

## Prevalence of Urinary Incontinence and Coping Attitudes in Women With and Without Incontinence in Turkey

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### ABSTRACT

**Aim:** Coping strategies are thought to be important in dealing with a problem that affects women's well-being and quality of life, such as incontinence (UI). This study was done to investigate the incidence of UI and coping attitudes in women without and with UI in Turkey.

**Material and Methods:** The descriptive study was carried out with 417 women who were applied in a Healthy Life Center located in Turkey. The study data were obtained using the International Consultation on Incontinence Questionnaire (Short Form) (ICIQ-SF) and Coping Orientations to Problems Experienced (COPE).

**Results:** It was found that 34.8% of women had UI. It was determined that women used more common problem and emotion-focused coping attitudes" which are functional coping attitudes. It was found that women with UI used "withdrawal" which are problem-functional coping attitude "acceptance" which are emotion-functional coping attitude and "denial" and "behavioral disengagement" which are dysfunctional coping attitudes more than women without UI.

**Conclusion:** It was determined that one third of the women had UI and they used more common problem-and emotion-focused coping attitudes. Although urinary incontinence has a chance of being treated, it is a condition that has major physical, psychosocial and economic effects on society, and is often reported to the health institution by women, and treatment is delayed.

**Keywords:** Urinary incontinence; cope; coping attitudes; women; life of quality.

## İnkontinansı Olan ve Olmayan Kadınlarda Başa Çıkma Tutumlarının ve İnkontinans Sıklığının İncelenmesi

### ÖZ

**Amaç:** Başa çıkma stratejilerinin, inkontinans gibi yaşam kalitesini etkileyen durumlarda önemli olduğu düşünülmektedir. Bu çalışmanın amacı, inkontinansı olan ve olmayan kadınların başa çıkma tutumlarının ve inkontinans sıklığının incelenmesidir.

**Gereç ve Yöntemler:** Kesitsel-tanımlayıcı tipteki çalışma, Türkiye'nin güneybatısında yer alan bir Sağlıklı Yaşam Merkezi'ne başvuran 417 kadın ile gerçekleştirilmiştir. Çalışma verileri, Uluslararası İnkontinans Anketi Kısa Formu (ICIQ-SF) ve Başa Çıkma Tutumlarını Değerlendirme Ölçeği (BÇTDÖ) kullanılarak toplandı.

**Bulgular:** Çalışmaya katılan kadınların %34.8'inde inkontinans olduğu ve stres tipi inkontinansın daha fazla görüldüğü bulunmuştur. İnkontinanslı olan ve olmayan kadınlar arasında sorunlarla başa çıkma tutumlarının benzer olduğu saptanmıştır. İnkontinanslı olan ve olmayan kadınlar arasında sorunlarla başa çıkma tutumlarının benzer olduğu ve kadınlarının daha çok işlevsel olan duygu odaklı ve problem odaklı tutumlarını kullandıkları saptanmıştır. İnkontinanslı kadınlarının işlevsel başa çıkma tutumlarından problem odaklı olarak "geri durma" tutumunu; duygu odaklı olarak "kabullenme" tutumunu ve işlevsel olmayan başa çıkma tutumu olarak "inkar" ve "davranışsal olarak boş verme" tutumlarını, inkontinans olmayan kadınlara göre daha fazla kullandığı saptanmıştır.

**Sonuç:** Kadınların, yaklaşık üçte birinde inkontinans olduğu ve kadınlarının problem odaklı ve duygu baş etme yöntemlerini daha çok kullandıkları saptanmıştır. Üriner inkontinans tedavi edilme şansı olmasına rağmen topluma majör fiziksel, psikosozyal ve ekonomik etkileri bulunan, kadınlar tarafından çoğu zaman sağlık kurumuna rapor edilmekte ve tedavi olmakta gecikilen bir durum olarak karşımıza çıkmaktadır.

**Anahtar Kelimeler:** İnkontinans; başa çıkma; tutum; kadın; yaşam kalitesi.

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## INTRODUCTION

Urinary incontinence (UI) is a condition that causes hygienic and social problems in the individual and may negatively affect the quality of life of women (1). It is estimated that UI affects 200 million individuals globally and will affect more than 423 million people by 2018 (2). UI is a concern that affects more than half of all women and it is often seen as a part of the aging process and an untreated consequence by women (3). Although UI is not a life-threatening problem for women, it is a condition that causes distress due to the state of being constantly wet, discomfort and irritation. Furthermore, UI causes negative psychosocial effects in women such as bad smell, feeling dirty, stigma, embarrassment, sexual problems, low self-esteem and deterioration in body image (2, 4-5). It has been stated that women avoid social activities such as shopping, sports, and visiting friends because they think that they can smell bad, and they see themselves as defective and incomplete, and as a result, they experience loneliness, isolation, depression and problems (6, 7). Because of these problems, UI is seen as a public health problem and is seen as a difficult experience for millions of people around the world, especially for women (8).

In the last decade, several studies have demonstrated that personal and social resources can cause improvement or impairment in the quality of life of individuals. Coping strategies of individuals are accepted among these resources (9-11). "Coping" encompasses all cognitive, emotional, and behavioral responses that the individual employs in order to resist and endure the events or factors that create stress for her (12-13). Clinical guidelines emphasize that the interventions should be patient-centered as individual differences can significantly impact coping mechanisms and treatment outcomes (1). The appropriate coping approach adopted by an individual toward the disease or illness allows them to adapt to their treatment (14). It is reported that women with UI have higher anxiety levels, lower self-confidence, and are more socially isolated than those without UI symptoms, and therefore may have inadequacies in their coping attitudes (15-16).

The number of studies examining coping attitudes in women with UI is quite limited. Incontinence studies generally have focused on women's quality of life and sexuality. Therefore, it is considered that determining the coping methods of women with UI it will shed light on the strategies to treating and preventing UI.

This study was done to investigate the incidence of UI and coping attitudes in women without and with UI in Turkey.

## MATERIAL AND METHODS

### Study Design

The descriptive, cross-sectional study was done between April 30, 2019 and October 30, 2019 with 417 women who were applied in a Healthy Life Center located in the southwest of Turkey.

### Participants

The inclusion criteria were limited to those women who were over 18 years old, were volunteering to participate, who speaks Turkish language. The exclusion criteria were as follows: having had a physical or mental disability. The number of samples was calculated using the sample size determination method for a known population (17). Of the 450 questionnaires administered to potential participants,

33 were turned back incomplete and so they were not included in the data analysis. The response rate was 93.0%.

### Measures

As data collection tools were used an information form, International Consultation on Incontinence Questionnaire (Short Form) (ICIQ-SF) and Coping Orientations to the Problems Experienced (COPE). The information form were included questions developed by the researchers on various socio-demographic characteristics such as age, gender and incontinence-related in line with the literature (15, 18-21).

**International Consultation on Incontinence Questionnaire (Short Form) (ICIQ-SF):** It was developed to evaluate presence of UI by Avery et al. The scale consists of four dimensions. In the first dimension of the scale, the frequency of UI, the amount of UI in the second dimension, and the effect on daily life of UI in the third dimension are questioned. The fourth dimension of the scale is questioned conditions causing incontinence. In the evaluation, the first three dimensions of the scale is scored. According to the responses given to the fourth dimension, the type of UI of individuals is determined and it is not scored. In the evaluation, the scores of the sub-dimension can be evaluated separately. In evaluating the effect on quality of life of UI, the scores of the three dimensions are summed. In general, it is recommended to determine a single score from the three dimensions are summed. It was validated in Turkish in 2004 by Cetinel et al. The scale score ranges from 0 to 21; a low score indicates that UI has little effect on quality of life, while a high score indicates that the high score indicates that it greatly affects the quality of life (22). The Cronbach's alpha value of this study of the ICIQ-SF was 0.86.

**Coping Orientations to Problems Experienced (COPE):** The scale was adapted into Turkish by Ağargün et al. in 2005, is a self-report scale consisting of 60 questions and 15 subscales. The total score for each question ranges from 1 to 4. These answers are as follows; 1=I haven't been doing this at all; 2=I do very little like this; 3=I do this moderately; 4= I've been doing this a lot. Five of these coping attitudes are problem-focused, the other five are emotion-focused, and the other five are classified as the least useful, that is, dysfunctional coping attitudes (23). The Cronbach's alpha value of this study of the COPE was 0.88.

Before the data collection, the purpose of the study was stated to the women included in the sample, and they were informed to fill in the "Informed Consent Form", "Information Form" and the scales and women had been stated that participation in the study was voluntary. The data collection forms were applied to the women included in the sample of the study between May and October 2019 and it took approximately 15-20 minutes for each participant to fill the form and scales. Women completed the form and scales by themselves.

### Statistical Analysis

The data of the study were analyzed using the SPSS (IBM SPSS Statistics version 22.0). The descriptive statistics were used in data analysis. The Kolmogorov-Smirnov test was used to analyze the normality of data. In order to analyze the difference between independent variables and scale total score, Student's t-test was used to analyze two

independent groups in the analysis of normally distributed data, and one-way analysis of variance (One-way ANOVA) was used for comparing three or more groups. Chi-square test was used to compare categorical variables. The significance level was accepted at  $p < 0.05$ .

## RESULTS

In this study, the mean score of the ICIQ-SF was  $1.96 \pm 0.85$  (Min=0, Max=21). It was found that 34.8% of women had UI and stress UI was more common. It was determined that of them, 13.4% had UI when coughing or sneezing, 9.4% had UI before reaching the toilet, 6.0% had UI before reaching the toilet + when sneezing or coughing, 2.6% had UI when getting dressed after finished urinating, 2.4% had UI when physically active or exercising, and 1.0% always had UI. The mean score of the ICIQ-SF was found to be  $2.30 \pm 0.33$  (Min=0, Max=10) (Table 1).

In this study, the mean score of the COPE scale was  $152.26 \pm 20.87$  (Min=60, Max=240). The mean score of the COPE scale of women without and with UI were determined to be  $152.26 \pm 20.85$  and  $152.25 \pm 20.91$ , respectively, and there was no statistical difference ( $p > .05$ ). Also, it was found that the coping attitudes of women without and with UI were similar, and that women used more common problem- and emotion-focused coping which are functional coping attitudes. It was found that women with UI used "withdrawal" which are problem-functional coping attitude, "acceptance" which are

emotion-functional coping attitude and "denial" and "behavioral disengagement" which are dysfunctional coping attitudes more than women without UI (Table 2).

**Table 1.** Distribution of the mean International Consultation on Incontinence Questionnaire scores (n=417)

Domain Items	n	%
<b>How often do you leak urine?</b>		
Never	272	65.2
once times a week or less	101	24.2
two or three times a week	20	4.8
once a day	8	1.9
few times a day	12	2.9
Always	4	1.0
<b>How much does urine leak?</b>		
Never	272	65.2
small	130	31.2
moderate	11	2.2
Large	4	1.4
<b>When do you leak urine?</b>		
Never	272	65.2
when coughing or sneezing	56	13.4
before reaching the toilet	39	9.4
before reaching the toilet/when sneezing or coughing	25	6.0
when getting dressed after finished urinating	11	2.6
when physically active or exercising	10	2.4
always	4	1.0
<b>ICIQ-SF Score</b>	$1.96 \pm 0.85$	(0-21)
<b>Generally, how much does UI affect your everyday life (n=145)</b>	$2.30 \pm 0.33$	(0-10)

**Table 2.** Distribution of the mean scores from COPE scale according to presence of urinary incontinence (n=417)

Domain items	Women with UI (n=145)	Women without UI (n=272)	TOTAL	
	Mean±SD	Mean±SD	Mean±SD	
<b>Problem-Focused Coping Attitudes</b>				
Planning	128.34±25.63	130.06±24.21	129.85±24.70	t=-.912 p=0.362
Active coping	121.86±22.47	123.34±22.34	122.28±22.37	t=-.644 p=0.520
Instrumental support	118.06±32.47	120.73±28.88	119.80±30.16	t=-.859 p=0.391
Suppressing other occupations	106.5±21.22	109.77±22.53	108.65±22.11	t=-1.421 p=.156
Withdrawal	99.17±23.34	95.40±26.78	96.71±25.67	t=1.429 p=0.154
<b>Emotion-Focused Coping Attitudes</b>				
Positive reframing	132.96±19.65	132.68±21.22	132.78±20.67	t=.132 p=0.895
Emotional support	113.03±31.45	114.96±29.67	114.29±29.67	t=-.619 p=0.536
Religion	116.55±38.14	117.68±37.41	117.29±37.62	t=-.292 p=0.770
Acceptance	107.51±28.54	101.72±28.15	103.74±28.39	t=1.990 p=0.047*
Humor	81.31±31.31	81.14±31.04	81.19±31.10	t=.053 p=0.958
<b>Dysfunctional Coping Attitudes</b>				
Focusing on the problem and venting	116.96±27.24	116.14±25.22	116.42±25.91	t=.310 p=0.757
Mental disengagement	94.69±29.20	96.83±26.13	96.09±27.22	t=-.767 p=0.443
Denial	69.93±25.93	65.66±26.91	67.14±27.60	t=1.507 p=0.133
Behavioral disengagement	66.41±26.10	64.81±25.52	65.37±25.70	t=.604 p=0.546
Substance use	49.24±12.73	50.95±13.17	50.36±13.00	t=-.724 p=0.469
<b>COPE</b>	$152.26 \pm 20.85$	$152.25 \pm 20.91$	$152.26 \pm 20.87$	t=.004 p=0.997

The distribution of the COPE and ICIQ-SF mean scores according to sociodemographic and some variables of the participants was presented in Table 3.

**Table 3.** Comparison of the mean scores obtained by the participants from COPE and ICIQ-SF scores by their sociodemographic and some variables (n=471)

Variables	Presence of Urinary Incontinence						X <sup>2</sup> /p	COPE Scores	
	Yes		No		Total			Mean±SD	p
Age group	n	%	n	%	n	%			
18-28	26	17.9	99	36.4	125	30.0	X <sup>2</sup> =48.535 p=0.001*	150.90±20.79	F=1.095 p=0.351
29-39	24	16.6	83	30.5	107	25.7			
40-50	49	33.8	64	23.5	113	27.1			
51 and above	46	31.7	26	9.6	72	17.3		152.02±21.77	
150.50±23.02									
<b>Married status</b>									
Single	36	24.8	101	37.1	137	32.9	X <sup>2</sup> =6.491 p=0.011*	151.84±19.81	t=-.285
Married	109	72.2	171	62.9	280	67.1		152.46±21.40	p=0.776
<b>Educational level</b>									
Primary school	24	16.6	18	6.6	42	10.1	X <sup>2</sup> =16.260 p=0.001*	155.12±20.51	F=.338 p=0.798
Middle School	11	7.6	8	2.9	19	4.6			
High school	19	13.1	47	17.3	66	15.8			
University	91	62.8	199	73.2	290	69.5		151.58±24.15	
151.11±24.12									
152.26±20.87									
<b>Working status</b>									
Yes	88	60.7	198	72.8	286	68.6	X <sup>2</sup> =6.432 p=0.011*	152.32±20.57	t=.094
No	57	39.3	74	27.2	131	31.4		152.11±21.59	p=0.925
<b>Income level</b>									
Income more than expenses	29	20.0	58	21.3	87	20.9	X <sup>2</sup> =4.009 p=0.135	154.06±20.41	F=.486 p=0.617
Income is equal to expenses	104	71.7	204	75.0	308	73.8			
Income less than expenses	12	8.3	10	3.7	22	5.3		151.66±21.42	
153.12±24.55									
<b>The longest lived place</b>									
Province	96	66.2	161	59.2	257	61.6	X <sup>2</sup> =2.025 p=0.363	150.46±20.89	F=2.722 p=0.067
District	38	26.2	88	32.4	126	30.2			
Town/village	11	7.6	23	8.5	34	8.2		155.70±19.42	
153.12±24.55									
<b>Status of birth</b>									
Yes	113	77.9	155	57.0	268	64.3	X <sup>2</sup> =18.069 p=0.001*	152.76±20.86	t=.657
No	32	22.1	117	43.0	149	35.7		151.36±20.91	p=0.512
<b>Status of menopause</b>									
Yes	58	62.4	35	12.9	93	22.3	X <sup>2</sup> =40.181 p=0.001*	148.98±22.35	t=-1.72
No	87	60.0	237	87.1	324	77.7		153.20±20.36	p=0.086
<b>Presence of a chronic disease</b>									
Yes	61	42.1	53	19.5	114	27.3	X <sup>2</sup> =24.284 p=0.001*	151.85±21.99	t=-.186
No	84	57.9	219	80.5	303	72.7		152.41±20.46	p=0.852
<b>Cigarette</b>									
Yes	41	28.3	74	27.2	115	27.6	X <sup>2</sup> =.054 p=.816	151.95±21.37	t=-.186
No	104	71.7	198	72.8	302	72.4		152.37±20.70	p=.852
<b>Alcohol</b>									
Yes	46	31.7	83	30.5	129	30.9	X <sup>2</sup> =.065 p=.799	152.19±22.47	t=-.047
No	99	68.3	189	69.5	288	69.1		152.28±20.14	p=.967
<b>BMI</b>									
Normal	62	42.8	171	62.9	233	55.9	X <sup>2</sup> =17.569 p=0.001*	150.80±20.34	F=1.341 p=0.067
Overweight	46	31.7	66	24.3	112	26.9			
Obese	37	25.5	35	12.9	72	17.3		153.71±21.80	
154.71±20.97									
<b>Having a gynecological operation</b>									
Yes	20	13.8	30	11.0	50	12.0	X <sup>2</sup> =.685 p=0.408	152.84±18.98	t=.210
No	125	86.2	242	89.0	367	88.0		152.18±21.13	p=0.833
<b>Having frequent urinary tract infections</b>									
Yes	36	24.8	39	14.3	75	18.0	X <sup>2</sup> =7.055 p=0.008*	155.67±25.43	t=1.565
No	109	75.2	233	85.7	342	82.0		151.51±19.69	p=0.118

\*p < 0.05; t = t Test; F = analysis of variance, X<sup>2</sup> = Chi-square.

## DISCUSSION

In this study, the incidence of incontinence in women and the coping attitudes of women were examined. In the study, it was determined that roughly one-third of the women had UI and stress UI was more common. It was found that women had mild amount of UI and it was affected their daily lives at a low level. Our study results were coherent with the findings of other studies (19, 24-25). In the study conducted by Alizadeh and colleagues (39) were found that the overall prevalence of urinary incontinence, stress urinary incontinence was 39.5%; 20.6% respectively. Our study results were similar its results.

In the study, it was found that the coping attitudes of women without and with UI were similar, and that women used more common problem- and emotion-focused coping which are functional coping attitudes. The studies showed that coping attitudes had a significant role in the health outcomes of diseases and illnesses (10, 26-27). Similar to our study, Grano et al. (10) found that individuals with UI used more common problem-focused and emotion-focused coping methods, and used less dysfunctional coping attitudes. In another study, it was determined that women suffering from UI developed behavioral adaptations and coping attitudes to adapt to the discomfort that UI would bring and to reduce the effect of symptoms (9). In addition, the studies determined that women saw incontinence as a normal part of aging, did not see the symptoms as abnormal, and thought that they had to cope with incontinence on their own (3, 10-11).

In the study, it was found that women with UI used "withdrawal" which are problem-functional coping attitude, "acceptance" which are emotion-functional coping attitude more than women without UI. Although studies were reported that women with UI used more common withdrawal and acceptance coping attitudes to reduce intense stress, it was reported that it might have negative consequences, as it makes the individual passive, hindering the ability to take action and seek solutions (10, 28). A study was reported that the women's use of withdrawal and accepting which are functional coping attitudes was because they both accept and avoid UI related problems. Because women's feeling of hiding the UI and being ashamed of the UI was reported as the biggest obstacle to seeking help (29). Studies conducted on UI indicated that women had more negative attitudes towards UI, they did not seek professional help for the precaution and treatment of incontinence for various reasons such as embarrassment, stigma and disregard (18, 30-34), and that they exhibited more coping behaviors such as keeping feet warm, applying heat to the perineum, decreasing the size of daily drinking water, using pads, cloth pads, limiting physical activity, avoiding social life and praying (9). Although Saleh et al. (31) found that although women with UI had positive attitudes, they also found that women with positive attitudes did not seek health services in practice. The results point to the require to investigate the reasons for women's use of "withdrawal and accepting" functional coping attitudes.

In this study, it was determined that women with UI used "denial" and "behavioral disengagement" which are dysfunctional coping attitudes more than women without UI. Studies were reported that women with UI were more

likely to use dysfunctional "denial" and "behavioral disengagement" coping attitudes, therefore, the solution to the problem was led to the conceptualization as difficult or impossible by women, and, as a result, it was increased mental distress (10, 35). The fact that women with UI who participated in our study used more withdrawal, acceptance, and behavioral disengagement coping attitudes may be because they were hopeless about UI. Similarly, a study was reported that the attitude of behavioral disengagement coping attitude was associated with hopelessness (36). Incorrect coping attitudes, especially dysfunctional attitudes, can make the solution of the problem even more difficult and complex, and lead to a reduction in their quality of life (13, 37). In addition, it was stated that neglected UI increased the negative coping attitudes towards seeking professional help (38). In this case, ignored UI can lead to increased UI severity and adverse health outcomes (37).

The study is a questionnaire study. It is not free from recall biases. Because it is a cross-sectional study, longitudinal studies are needed to better explain the observed associations and assess how coping attitudes may change over time. The sample included a research location and 417 women; so, the finding cannot be generalized. In addition, another limitation of the study most women had mild and stress type incontinence, its results cannot be generalized in women for all types and degrees of incontinence.

## CONCLUSION

It was determined that roughly one-third of the women had UI and stress UI was more common. It was found that women had mild amount of UI and it was affected their daily lives at a low level. It was determined that the coping attitudes of women without and with UI were similar. In addition, it was found that the women participating in the study used more functional coping attitudes and less use of dysfunctional coping attitudes.

### Ethical Aspect of the Research

Before beginning the research, the study was obtained from the Ethics Committee of Muğla Sıtkı Koçman University (No:101, Date: 05.22.2019) and the research institution. The informed consent form was obtained from all women included in the sample.

**Authors's Contributions:** Idea/Concept: S.D., N.A.B.; Design: S.D.,; Data Collection and/or Processing: S.D.,A.D.; Analysis and/or Interpretation: S.D.,A.D., N.A.B.; Literature Review: S.D.,A.D.; Writing the Article: S.D.,; Critical Review: S.D.,A.D., N.A.B.

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