Original Article

Determination of Quality of Life in 65 and Above Age Women with Urinary Incontinence

Ilknur Goksin, MSc
Lecturer, Aksaray University, Faculty of Health Sciences, Nursing Department, Aksaray, Turkey

Guler Duru Asiret
Associate Professor, Aksaray University, Faculty of Health Sciences, Nursing Department, Aksaray, Turkey

Corresponding author: Msc Lecturer. Ilknur Goksin, Aksaray University, Nursing Department, Faculty of Health Science, 68100, Aksaray, Turkey E-mail: ilknurgoksin@hotmail.com

Abstract

Aim: This descriptive study was conducted to determine the quality of life and the influencing factors of women over 65 years of age with urinary incontinence.
Methods: The study consisted of female patients aged 65 years and over who were receiving inpatient treatment between July 15 and December 30, 2016 in these clinics and who were willing to participate in the study and whose physical and cognitive health levels were appropriate to respond to forms. In collecting data, patient sociodemographic data form and incontinence quality of life questionnaire (I-QOL) were used. Analysis of the data was made using the SPSS 23.0 statistical program. Mann Whitney U and Kruskal Wallis tests were used in the evaluation of the data as well as descriptive statistical methods.
Results: The mean score of women in our study (I-QOL) was 59.06±19.1 (min = 21, max = 100). It was determined that there was no statistically significant relation between women and age, education, having chronic illness and I-QOL total point averages. The mean score of women who did not refer to the health institution due to urinary incontinence (p = 0.015) and those who did not regard urinary incontinence as a problem (p = 0.000) was found to be higher than the women who were referred to the health institution because of incontinence.
Conclusion: As a result of our study, it was determined that the life quality of women was moderate, the quality of life of the women who did not regard urinary incontinence as a serious health problem and did not apply to the health institution was found to be higher.

Key words: Urinary incontinence, elderly, quality of life, woman

Introduction

Although it can be seen at any age, Urinary Incontinence (UI) is a common health problem that can be seen more frequently in the elderly and reduces the quality of life due to the physiological changes that occur with increasing age, depending on the impact on the pelvic support structures (Botlero et al., 2009, Lasserre et al., 2009, Burti et al., 2012, Akın, 2015). In studies, it has been determined that the incidence of UI is between 33.9% and 43.6% (Bilgili et al., 2008) (Lasserre et al., 2009), (Bektas & Alparslan, 2013) (Aslan et al., 2009), and the quality of life is low (Tsai & Liu, 2009) and moderate (Aslan et al., 2009, Yılmaz et al., 2014) among women aged 65 years or older with UI.

As a problem that most women experience during their lifetime, the UI and accompanying symptoms are a social problem as much as the medical condition that affects the quality of life negatively. The content of the quality of life concept is strongly related to nursing practices. For this reason, nursing interventions should focus on behaviors that will affect quality of life positively (Eryilmaz, 2016).

In addition, early diagnosis of UI and adequate guidance on risk factors will contribute to the improvement of health of women and increasing their quality of life significantly (Bilgili et al., 2008). For this purpose, nurses should help family to limit the number of pregnancies and deliveries by providing training on the methods

of family planning in the fertile period, provide good care during labor and make episiotomy on time to avoid birth trauma, teach Kegel exercises to be used after birth and throughout every period of life as well providing training for women on the adoption of proper eating habits, admitting health institutions during menopause, and improving and protecting health in every stage of life (Eryilmaz, 2016). Thus, the diagnosis and treatment of UI, a common problem in elderly women, may contribute to active and successful aging of women. The study was conducted to determine the effect of UI on the quality of life of women aged 65 and over.

Method

Type of Study, Study Population and Sampling

This descriptive type research was conducted with 108 women aged 65 years and over who had UI complaints and hospitalized due to other diseases in the Aksaray University, Training and Research Hospital, internal Medicine, Surgical and Pulmonary Clinics. Patients were asked whether they had urine leak in the last month, and all the patients who had leaked urine in this period were included in the study without looking for UI type and severity. The study was conducted with voluntary female patients aged 65 years and over who were hospitalized between May 15 and December 30, 2016 in these clinics and whose physical and cognitive health levels were suitable for responding to questionnaire.

Data Collection Instruments

The data were collected using the personal information form (Bilgili et al., 2008, Aslan et al., 2009, Yılmaz et al., 2014), which were developed in accordance with the literature and describe the socio-demographic, obstetric and disease-related characteristics of women, and the Incontinence Quality of Life Scale. The personal information form includes questions to identify the socio-demographic characteristics of women such as age, education level, income status and marital status, the fertility characteristics such as number of births, difficult birth experience, mode of delivery, history of giving birth to a heavy baby, presence of chronic disease, type, frequency and amount of UI, referral to a health institution for urinary incontinence, and whether she considers UI as a health problem.

The Incontinence Quality of Life Scale (I-QoL) was developed by Wagner et al. to determine the quality of life of patients with UI. The scale consists of three sub-scales and 22 items. Its sub-scales are limiting behavior (items no 1,2,3,4,10,11,13,20), psychosocial impact (items no (5,6,7,9,15,16,17,21,22), and social isolation (items no 8,12,14,18,19). I-QoL is a 5-point Likert-type scale (1= very, 2= quite, 3= moderate, 4= somewhat, 5= never) with scores mapped to the range of 0-100 for a better understanding of the calculated total score. The Turkish validity and reliability of I-QoL has been carried out by Ozerdogan et al. (2003). The increased scores in the scale indicate a high-level of quality of life (Wagner et al., 1996, Ozerdogan & Beji, 2003).

Ethical Aspect of the Study

Official permission from the studied institution, and verbal consent of the participants were obtained. Approval of the ethical committee of the Human Research Ethics Board of Aksaray University was obtained in order to conduct the research ethically.

Evaluation of Data

The data of the study were evaluated by SPSS 23.0 (Statistical Package for the Social Sciences) statistical program. In the evaluation of data, Mann Whitney U test and Kruskal Wallis test was used in addition to descriptive statistical methods such as number and percentage distributions, mean, and standard deviation.

Limitations of the Study

The data of the study are limited to women aged 65 years and older who are bedridden and have no cognitive problems. Information on the presence of chronic illness and fertility characteristics are based on the self-report of the elderly. Results from the study can be generalized to this elder group.

Results

In our study, it was determined that 53.7% of women with incontinence was single, widowed or divorced, 74.1% was illiterate, and 62% had moderate income (Table 1).

When the characteristics related to fertility and chronic illness of the elderly were examined, it was found that 89.8% had vaginal delivery, 80.6% had births 3 and over, and 40.7% had delivered babies weighting 4 kg and over. It was determined that 80.6% of women had at least one chronic illness (Table 2).

Table 1. Socio-demographic characteristics of the elderly

	n	%
Age, years (Mean±S.D): 72.26±6.32 (min=65-mak=93)		
65-74 years	77	71.3
75 years and over	31	28.7
Marital status		
Married	50	46.3
Single/widowed/ divorced	58	53.7
Education		
Illiterate	80	74.1
Literate/Primary school	24	22.2
High school	4	3.7
Perceived economic situation		
Bad	26	24.1
Middle	67	62.0
Good	15	13.9

Table 2. Characteristics of the elderly about fertility and chronic illness

	n	%
Type of Birth		
Never delivered	4	3.7
Vaginal	97	89.8
Vaginal and Caesarean	5	4.6
Cesarean	2	1.9
Parity		
0-2	21	19.4
3 or more	87	80.6
Chronic disease		
Yes	87	80.6
No	21	19.4

Table 3. Characteristics of the elderly about urinary incontinence and treatment-seeking behavior

	n	%
Type of urinary incontinence		
Stress incontinence	25	23.2
Urge incontinence	47	43.5
Mixed incontinence	36	33.3
The frequency of urinary incontinence		
One or more times a day	55	50.9
Two or three times a week	31	28.7
One or more times a week	22	20.4
See urinary incontinence as a health problem		
Yes	69	63.9
No	39	36.1
Applying to a health institution due to urinary incontinence		
Yes	45	41.7
No	63	58.3

Table 4. I-QOL sub-dimension and total score average of the elderly

	Mean	S.D	Min.-Mak.
Restricting behaviors	21.56	7.67	8-40
Psychosocial influence	30.28	9.27	10-45
Social isolation	13.12	5.52	5-25
I-QOL total score average	59.06	19.10	21.81-100.00

Table 5. Relationship between the averages of I-QOL total and sub-dimension scores with the characteristics of urinary incontinence and treatment-seeking behaviors

I-QOL	Restricting behaviors	Psychosocial influence	Social isolation	I-QOL total score average
	(Mean±S.D)	(Mean±S.D)	(Mean±S.D)	(Mean±S.D)
Type of urinary incontinence				
Stress incontinence	21.56±7.32	29.48±10.43	13.88±6.48	59.01±21.07
Urge incontinence	22.63±7.80	31.65±9.36	13.82±5.57	61.93±19.56
Mixed incontinence	20.16±7.71	29.05±8.27	11.66±4.50	55.34±16.82
	KW=1.774 p=0.412	KW=2.111 p=0.348	KW=3.138 p=0.208	KW=2.225 p=0.329

The frequency of urinary incontinence				
One or more times a day	19.34±7.19	28.03±8.92	11.14±4.27	53.20±16.75
Two or three times a week	21.74±6.32	30.67±9.13	13.90±5.73	60.28±18.23
One or more times a week	26.86±8.19	35.36±8.58	16.95±5.92	71.97±19.88
	KW=14.058 **p=0.001**	KW=10.103 **p=0.006**	KW=15.878 **p=0.000**	KW=14.014 **p= 0.001**
See urinary incontinence as a health problem				
Yes	19.44±7.20	27.46±8.90	11.36±4.89	52.97±17.91
No	25.30±7.09	35.28±7.75	16.23±5.24	69.83±16.33
	Z=3.663 **p=0.000**	Z=-4.135 **p=0.000**	Z=-4.270 **p=0.000**	Z=-4.335 **p=0.000**
Applying to a health institution due to urinary incontinence				
Yes	19.71±7.58	28.11±9.49	11.31±4.68	53.75±18.57
No	22.88±7.51	31.84±8.86	14.41±5.74	62.85±18.70
	Z=-1.971 **p=0.049**	Z=-2.045 **p=0.041**	Z=-2.761 **p=0.006**	Z=-2.443 **p=0.015**

When the characteristics of urinary incontinence and health seeking behaviors of the elderly with urinary incontinence were examined, it was determined that the most common type of urinary incontinence was the urge incontinence by 43.5%, 50.9% had leaked urine several times a day, and 36.1% was using pad due to urinary incontinence. It was determined that 36.1% of the elderly did not consider UI as a health problem, and 58.3% did not admit to a health facility because of the UI (Table 3).

I-QoL sub-scale and total scores are shown in Table 4. The mean score of I-QoL for the elderly was 59.06±19.10, the mean limiting behaviors sub-scale score was 21.56±7.67, the mean score of the psychosocial impact sub-scale was 30.28±9.27, and the mean score of social isolation sub-scale was 13.12±5.52 (Table 4). Although not stated in the table, when the relationship between I-QoL total and sub-scale score averages and socio-demographic marital status, education status, and perceived economic status) and fertility characteristics (mode of delivery, number of births, and giving birth to a baby over 4kg) of the elderly was investigated in our study, no statistically significant difference was found between the I-QoL total and sub-scale score averages in terms of these characteristics ($p>0.05$). In addition, when the relationship between the urinary incontinence and health seeking behaviors of the elderly and the I-QoL total and sub-scale averages was examined, no statistically significant difference was found between the urinary incontinence type and use of pads and the I-QoL total and sub-scale averages ($p>0.05$). However, the difference between the incidence of urinary incontinence in the elderly, the considering the urinary incontinence as a health problem, admission to a health institution due to urinary incontinence, and the I-QoL total and sub-scale scores was found to be statistically significant ($p<0.05$), (Table 5).

Discussion

The UI, which affects the physical, psychological, social and economic well-being of women and their families, is frequently seen in the elderly population in Turkey and in the world, and is affected by many factors (Aslan et al., 2009, Burti et al., 2012).

In numerous studies it has been found that the incidence of UI is higher in women who had

vaginal delivery than women who underwent c-section and women who had never given birth (Altaweel & Alharbi, 2012, Terzi et al., 2013, Yılmaz et al., 2014, Liu et al., 2014). Vaginal birth has been reported to increase UI due to adverse effects on pelvic organ support, and the structure and function of pelvic floor muscles (Eryilmaz, 2016). In our study, 80.6% of women with UI was found to have 3 or more deliveries (Table 2). Similarly, in the literature, it has been found that vaginal delivery and parity increase the UI (Onur et al., 2009, Altaweel & Alharbi, 2012, Al-Badr et al., 2012, Bektas & Alparslan, 2013, Kilic, 2016).

Less than half of women with urinary incontinence problems admit for treatment, which indicates that a clinically significant portion of urinary incontinence has not been diagnosed (Wallner et al., 2009). In studies in the literature, the rate of receiving medical assistance for women with UI has been low. Reasons for this include women's view of the UI as a natural part of life, embarrassment from the treatment, the belief that the treatment is not possible, and the low incidence and severity of the disease to seek medical help. Women believe that the use of pads or lifestyle changes are sufficient to cope with this condition instead of receiving medical help. These women can be socially isolated by avoiding trips outside, limiting their interaction with family and friends due to the fear and embarrassment they felt for the smell of urine (Altaweel & Alharbi, 2012). Although 63.9% of the women in our study considered UI as a health problem, it is seen that only 41.7% admitted to a health institution due to UI (Table 3). Rates of seeking medical help from a health institution for UI were 39.7% in the study by Lassere et al. (2009), 9% in the study by Altaweel and Alharbi (2012), 30.2% in the study by Ozturk et al. (2012), 2.5% in the study by Yılmaz et al. (2014), and 29.3% in the study by Kilic (2016) (Lasserre et al., 2009, Altaweel & Alharbi, 2012, Ozturk et al., 2012, Yılmaz et al., 2014, Kilic, 2016). It is believed that women do not receive medical help because they do not consider urinary incontinence as a health problem due to its prevalence in their family and surroundings and belief that urinary incontinence is a natural consequence of aging.

The average I-QoL score of women participating in the study was 59.06±19.10. The mean I-QoL sub-scale scores were 21.56±7.67 in the limiting behaviors, 30.28±9.27 in psychosocial impact, and 13.12±5.52 in social isolation, respectively (Table 4). In our study, it determined that the women with UI had a moderate level of quality of life. In similar studies, the quality of life of women with UI has been found to be moderate (Lasserre et al., 2009, Yılmaz et al., 2014). In the study by Ozdemir et al. (2011), it has been stated that the women with UI had lower quality of life than those without UI (Ozdemir et al., 2011). In other studies conducted with women with UI, the quality of life of women has been found to be low and moderate (Segedi et al., 2011, Senra & Pereira, 2015).

In our study, it was found that 50.9% of the elderly had urine leak once a day or less, and the total I-QoL score and sub-scale scores of the elderly in this group was found to be lower than that of women who leaked urine less frequently. In a study, it has been determined that 51.6% of the women with UI had one urine leak a day, and the elderly in this group have been found to have lower quality of life than the elderly who leaked urine less frequently (Demirel, 2012).

The quality of life of the elderly who consider UI as a health problem was found to be statistically significantly lower than those who did not consider UI as a health problem. This is believed to be associated with the perception of elderly, who do not consider urinary incontinence as a disease, which perceive themselves as physically and psychologically healthy and have no difficulty in their social life.

In our study, the quality of life of women who admitted to a health institution due to UI was statistically significantly lower than the women who did not admit to a health institution ($p<0.05$). Similarly, in the study by Demirel (2012), it has been determined that the women who received medication for UI had lower quality of life than that of women who did not receive any treatment (Demirel, 2012).

Conclusion

As a result of our study, it was found that vaginal delivery, parity, and advanced age increase the risk of incontinence, that the elderly had moderate quality of life, that the women who do not consider urinary incontinence as a serious health problem and do not admit to health institutions because of UI had better quality of life, and that the elderly do not admit to health institutions, in spite of considering urinary

incontinence as a health problem. It is recommended for nurses to assess the risk factors (birth history, nutrition, menopause, etc.) that may cause incontinence in women irrespective of the age, and provide training and consultancy to women about the measures (exercise, etc.) necessary for protection against incontinence.

References

Akin, S. (2015). Urinary İncontinence in The Elderly. Continence and Neurology Bulletin; 2: 49-54.

Al-Badr, A., Brasha, H., Al-Raddadi, R., Noorwali, F., & Ross, S. (2012). Prevalence of urinary incontinence among Saudi women. International Journal of Gynecology & Obstetrics, 117(2), 160-163.

Altaweel, W., & Alharbi, M. (2012). Urinary incontinence: prevalence, risk factors, and impact on health related quality of life in Saudi women. Neurourology and Urodynamics, 31(5), 642-645.

Aslan, E., Beji, N. K., Erkan, H. A., Yalcin, O., & Gungor, F. (2009). Urinary incontinence (UI) and quality of life (QoL) of the elderly residing in residential homes in Turkey. Archives of Gerontology and Geriatrics, 49(2), 304-310.

Bektas, H., & Alparslan, O. (2013). The factors related to prevalence of urinary stress incontinence in women inhabiting in primer health center turkey. Health Med, 7, 182-189.

Bilgili, N., Akın, B., Ege, E., & Ayaz, S. (2008). Frequency of urinary incontinence in women and the risk factors affecting it. Turkish Clinics Journal of Medical Sciences, 28(4), 487-493.

Botlero, R., Davis, S. R., Urquhart, D. M., Shortreed, S., & Bell, R. J. (2009). Age-specific prevalence of, and factors associated with, different types of urinary incontinence in community-dwelling Australian women assessed with a validated questionnaire. Maturitas, 62(2), 134-139.

Burti, J. S., Santos, A. M. B., Pereira, R. M. R., Zambon, J. P., & Marques, A. P. (2012). Prevalence and clinical characteristics of urinary incontinence in elderly individuals of a low income. Archives of Gerontology and Geriatrics, 54(2), e42-e46.

Demirel, T. (2012). The Prevalence of Urinary Fecal Incontinence in 65 Years and Older Women, Risk Factors and the Effect on Quality of Life, Selcuk University Health Sciences Institute, Department of Nursing, M.Sc. Thesis, Konya.

Eryilmaz, H.Y. (2016). Postpartum Period. Women's Health. Editor: Sirin, A., Kavlak, O. Expanded 2nd edition Nobel Medical Bookstores, Istanbul, 136-141.

Kilic, M. (2016). Incidence and risk factors of urinary incontinence in women visiting Family Health Centers. SpringerPlus, 5(1), 1331.

Lasserre, A., Pelat, C., Gueroult, V., Hanslik, T., Chartier-Kastler, E., Blanchon, T., ... & Bloch, J. (2009). Urinary incontinence in French women: prevalence, risk factors, and impact on quality of life. European Urology, 56(1), 177-183.

Liu, B., Wang, L., Huang, S. S., Wu, Q., & Wu, D. L. (2014). Prevalence and risk factors of urinary incontinence among Chinese women in Shanghai. International Journal of Clinical and Experimental Medicine, 7(3), 686.

Ozerdogan, NO., & Beji, N.K. (2003). The prevalence of urinary incontinence in women over 20 years of age in Eskisehir, Bilecik, Afyon, Kutahya, risk factors, effect on the quality of life. Florence Nightingale Nursing Review, 13 (51).

Onur, R., Deveci, S. E., Rahman, S., Sevindik, F., & Acik, Y. (2009). Prevalence and risk factors of female urinary incontinence in eastern Turkey. International Journal of Urology, 16(6), 566-569.

Ozturk, G. Z., Toprak, D., & Basa, E. (2012). The frequency of urinary incontinence and factors affecting women over 35 years of age. Sisli Etfal Hospital Medical Bulletin, 46(4), 170-6.

Ozdemir, E., Ozerdogan, N., & Unsal, A. (2011). Urinary Incontinence, Sexual Dysfunction and Quality of Life of 20 - year - old Married Women in the Health Centers of Ankara Gulveren. Turkish Clinics Journal of Gynecology and Obstetrics, 21(4), 266-276.

Segedi LM, Segedi D, Ilić KP (2011). Quality of life in women with urinary incontinence. Medicinski Glasnik, 8:237-842.

Senra, C., & Pereira, M. G. (2015). Quality of life in women with urinary incontinence. Journal of the Brazilian Medical Association, 61(2), 178-183.

Terzi, H., Terzi, R., & Kale, A. (2013). Frequency of urinary incontinence in women over 18 years and factors affecting urinary incontinence. Ege Medical Journal, 52(1).

Tsai, Y. C., & Liu, C. H. (2009). Urinary incontinence among Taiwanese women: an outpatient study of prevalence, comorbidity, risk factors, and quality of life. International Urology and Nephrology, 41(4), 795-803.

Wallner, L. P., Porten, S., Meenan, R. T., Rosetti, M. C. K., Calhoun, E. A., Sarma, A. V., & Clemens, J. Q. (2009). Prevalence and severity of undiagnosed urinary incontinence in women. The American Journal of Medicine, 122(11), 1037-1042.

Wagner TH, Patrick DL, Bavendam TG, et al. Quality of life of persons with urinary incontinence: development of a new measure. Urology 1996; 47: 67-71.

Yilmaz, E., Muslu, A., & Ozcan, E. (2014). Quality of life in women with urinary incontinence. ERU Journal of Health Sciences Faculty, 2(2), 1-14.