11.80	.000
1/week	54	29.2	28.57 ± 5.42		36.61 ± 6.44		17.61 ± 3.85		82.79 ± 14.45	
2/week	44	23.8	26.40 ± 4.74		35.52 ± 5.19		15.13 ± 2.84		77.06 ± 11.31	
3-4/week	66	35.7	29.77 ± 4.30		38.92 ± 4.31		17.74 ± 3.69		86.43 ± 11.49	
1/month	16	8.6	23.25 ± 6.15		30.75 ± 7.59		15.68 ± 4.33		69.68 ± 16.74	
BMI										
Low	22	7.2	30.95 ± 4.25	.000	40.18 ± 4.46	.016	18.13 ± 3.89	.004	89.27 ± 11.69	.001
Normal	119	39.1	27.56 ± 6.04 27.54 ± 5.66		35.79 ± 6.93		16.85 ± 3.74		80.21 ± 15.67	
Overweight	64	21.1	25.21 ± 5.53		36.53 ± 6.09		16.57 ± 3.79		80.65 ± 14.09	
Obese	99	32.6			35.41 ± 6.35		15.32 ± 4.16		75.94 ± 14.55	
Delivery										
Yes	244	80.3	26.16 ± 5.47	.000	35.45 ± 6.45	.000	15.72 ± 3.79	.000	77.33 ± 14.30	.000
No	60	19.7	30.60 ± 6.09		38.96 ± 5.97		19.11 ± 3.54		88.68 ± 14.67	
Miscarry (n=94)										
Yes	63	67.0	26.17 ± 5.87	.007	35.58 ± 6.33	.001	16.07 ± 4.28	.001	77.84 ± 14.94	.001
No	31	33.0	29.77 ± 5.89		39.41 ± 4.60		19.16 ± 3.82		88.35 ± 12.88	
Abortion (n=74)										
Yes	42	56.8	26.23 ± 5.56	.002	35.66 ± 5.82	.001	16.61 ± 4.61	.013	78.52 ± 14.35	.001
No	32	43.2	30.40 ± 5.37		39.65 ± 4.45		18.96 ± 3.28		89.03 ± 12.16	
Last delivery age (n=244)										
Under 25 years	28	11.5	25.57 ± 5.43		34.46 ± 7.64		16.00 ± 3.68		76.03 ± 15.03	
25-29 years	75	30.7	26.89 ± 5.28	.002	35.98 ± 5.81	.031	16.08 ± 3.68	.030	78.96 ± 13.42	.005
30-34 years	86	35.2	27.19 ± 5.25		36.55 ± 6.20		16.17 ± 3.92		79.93 ± 14.10	
35 years and older	55	22.5	23.85 ± 5.52		33.49 ± 6.66		14.38 ± 3.55		71.72 ± 14.15	

HRT, hormone replacement theraphy; SD, standard deviation; I-QOL, urinary incontinence quality of life scale.

disease and MUI,[35] and I-QOL total and subgroup mean scores of women. In the study of Dursun et al[36] with 6473 women, it was reported that the prevalence of UI increased in women who were 40 years and older, had 5 or more children, and had a low education level. In the study of Demir and Erbesler,[41] it was stated that there was no statistically significant difference between women's quality of life according to their education level, presence of chronic disease, UI type, number of births, duration of UI, and frequency of UI. Similar to our study, in the literature, it was stated that UI negatively affects sexual life and quality of life.[24,42-45] Increasing age of women

causes a decrease in pelvic muscle strength. In addition, increasing age causes chronic diseases, the symptoms and severity of the diseases, the risk of experiencing gynecological operations, the number of births and hormonal irregularities, decrease in the frequency of sexual intercourse, change in the quality of sexual life with UI that can affect women's quality of life both physically and psychologically. In addition, it is thought that low education levels and low-income levels may negatively affect women's access to health services and care, even if they have problems with UI. The UI is a medical problem that causes physical, psychological, and social problems in women,

affecting sexual life and quality of life. It is necessary for nurses to know the factors affecting UI, to include women from all age groups in screening programs, and to provide training and counseling on preventive practices. Thus, early diagnosis and treatment will be provided, and the negative impact of UI on quality of life will decrease. In the study, determining the prevalence of UI in women and the factors affecting it and examining its effect on the quality of life show the extent of the problem and reveal that UI is a priority problem that should be queried.

Limitations of Study

The findings obtained from the study are limited only to the findings of the women who came to the gynecology polyclinic and agreed to participate in the study at the time of application of the data collection tools, and the results cannot be generalized.

Conclusion

In the study, it was concluded that one-third of women experience one of the UI types. It was determined that the type, duration, and frequency of UI in women affected their quality of life. In addition, it was determined that some sociodemographic (age, education level, and income level); obstetric (delivery, miscarriage, abortion, and last birth age); health history (menopausal status, HRT use, chronic drug use, chronic constipation, chronic cough, incontinence or prolapse in the family, surgery related to gynecological diseases, and obesity); and sexual life (active sex life and frequency of sexual intercourse) characteristics of women negatively affect their quality of life with UI. The UI is a problem that is frequently experienced in women, may cause deterioration in the quality of life, and may lead to physical, psychological and social problems. Health professionals should be more careful in the implementation of preventive measures, early diagnosis and treatment of this underestimated, neglected and increasing prevalence day-by-day problem, and it is necessary for every woman of reproductive age to question the affecting factors. Nurses, who are in effective communication with women in every field and provide holistic care at every step of the health system, will provide education and counseling related to UI to all women, which will increase women's awareness and contribute to the improvement of their quality of life. However, there is a need for large-scale, quantitative studies that measure UI quality of life, including different sample groups, and qualitative studies that show how women's UI is affected.

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