

Original Article

Assessment of the Quality of Life in Women with a Diagnosis of Urogenital Prolapse

Eda Şahin, RN, PhDs

Gulhane Military Medical Academy, School of Nursing, Department of Obstetric and Gynecology Nursing, Etlik, Ankara, Turkey

Gulsen Vural, RN, PhD

Professor Sanko University, Faculty of Health Science, Gaziantep, Turkey

Correspondence: Eda Şahin, Gulhane Military Medical Academy, School of Nursing, Department of Obstetric and Gynecology Nursing, Etlik, Ankara, Turkey e-mail: edasahin@gata.edu.tr

Abstract

Aim: The aim of this descriptive study was to assess the severity of symptoms and their impact on quality of life in women with a diagnosis of urogenital prolapse.

Background: Urogenital prolapse symptoms are not life-threatening, but they lead to limitations in work, family and sexual life and deterioration in quality of life. Therefore, when many women experience these symptoms more than once in a week, they realize that their quality of life has been negatively affected.

Methods: The study included a total of 179 women with a diagnosis of urogenital prolapse who applied to the gynecology outpatient clinic of Women's Health Teaching and Research Hospital, Turkey, July-October 2010. The "Descriptive Information Questionnaire" and "The Prolapsus-Related Quality of Life (P-QOL) Questionnaire" were used to collect data.

Results: In this study, 68.1% of women recruited from the gynecology outpatient clinic were aged 52 and over, and 46.9% had graduated from primary school. 44.1% of women's parity was 3-4, 97% of women had a history of giving birth vaginally. 72.6% of women were in the postmenopausal period and 29.1% of women had a history of urogenital prolapse in their family. 77.7% of women had not previously applied to a hospital, even though they had experienced symptoms related to urogenital prolapse, 43.6% of women had applied to a hospital concerning urinary incontinence. It was found that 52% of women were diagnosed with cystocele, 57% had a third degree or higher urogenital prolapse.

Urogenital prolapse affects women's general health perceptions, physical-social activities, personal relationships, quality of sleep.

Conclusion: All women should be educated - consulted about urogenital prolapse for prevention of the disease, early diagnosis treatment.

Key words: Urogenital prolapse, women, quality of life

Introduction

The size of the elderly population is gradually increasing throughout the world. The lifespan of women, which was 18 years around 1000 B.C., has extended to 80-85 years in today's developed countries. The majority of the elderly population is composed of women (Mandracioğlu, 2010).

The most common gynecological problem observed in the genital organs of elderly women is urogenital prolapsed. Urogenital prolapse leads to pain, a sensation of pressure, incontinence, constipation, urination and/or defecation difficulties and similar problems. Urogenital prolapse also leads to difficulty during coitus, frequent vaginal infections, and

disorders in the urinary bladder, bowel and sexual functions. In particular, urinary bladder and fecal incontinence lead to a deterioration of the life quality of these women, with isolation from social life (Swift et al., 2003).

Urogenital prolapse symptoms are not life-threatening, but they lead to limitations in work, family and sexual life and deterioration in quality of life. Therefore, when many women experience these symptoms more than once in a week, they realize that their quality of life has been negatively affected. However, as women regard these symptoms as the natural result of aging, they do not generally consult a doctor or they delay in finding a solution.

Furthermore, women delay in getting help as they perceive the prolapse problem as shameful (Seven et al., 2008). With an increase in life expectancy, and rates of pelvic floor disorders in developing countries, the need for treatment increases and therefore expenditures gradually increase. According to a retrospective study carried out by an insurance company in America, women aged 80 undergo reconstructive surgery for prolapses or urinary incontinence at the rate of 11%. A secondary operation is required in one-third of these cases. When the increasing age of the population is taken into consideration, it is estimated that the number of women consulting doctors due to pelvic floor diseases will double in the next 30 years. In the United States of America, more than 300,000 operations are performed for prolapses each year and the money spent annually for urogenital prolapse equals one billion dollars (Subak et al., 2001).

Nurses should be able to provide women with the necessary information regarding the reasons for urogenital prolapse, prognosis and treatment, lessening of symptoms and management of this condition. Nurses can determine the effects of a patient's current symptoms on her hygiene and comfort, and attempt to find solutions. Also, nurses can teach Kegel exercises to mothers to prevent urogenital prolapse in the postpartum period and following treatment, they can inform them about how to prevent a recurrence of urogenital prolapse. Nurses can help women experiencing urogenital prolapse to identify their problems and inform them about treatment methods, so that they can play an active role in the resolution of the problem.

The incidence of urogenital prolapse varies between 2% and 50%, depending upon differences in the definition of the condition and the population surveyed (Nygaard et al., 2004; Schaffer et al., 2005). It is estimated that the incidence of urogenital prolapse will increase with extended lifespans. For this reason, studies regarding the negative effects of this problem on women's quality of life and the increase in treatment expenses are required. Therefore, the present descriptive study was conducted to determine the effect of urogenital prolapse on the quality of life for women diagnosed with this condition.

Materials and methods

The research was carried out in the Urogynecology Polyclinic of Zubeyde Hanim Gynecological Diseases Training and Research Hospital. The study

population was all women who consulted the urogynecology polyclinic in 2010 and were diagnosed with urogenital prolapse after a medical examination. The research sample is composed of 179 women who applied to the urogynecology polyclinic between July and October, who had no previous experience of surgical operation and who were diagnosed with urogenital prolapse for the first time. To identify the sample, subscale scores on preliminary information drawn from other studies evaluating the quality of life of women with urogenital prolapse were used, as the number of women diagnosed with urogenital prolapse is not known (Seven et al., 2008; Digesu et al., 2003; Srikrishna et al., 2008).

Previous research using the scale suggested that the personal relations subscore yielded the most heterogeneous distribution, therefore the highest sample size was considered appropriate for the estimation of this variable. The personal relations subscore was estimated to be 55 ± 40 ; the required sample size was calculated as 179 persons for significance within a 95 % confidence interval and a ± 5 error margin.

Written consent for the research was received from the Gazi Hospital Ethical Committee and from the participants. For data collection, a questionnaire developed by the researchers in accordance with the literature, and the Prolapse Life Quality (P-YK) Scale, were used. To evaluate the effect of prolapse on women's quality of life, a scale developed by Digesu and colleagues was used.

Turkish validity and reliability of the scale was carried out by Seven and colleagues; the Cronbach's alpha value was found to be higher than 0.64 for rate of severity, and higher than 0.75 in all other fields (Seven et al., 2008). In this study, the Cronbach's alpha value was 0.89. There is no total score for this questionnaire. Scores obtained from the individual scales vary between 0 and 100. Higher scores indicate a lower quality of life; lower ones indicate a better quality of life.

SPSS 15.0 was used for data analysis. Frequencies and percentages, Chi square tests, arithmetic averages, standard deviations and Mann-Whitney U tests were used. The statistical significance level was set at 0.05.

Results

A majority of the women (68.1 %) were age 52 or over. 46.9% of women were primary school

graduates, and 90.5 % were housewives. The majority of women (97.8%) had had vaginal deliveries (VD), and 72.6% of women were in the postmenopausal period. In addition, 44.1% of women had delivered 3 or 4 times.

Approximately two thirds of the women (29.1%) had a history of urogenital prolapse in their families. We found that 77.7 % of women did not consult a hospital even though they had urogenital prolapse, 80% of women received medication and 43.6 % of women consulted a hospital with a complaint of urine incontinence. About half of women (52 %) were diagnosed with cystocele and 57% had urogenital prolapse of the 3rd degree or above.

We found that 87.2% of women had frequent urination, 85.5% had urination urgency, 74.9% had urinary incontinence, 78.8% had incontinence during coughing and sneezing, and 86.6% reported feeling a bulge/lump from or in the vagina (Table 1).

A majority of the women (83.8%) were found to have a heaviness/dragging feeling from the vagina or the lower abdomen, 84.4% of women had a feeling of vaginal bulge, 64.2% of women had constipation, and 60.9% of women did not feel their bowels were completely empty after defecation (Table 1).

In the participant group, the average effect of prolapse on general health perception was found to be 47.7 ± 2.29 and the average effect of prolapse on quality of life was found to be 78.58 ± 2.68 . At the lower dimensions of the scale, the average role limitations score was found to be 52.79 ± 36.14 , average physical limitations score was 57.82 ± 33.62 , average social limitations score was 43.51 ± 37.94 , and average personal relations score was 53.81 ± 54.21 . The average emotions score was 67.84 ± 3.14 , average sleeping /energy score was 40.96 ± 26.15 and average rate of severity score was 38.03 ± 25.12 (Table 2).

Table 3 displays the dispersion of P-YK Scale scores according to the degree of prolapse. On the dimension of general health perception, the average score for women with urogenital prolapse of the 3rd degree or over was 52.80 ± 2.460 . With respect to the effect of prolapse, the average score for women with urogenital prolapse of the 3rd degree or over was 84.11 ± 2.522 . The statistical analysis showed that groups differed in terms of general health perception and prolapse effect, with the group who had urogenital prolapse of the 3rd degree and over significantly more affected than the other groups ($p < 0.005$). At the lower dimensions of the scale, the

average score for role limitations was 59.96 ± 36.690 , the average score for physical limitations was 68.38 ± 29.401 and the average score for social limitations was 46.62 ± 39.665 .

Women with a prolapse of the 3rd degree or over had the highest scores on these dimensions. The relationships between urogenital prolapse of the 3rd degree or over and role limitations and physical limitations were statistically significant ($p = 0.000$), and the relationship between social limitations and degree of prolapse was also statistically significant ($p = 0.064$).

The average personal relations score was 61.90 ± 54.433 . Scores on this dimension were also significantly related to degree of prolapse ($p = 0.406$).

When average scores for emotions, sleeping/energy, and violence rate were examined, the highest scores were observed in women with urogenital prolapse of the 3rd degree or over (74.24 ± 2.898 , 44.54 ± 24.844 , 48.90 ± 22.781 , respectively). The relationship between emotions, sleeping/energy, severity rates and degree of prolapse was statistically significant ($p < 0.05$).

Discussion

We found that most of the women in this study, diagnosed with urogenital prolapse, were at or over the age of 52 (68.1 %), primary school graduates (46.9 %), and unemployed (90.5 %). This is similar to other studies conducted with women diagnosed with prolapse, where the frequency of urogenital prolapse has been found to increase as age increases, and as level of education decreases (Swift et al., 2003; Seven et al., 2008; Nygaard et al., 2004).

We found that 44.1% of the women gave birth 3 or 4 times. type of delivery is among the risk factors for developing prolapse. In our study, the majority of women (97.8 %) had VD. A pelvic organ support study has reported that each vaginal delivery increases the risk of urogenital prolapse development 1.2 times (Schaffer et al., 2005). In a study carried out by Swift and colleagues, women who had never given birth and women who had two vaginal deliveries were compared; they found that two vaginal deliveries could increase the risk of urogenital prolapse by 8.4% (Swift et al., 2003). In a study by Lukacz and colleagues, women who had one or more vaginal deliveries were found to have a 3.21 times higher risk of urogenital prolapse than women who had cesarean deliveries (Lukacz et al., 2006).

Table 1. Urinary and bowel symptoms responses from POP-Q in symptomatic women. N=179

	n	%
Urinary frequency		
Yes	156	87.2
No	23	12.8
Urinary urgency		
Yes	153	85.5
No	26	14.5
Urinary incontinence		
Yes	134	74.9
No	45	25.1
Incontinence during coughing and sneezing		
Yes	141	78.8
No	38	21.2
Feeling a bulge/lump from or in the vagina		
Yes	155	86.6
No	24	13.4
Heaviness/dragging feeling from the vagina or the lower abdomen		
Yes	150	83.8
No	29	16.2
Vaginal bulge		
Yes	151	84.4
No	28	15.6
Constipation		
Yes	115	64.2
No	64	35.8
Bowels do not feel completely empty after opening		
Yes	109	60.9
No	70	39.1

Table 2. Prolapse Quality of Life Domain Scores (N=179)

	Mean \pm sd	Min.max.
General health perception	47.7 \pm 2.29	0-100
Prolapse impact	78.58 \pm 2.68	0-100
Role limitation	52.79 \pm 36.14	0-100
Physical limitation	57.82 \pm 33.62	0-100
Social limitation	43.51 \pm 37.94	0-100
Personel relationship	53.81 \pm 54.21	0-100
Emotion	67.84 \pm 3.14	0-100
Sleep and energy	40.96 \pm 26.15	0-100
Severity measures	38.03 \pm 25.12	0-100

Table 3. P-YK Scores Distribution According to Prolapse Degrees

n=179

	General health perception	Prolapse impact	Role limitation	Physical limitation	Social limitation	Personel relationship	Emotion	Sleep /energy	Severity measures
	$\bar{X} \pm sd$	$\bar{X} \pm sd$	$\bar{X} \pm sd$	$\bar{X} \pm sd$	$\bar{X} \pm sd$	$\bar{X} \pm sd$	$\bar{X} \pm sd$	$\bar{X} \pm sd$	$\bar{X} \pm sd$
Prolapse Degrees									
1.degree	39.13 \pm 1.655	53.62 \pm 3.136	28.26 \pm 30.746	23.18 \pm 29.189	27.05 \pm 2 4.117	47.10 \pm 52.139	49.27 \pm 3.262	31.15 \pm 30.692	21.01 \pm 21.885
2.degree	40.81 \pm 1.888	78.23 \pm 2.102	48.63 \pm 31.884	51.02 \pm 31.988	44.44 \pm 3 8.019	61.90 \pm 54.433	62.58 \pm 3.221	37.75 \pm 25.634	22.27 \pm 17.872
3.degree and up	52.80 \pm 2.460	84.11 \pm 2.522	59.96 \pm 36.690	68.38 \pm 29.401	46.62 \pm 3 9.665	51.55 \pm 54.634	74.24 \pm 2.898	44.54 \pm 24.844	48.90 \pm 22.781
z/p	10.843/ .004	23.559/ .000	15.448/ .000	34.368/ .000	5.491/ .064	1.801/ .406	14.976/ .001	7.465/ .024	50.047/ .000

Most women diagnosed with urogenital prolapse are in the postmenopausal period. In our study, this was the case for 72.6 % of participants. In the literature, menopause has been found to increase the risk of developing urogenital prolapse (Swift et al., 2003; Seven et al., 2008; Nygaard et al., 2004; Schaffer et al., 2005); however, findings of these studies vary. Similar to our study, Rortveit and colleagues found that 72% of women with symptomatic urogenital prolapse were in the postmenopausal period (Rortveit et al., 2007). Sinha and colleagues found that 56 % of women with a diagnosis of urogenital prolapse were in the postmenopausal period (Sinha et al., 2007). Our study gives rise to the idea that in the postmenopausal period, a majority of women undergo changes in collagen value and quality, depending upon the degree of estrogen deficiency in this period, which leads to urogenital prolapse.

In our study, approximately 1/3 (29.1 %) of the women diagnosed with urogenital prolapse were found to have a family history of urogenital prolapse. Supporting this finding, Bonetti suggested that sisters of 23.1% of women diagnosed with urogenital prolapse will have this condition as well (Bonetti et al., 2004). In some studies, women who have a sister with urogenital prolapse have been found to have a higher risk of this condition than women with no urogenital prolapse in their family history (Miedel et al., 2009; Buchsbaum et al., 2006). In agreement with the literature (Seven et al., 2008; Nygaard et al., 2004; Schaffer et al., 2005; Bonetti et al., 2004; Miedel et al., 2009; Buchsbaum et al., 2006), the results of our study indicate that genetic factors have a role in urogenital prolapse development.

We found that the majority of women (77.7 %) in our study had not previously consulted to hospital although they complained of urogenital prolapse, and that approximately half of them (43.6%) consulted to hospital due to urine continence. In a study by Fritel and colleagues, women who had consulted to hospital due to vagi eminentia and a sense of pressure, and were subsequently diagnosed with urogenital prolapse, had had urogenital prolapse symptoms for more than a year (Fritel et al., 2009). The literature indicates that 50% of women admitted to a gynecology polyclinic have urogenital prolapse in various degrees; however, they have not consulted to the hospital before. This situation is regarded as a normal result of womanhood and especially aging by a majority of women; therefore, they do not consult a physician. Some women stated that they could not

consult a physician because they felt embarrassed, or they hesitated (Swift et al., 2003; Seven et al., 2008; Nygaard et al., 2004). In our study, more than half of the women diagnosed with urogenital prolapse (52%) were found to have a cystocele diagnosis and urogenital prolapse (57%) of the 3rd degree and over. A study by the Women's Health Institute found that 34% of women between the ages of 50-79 and diagnosed with urogenital prolapse have cystocele, 19% have rectocele, and 14 % have uterine prolapse (Hendrix et al., 2002). While lower degrees of urogenital prolapse are frequent and generally asymptomatic, urinary system, bowel and sex life related symptoms are defined as universal prolapse symptoms. While symptoms can be observed separately, various symptoms can be observed collectively (Swift et al., 2003). In this study, most of the women experienced frequent urination, urinary incontinence and a feeling of urinary urgency. The majority of the women (78.8%) experienced coughing/sneezing related to urinary incontinence (Table 1). Similarly, in a study by Ghetti and colleagues, it was reported that 86% of women experienced frequent urination, 75% felt urgency, and 78% experienced urinary incontinence with activity (Ghetti et al., 2005). A study carried out by Mouritsen and colleagues reported that 27% of women with urogenital prolapse experienced stress incontinence, 21% had mixed type incontinence and 36% had excretion problems (Mouritsen, 2005). Ellerkmann et al. found that 13% of women with urogenital prolapse had stress incontinence (Ellerkmann et al., 2001). Additionally, 84.4% felt a nub/ementia within the vagina or hanging out of the vagina and 84.4 % had the feeling of a nub/ementia hanging out of the vagina (Table 1). Similarly, in other studies, over 50% of women with urogenital prolapse felt eminentia [(Swift et al., 2003; Fritel et al., 2009; Ghetti et al., 2005).

More than half of the women (60.9 %) complained of a failure in full excretion of bowels, constipation and difficulty during defecation (Table 1). Also, 79.9% of the women had pain in the lower back, and approximately 1/3 of them exhibited the behavior of helping to pass a stool using their fingers. In a study by Fritel et al., 51% of women experienced difficult defecation, 68% of women defecated less than three times a week, and 60% of women experienced abdominal pain (Fritel et al., 2009). Ellerkmann and colleagues found that 31% of women diagnosed with urogenital prolapse had fecal incontinence, 50% had

excretion problems, 6% of women had constipation and 24% interfered manually during defecation or miction [Ellerkmann et al., 2001].

Although urogenital prolapse symptoms are not life threatening, they affect psychological, social and physical wellness, limit work, family and sexual life of woman and negatively affect quality of life (Seven et al., 2008). In our study, the average effect score of urogenital prolapse on general health perception was 47.7 ± 2.29 , and average effect score on quality of life was 78.58 ± 2.68 (Table 2). In a study carried out by Digesu et al. with British and Italian women, general health perception of prolapse and average effect scores of the prolapse were higher than in the results of our study (Digesu et al., 2005; Digesu et al., 2003). In other words, the general health perception and the effect of prolapse for the women in our study had less of a negative impact on their quality of life. In contrast, a study carried out by Srikrishna and colleagues found that the effect of prolapse on general health perception was even lower than in our study (Srikrishna et al., 2008). At the lower dimensions of the scale in our study, the role limitation domain average score was 52.79 ± 36.14 , the physical limitation domain average was 57.82 ± 33.62 , and the social limitations domain average was 43.51 ± 37.94 (Table 2). In studies carried out by Brocker and colleagues on women with urogenital prolapse, role, physical, and social limitations domain averages were higher than in our study (Brocker et al., 2011). This finding indicates that role, and physical and social limitation effects on the women in our study were less negative. The life quality domain expresses how individuals perceive their own health. Social and cultural differences can also affect how individuals perceive their own health. In this sense, in Turkish society, as urogenital prolapse is perceived as a normal result of aging and child delivery, the presence of prolapse was not perceived by women as a serious problem.

In our study, we found that the average score for the personal relations domain was 53.81 ± 54.21 , for the emotions domain was 67.84 ± 3.14 , for the sleep/energy domain was 40.96 ± 26.15 and for the severity domain was 38.03 ± 25.12 (Table 2). In a study by Seven et al., women's average scores on personal relations, emotions, sleep/energy, and severity domains were higher than ours (Seven et al., 2008). This finding indicates that women in our study were less affected on these domains.

The average general health perception score in our study, for women with a 3rd degree or higher urogenital prolapse, was 52.80 ± 2.460 , the average prolapse effect score was 84.11 ± 2.522 , the average role limitations score was 59.96 ± 36.690 , the average physical limitations score was 68.38 ± 29.401 , and the average social limitations score was 46.62 ± 39.665 (Table 3). The average emotions domain score for women with a 3rd degree or higher urogenital prolapse was 74.24 ± 2.898 , the average sleep/energy score was 44.54 ± 24.844 , and the average severity rate score was 48.90 ± 22.781 (Table 3). The relationships among general health perception, prolapse effect, role limitations, physical limitations, emotions, sleep/energy and severity rate and degree of prolapse were statistically significant ($p < 0.005$; Table 3). As a result, we can say that as the degree of prolapse increases, symptoms increase, and quality of life is negatively affected.

Our study indicates that urogenital prolapse affects quality of life, general health perception, regular physical activity, social life, personal relations and sleep quality of women. In addition, we found that women consult to medical institutions late, even if they experience many urogenital prolapse symptoms. Therefore, it is recommended that medical staff be more sensitive about the significance of the issue and provide women with the required training and consultancy about the importance of early diagnosis and treatment.

Conflict of interest

None related to this article.

Authors Contribution:

S Eda: Project development, Data Collection, Data analysis, Manuscript writing. V Gulsen: Project development, Data analysis, Manuscript writing

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