

FACTORS AFFECTING PERCEIVED QUALITY OF LIFE OF TURKISH WOMEN WITH URINARY INCONTINENCE

Hypothesis / aims of study

Urinary incontinence reduces the social relations and activities of women due to serious hygienic problems associated with it. In the same, it reduces the quality of life by affecting the emotional and psychological well-being and sexual relation. There are many factors that are thought to be effective in reducing the quality of life (1). In these factors, education status, age, number of births, menstrual status, body mass index (BMI), type of urinary incontinence, chronic diseases, presence of hysterectomy, menopause duration, marital status and occupation are accountable. However, studies in which the women's quality of life affected by which of these factors are limited (2). The aim of this study was to determine which factor affected more the quality of life in women with urinary incontinence

Study design, materials and methods

This study includes a retrospective review of the files of 602 women with urinary incontinence evaluated at the Women's Health Unit between 2009 and 2016. Inclusion criteria were determined as follows: having urinary incontinence symptoms, be able to speak and understand the Turkish language, and being older than 18 years. Women who were not able to cooperate, having any mental problems that prevent to understand, having neurological, and psychiatric disorder, being pregnant, having coitus negative and women whose evaluation forms are lacking were not included in the study. Socio-demographic features (age, height, weight, education status, occupation), incontinence type (with the Questionnaire for Urinary Incontinence Diagnosis), menstrual status, obstetric anamnesis, chronic illnesses, urinary leakage amount (with 1 hour pad test), the severity of incontinence (Incontinence severity index), pelvic floor muscle strength (with vaginal pressure measurement), and perceived quality of life (with 10-cm Visual analogue scale) were recorded from the files of women. It was required to mark from women regarding their perceived quality of life level on a 10 cm line where 0 means no effect on quality of life while 10 means affects the quality of life most. The descriptive values of the obtained data were calculated as number and % frequencies, mean \pm standard deviation (SD), depending on the type of variable. The effect on the quality of life of the categorical structures was analyzed by one-way ANOVA and different categories were determined by Scheffe post-hoc test. The relation of numerical type characteristics with the quality of life criteria were examined by means of correlation analysis. Statistical significance level was accepted as $p < 0.05$ and SPSS (ver. 18) program was used in the calculations.

Results

The physical and socio-demographic features of women are presented in Table 1 and 2. Positive and statistically significant correlations were found between perceived quality of life scores and scale type variables such as body weight, BMI, duration of incontinence, urinary leakage amount and incontinence severity (Table 1). When the relationship between perceived quality of life scores and socio-demographic and clinical features of categorical type was examined, it was found that the quality of life was affected by educational level, incontinence type and presence of hypertension (HT) (Table 2).

Table 1. Relationship between the quality of life score and the numeric type features

	N	Mean	SD	Minimum	Maximum	r	p
Age (year)	602	52,60	11,43	24,00	92,00	,023	,570
Body Height (m)	602	1,57	,07	1,00	1,78	,012	,771
Body Weight (kg)	602	77,78	13,83	45,00	130,00	,152	,000*
BMI (kg/m ²)	602	31,50	6,01	18,29	76,00	,132	,001*
Duration of incontinence (year)	602	5,41	6,01	,08	35,00	,129	,002*
Duration of menopause (year)	361	10,64	9,58	,00	42,00	,003	,953
Gravida	602	3,27	1,84	,00	13,00	,065	,112
Para	602	3,08	1,68	,00	12,00	,062	,130
Number of live children	602	2,79	1,41	,00	11,00	,016	,702
Pad test (gr)	602	5,25	11,15	,00	125,99	,196	,000*
Pelvic floor muscle strength (hPA)	602	22,19	13,78	1,00	79,00	-,033	,420
Incontinence severity index	602	3,37	1,89	1,00	12,00	-,189	,000*
Visual analogue scale-perceived quality of life	602	6,54	3,28	,00	10,00		

* $p < 0.05$

Table 3. Relations between the quality of life score and categorical features

		Visual analogue scale-perceived quality of life		p
		n	%	
Education status	Illiterate	101	16,8	0.001*
	Literate	28	4,7	
	Elementary school	373	62	
	Secondary school	24	4	
	High school	44	7,3	
	University	32	5,3	
Occupation	Housewife	497	82,6	0.095
	Worker	48	8	
	Civil servant	15	2,5	
	Retired	32	5,3	
	Self-employment	10	1,7	
Type of urinary incontinence	Stress	232	38,5	0.001*
	Urgency	67	11,1	
	Mixed	303	50,3	
Presence of Diabetes	Yes	120	19,9	0.280
	No	482	80,1	
Presence of HT	Yes	252	41,9	0.020*
	No	350	58,1	
Presence of Asthma	Yes	62	10,3	0.199
	No	540	89,7	
Menstrual status	Normal	135	22,4	0.888
	Irregular	106	17,6	
	Menopause (Spontaneous)	286	47,5	
	Menopause (cause of surgery)	75	12,5	

* p<0.05

Interpretation of results

Factors affecting the quality of life of women with urinary incontinence were found as body weight, BMI, duration of incontinence, urinary leakage amount, incontinence severity, education level, presence of HT and type of incontinence.

Concluding message

Modifiable factors affecting the quality of life of women with urinary incontinence were found to be body weight and urinary leakage amount. Therefore, we suggest that lifestyle changes such as weight loss should be recommended to increase the quality of life of women with urinary incontinence and they should be directed to appropriate treatment methods depending on the amount of urinary leakage.

References

1. Aguilar-Navarro S, Navarrete-Reyes AP, Grados-Chavarría BH, García-Lara JMA, Amieva H, Ávila-Funes JA. The severity of urinary incontinence decreases health-related quality of life among community-dwelling elderly. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*. 2012;67(11):1266-71.
2. Kwon BE, Kim GY, Son YJ, Roh YS, You MA, Ko I, et al. Quality of life of women with urinary incontinence: a systematic literature review. *facilities*. 2010;1:7-12.

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