



ARAŞTIRMA / RESEARCH

Quality of life and sexual life in women with advanced stage pelvic organ prolapse

İleri evre pelvik organ prolapsusu olan kadınlarda yaşam kalitesi ve cinsel yaşam

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Abstract

Purpose: This study aims to evaluate women with pelvic organ prolapse in terms of the risk factors and identify the effects of pelvic organ prolapse on quality of life and sexual function.

Materials and Methods: Target population of the study was women who applied to the gynecology polyclinics in a university hospital and maternity and children hospital. The study was completed with 110 control and 81 case group participants. The data were collected through Personal Identification Form, Pelvic Floor Distress Inventory-20 (PFDI-20), Prolapse Quality of Life Scale (P-QOL), Pelvic Organ Prolapse / Urinary Incontinence Sexual Function Questionnaire (PISQ-12) and Female Sexual Function Inventory (FSFI).

Results: Study results show that as pelvic floor dysfunction increases, quality of life decreases and sexual function is affected negatively. The difference in the general mean scores of questionnaires life quality and sexual dysfunction between the case and control groups was found to be statistically significant. POP prevalence decreases 1.6 times with the decrease in the number of pregnancies; it decreases 3.5 times with the decrease in the number of deliveries; and assisted delivery increases 2.8 times and increases 5.8 times if there is family history.

Conclusion: Given the relationship between pelvic floor dysfunction and quality of life and sexuality it is possible to say that this is not only a medical problem but also a social problem. In this regard, it is important that both health professionals and women have prior knowledge of the risks about in terms of reducing the risk of encountering POP.

Key words: Pelvic organ prolapse, quality of life, sexual life, sexual health

Öz

Amaç: Bu çalışmanın amacı, pelvik organ prolapsusu olan kadınları risk faktörleri bakımından değerlendirmek ve prolapsusunun yaşam kalitesi ile cinsel fonksiyon üzerindeki etkilerini belirlemektir.

Gereç ve Yöntem: Araştırmanın örneklemini, bir üniversite hastanesi ile kadın doğum ve çocuk hastanesindeki jinekoloji polikliniğine başvuran kadınlar oluşturmuştur. Çalışma 81 vaka ve 110 kontrol grubu katılımcı ile tamamlanmıştır. Veriler, kadınları tanıttığı bilgi formu, Pelvik Taban Distres Envanteri- 20 (PFDI-20), Prolapsus Yaşam Kalitesi Ölçeği (P-QoL), Pelvik Organ Prolapsusu / Üriner İnkontinans Cinsel İşlev Ölçeği (PISQ-12) ve Kadın Cinsel Fonksiyonu İndeksi (FSFI) aracılığıyla toplanmıştır.

Bulgular: Çalışma sonuçları pelvik taban disfonksiyonu arttıkça yaşam kalitesinin azaldığını ve cinsel fonksiyonun olumsuz yönde etkilendiğini göstermektedir. Vaka ve kontrol grubu arasındaki yaşam kalitesi ve cinsel disfonksiyon ölçek genel puan ortalamaları arasındaki fark istatistiksel olarak anlamlıdır. POP prevalansı, gebelik sayısında azalma ile 1.6 kat, doğum sayısındaki azalma ile 3.5 kat azalırken ve müdahaleli doğumda 2.8 kat, aile öyküsü varsa 5.8 kat artmaktadır.

Sonuç: Pelvik taban disfonksiyonu ile yaşam kalitesi ve cinsellik arasındaki ilişki göz önüne alındığında, bunun sadece bir tıbbi sorun değil aynı zamanda sosyal bir sorun olduğunu söylemek mümkündür. Bu bakımdan, hem sağlık çalışanlarının hem de kadınların POP ile karşılaşma riskini azaltma açısından riskler hakkında önceden bilgi sahibi olmaları önemlidir.

Anahtar kelimeler: Pelvik organ prolapsusu, yaşam kalitesi, cinsel yaşam, cinsel sağlık

INTRODUCTION

Pelvic Organ Prolapse (POP) is defined as the herniation or prolapse of the pelvic organs/bladder, uterus and rectum from their normal place to or beyond the vaginal wall as a result of the weakening in the pelvic support tissue. Aberrations happening in the functions of these organs due to the changes in their positions cause various symptoms¹. Pelvic organ prolapse is a both medical and social problem because women's quality of life is negatively affected by the micturation problems such as urinary incontinence, fecal incontinence or constipation, problems regarding sexual life, pelvic organ prolapse, presence of hand-held bulk and related symptoms, as well as symptoms such as advanced POP decubitus ulcer and pelvicgia.

Sexuality is an inseparable part of human life and the most important parameters of health and quality of life. Sexual life is one of the parts which should be assessed in POP cases and which is affected in serious ways. Studies comparing women with and without prolapse in terms of women's sexual functions report that POP can have significant negative effects^{2,3}. Analysis of women with urinary incontinence and/or pelvic organ prolapse indicates that they can develop various sexual dysfunctions due to the negative effects in sexual life caused by low body image, increased sense of shame, decreased feminine feelings both physically and sexually, anxiousness due to smell, the need for using pad/cloth constantly, fear of incontinence, urinary incontinence during coitus, negative reactions of the spouse/partner, the feeling of having become less attractive, and the depression caused by these factors⁴⁻⁶. Studies conducted in Turkey involve investigation of quality of life and sexual functions in women with POP^{4,7-11}. However, there are no studies that compare quality of life and sexual life with women without POP. In this regard, the present study was designed as a case-control study to determine the risk factors related with POP and identify the effects of POP on quality of life and sexual function.

MATERIALS AND METHODS

Study Design

This study was performed as a case-control one in order to identify the effects of POP on quality of

life and sexual function of women with pelvic organ prolapse. Patients were allocated into two groups. Those who were over 40 years old, who were not diagnosed with cancer or had not received cancer treatment before, whose mental state was relevant to evaluation, who were not diagnosed with pregnancy, and who were diagnosed with advanced pelvic organ prolapse were included in the case group and those who were not diagnosed with POP were included in the control group. This study was approved by the Ethics Committee of Cukurova University, Turkey (Number 34/15, 05 September 2014). Participants were informed about the aims of the study and their verbal consent was obtained prior to the administration of the questionnaire.

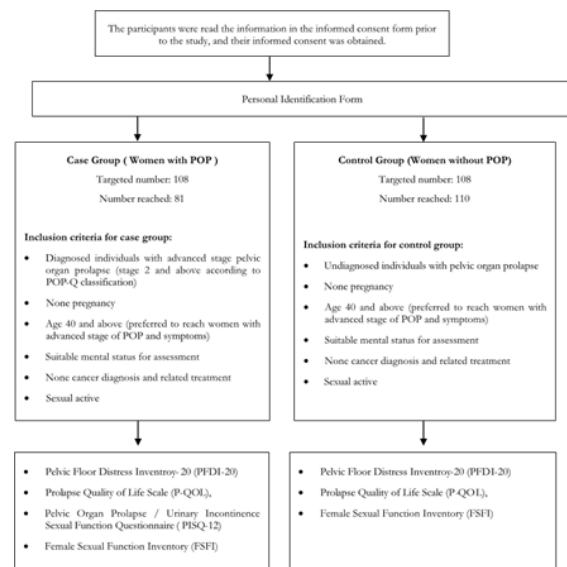


Figure 1 Study flow diagram

Subjects

Target population of the study was women who applied to the gynecology polyclinics in university hospital and in maternity and children hospital. The participants were women who applied to gynecology polyclinics between the dates specified, who met the research criteria and accepted to participate in the study. All women were evaluated with a general medical history, sexual history, and physical examination, including gynecologic examination by gynecologist. All patients were examined in the dorsal lithotomy position. Degree of pelvic organ prolapse was quantitatively assessed using pelvic organ prolapse quantitation (POP-Q) staging

system.

Inclusion criteria for case group were; being diagnosed as advanced stage pelvic organ prolapse (Stage 2 and above according to POP-Q classification), not being pregnant, being at an age of 40 and above (preferred to reach women with advanced stage of POP and symptoms), being in a suitable mental status for assessment, not having any cancer diagnosis and related treatment and being sexually active. Inclusion criteria for control group were; not having any diagnosis of pelvic organ prolapse, not being pregnant, being at an age of 40 or above, being in a suitable mental status for assessment, not having any cancer diagnosis and related treatment and being sexually active.

The related literature indicates POP prevalence in Turkey between 6.4% and 27.1%⁴⁻⁷⁻¹¹. 95% confidence interval with improbable sampling method and $p < 0.05$ significance level indicated that the case and control groups should have 108 volunteer women in each. Due to such reasons as lack of urogynecology clinics in the hospitals where the study was conducted and some cases' reluctance to participate in the study, the study was completed with 110 control and 81 case group participants. This situation is a limitation for the study.

Scales

The participants were read the information in the informed consent form prior to the study, and their informed consent was obtained. The data were collected through Personal Identification Form, Pelvic Floor Distress Inventory-20 (PFDI-20), Prolapse Quality of Life Questionnaire (P-QOL), Pelvic Organ Prolapse / Urinary Incontinence Sexual Function Questionnaire PISQ-12), and Female Sexual Function Inventory (FSFI) (Figure 1).

Personal Identification Form

This form developed by the researcher consisted of 40 items. The form included questions about socio-demographic features, obstetric and gynecological features, general health status, risk factors for pelvic organ prolapse, and treatment history for diagnosed individuals. Demographic features questions implicate such as age, educational status, occupation, height/weight. Questions related to obstetric and gynecologic status implicate questions such as first gestational age, number of pregnancies, number of births, number of abortions/voluntary pregnancy termination, type of delivery (vaginal or cesarean),

assisted delivery (forceps/vacuum), presence or absence episiotomy, neonatal weights at birth, menopausal status (perimenopause, menopause or post menopause) and status of taking hormone treatment. Every birth is evaluated separately in terms of mode of delivery and neonatal weight. Information on general health features were included in the questions about family history of POP (mother, grandmother, sister, aunt), smoking and alcohol consumption status (amount of daily use), constipation (fewer than three times a week), chronic cough, heavy load lifting, chronic illness (diabetes mellitus, chronic renal failure, liver disease), complaints of urine incontinence, fecal incontinence or genital organ sagging, history of gynecologic surgery and conservative treatment options.

Pelvic Organ Prolapse/Incontinence Sexual Questionnaire

Pelvic Organ Prolapse/Incontinence Sexual Questionnaire (PISQ-12) is condition-specific female sexual function questionnaire developed to assess sexual function in women with UI and/or POP by Rogers and et al. in 2003¹⁶. Turkish validation and reliability made by Cam and et al.¹⁷. Questionnaire include 12 items in three different domains; behavioral-emotive (4 items), physical (5 items), and partner related (3 items). Questions are rated on a five-point Likert scale ranging from 0 to 4, indicating a worse to better condition. Reverse scoring is used for first 1-4 questions. The total score is a range between 0-48 and the higher scores indicate that the improvement in sexual function.

Female Sexual Function Index

Female Sexual Function Index (FSFI) was developed by Rosen et al. in 2000 and consists of 19 questions that interrogate sexual desire, arousal, lubrication, orgasm, satisfaction and pain¹⁸. It was adjusted in Turkish by Aygin and Eti Aslan¹⁹ and supported with Oksuz and Malhan²⁰. It provides scores on six domains of sexual function: desire(1-2), arousal (3-6), lubrication (7-10), orgasm (11-13), satisfaction (14-16), and pain (17-19) as well as a total score. Questions are ranging from 0 to 5. If a domain score is zero, it indicates that no sexual activity during the past month. Each domain scores obtain with adding the scores of the individual items that comprising the domain and multiplying the sum by the domain factor. Full scale score is obtained by addition of six domain score. The total

score is a range between 0-48 and the higher scores indicate that the improvement in sexual function. The lowest total score that can be taken from the scale is 2, the highest score is 36. Cut-of point is 26.55 for FSFI. Total score of 26 or less indicates risk for sexual dysfunction¹⁸⁻²⁰.

Statistical analysis

For all statistic calculations SPSS 21 for Windows was used. The data were analyzed using percentages, means, Mann-Whitney U test, Bonferroni correction, NPar test, and Spearman's correlation test. Mean scores for two groups were analyzed using Mann-Whitney U test. The relationship between two parametric data were analyzed using Spearman's correlation test. The difference between non-parametric data was analyzed using Chi-square

test. For all the data obtained in this study, statistical significance was taken $p < 0.05$, α error level was 5 %, and reliability level was 95%.

RESULTS

The participants' age ranged between 40 and 67 and their average age was 49.59 ± 6.66 years. Of all the women participating in the study, 36.6% received 12-year primary education. Average body mass index (BMI) of the women in the case and control groups was 26.50 ± 3.50 . Both groups were in the overweight category in terms of the mean scores identified. 83.6% of the participants did not work anywhere. No significant difference was found between the case and control groups in terms of their descriptive features ($p > 0.05$) (see Table 1).

Table- 1. Descriptive features of case and control groups

Variable	Case (n=81)		Control (n =110)		χ^2	p
	n	%	n	%		
Age						
40-49	41	50.6	63	41	0.539	0.137
50-59	32	39.5	40	32		
60 -67	8	9.9	7	8		
Age (mean \pm SD)	48.98 \pm 6.39		50.42 \pm 6.81			
Education					2.738	0.740
Illiterate	8	9.9	11	8		
Literate	8	9.9	6	8		
Primary school	26	32.1	31	26		
Secondary school	21	25.9	29	21		
High school	12	14.8	24	12		
University and higher	8	7.4	9	6		
Body Mass Index (BMI)	20	24.7	42	38.2	0.123	0.239
18.5 – 24.99 (normal)	45	55.6	53	48.2		
25-30 (overweight)	16	19.8	15	13.6		
30-40 (I-III. obese)						
BMI (Mean \pm SD)	26.85 \pm 3.81		26.25 \pm 3.32			
Working Status (employed)	11	13.6	21	19.1	1.016	0.314

Number of pregnancies ranged from 1 to 10 and births ranged from 1 to 8 in both groups. Average age of first pregnancy was 20.36 ± 2.76 in case group and 20.30 ± 4.89 in control group. The average number of pregnancy was 4.05 ± 1.96 , birth was 3.06 ± 1.29 , abortion was 0.46 ± 0.79 , voluntary pregnancy termination was 0.57 ± 0.98 in case group. Cesarean rate was 9.8%, episiotomy rate was 76.5% for first delivery of case group. Macrosomic baby history was present in 8.6% of first births, 6.2% of second and third birth, 1.2% of fourth birth in case group. The average number of pregnancy was

3.04 ± 1.50 , birth was 2.48 ± 1.17 , abortion was 0.25 ± 0.53 , voluntary pregnancy termination was 0.32 ± 0.72 in control group. Cesarean rate was 10% and episiotomy rate was 65.5% for first delivery of control group. Macrosomic baby history was present in 7.3% of first births, 0.9% of second, third and fourth birth in control group. There was a significant difference between the case group and control group in terms of such variables as the number of pregnancies, number of deliveries, number of abortions, number of pregnancy discharges, and being in the menopausal period

($p < 0.05$). Of all the participants, 38.2% did not in menopause yet, 5.8% were in perimenopausal period, 38.2% were in menopause, and 17.8% were in postmenopausal period. No significant differences were identified between the groups in terms of menopausal duration and use of hormone

replacement. Table 2 demonstrates scores in relation to PFDI-20, P-QOL, PISQ-12 and FSFI mean scores of the case and control groups. There was a statistically significant difference between the case and control groups in terms of the total mean scores ($p < 0.05$).

Table 2. PFDI-20, P-QOL, PISQ-12 and FSFI mean scores of the case and control groups

Scales	Case	Control	U	z	p
PFDI-20	127.95±40.28	39.58±46.56	724.500	-9.892	0.000
P-QOL	74.34±23.05	33.89±17.44	646.000	-10.094	0.000
PISQ-12***	29.68±7.18	***	NE**		
FSFI	21.39±4.46	24.45±5.98	2941.000	-4.011	0.000

Mean±SD;* Mann-Whitney U; **NE: Not eligible to analysis; *** Only case group

There was a statistically significant difference between the groups in terms of the PFDI-20 sub-dimension mean scores ($p < 0.05$) (see Table 3). PFDI-20 general score and all POPDI-6, CRADI-8, UDI-6 sub dimensions demonstrated significant differences between the case and control group. The difference between the case and control group in terms of the P-QOL total mean scores was statistically significant similar to the scale sub-

dimensions. P-QOL sub-dimensions; general health, POP symptom, daily limitations, physical limitations, social limitations, personal relations, emotional state, sleep/energy and symptom all sub-dimensions indicated statistically significant differences between the case and control groups ($p < 0.000$). Quality of life scale total score and sub-dimension scores were found to be higher than the control group (see Table 3).

Table 3: PDFI-20, P-QOL, PISQ-12 and FSFI sub-dimension mean scores of case and control groups

Sub-dimensions	Case	Control	U	z	P
PTDE-20					
POPDI-6	45.31±21.43	11.66±18.38	1140.000	-8.964	0.000
CRADI-8	17.51±14.51	8.29±12.68	2661.500	-4.933	0.000
UDI-6	65.12±22.33	19.62±23.18	846.500	-9.593	0.000
P-QOL					
General health	50.72±14.346	20.57±15.624	682.000	-10.009	0.000
Prolapse impact	34.35±14.652	17.50±14.278	1930.500	-6.714	0.000
Role limitation	54.93±22.311	26.09±14.844	1453.000	-8.763	0.000
Physical limitation	53.70±21.877	25.00±12.543	1292.500	-9.225	0.000
Social limitation	45.80±22.240	24.09±11.357	1829.500	-7.721	0.000
Personal relationship	38.84±23.985	9.63±15.180	1320.500	-8.636	0.000
Emotion	47.57±21.724	23.87±9.908	1517.000	-8.605	0.000
Sleep energy	48.39±19.200	26.63±12.941	1626.000	-7.929	0.000
Severity measures	43.02±17.882	23.13±7.163	1465.500	-8.654	0.000
FSFI					
Desire	3.01±1.04	3.51±1.14	2983.500	-3.969	0.000
Arousal	3.32±0.91	3.90±1.14	2787.000	-4.443	0.000
Lubrication	3.79±1.01	4.40±1.16	2943.500	-4.025	0.000
Orgasm	3.83±1.02	4.14±1.18	3651.500	-2.143	0.032
Satisfaction	3.56±0.97	4.13±1.31	2954.000	-4.019	0.000
Pain	3.85±1.17	4.35±1.28	3504.000	-2.548	0.011
PISQ-12**					
Behavioral emotive	7.40±3.14				
Physical	11.23±5.18	***		NE **	
Partner-related	9.38±1.49				

* Mann-Whitney U; **NE: Not eligible to analysis; *** Only case group

As for PISQ-12 sub-dimension scores, behavioral/emotional sub-dimension mean score was 7.40±3.14, physical state sub-dimension mean score was 11.23±5.18, and partners' case sub-

dimension mean score was 9.38 ± 1.49 (see Table 3). Findings in relation to sexual functions for case and control groups are demonstrated in Table 3. Statistically significant differences were detected between FSFI total and sub-dimensions mean scores ($p < 0.05$).

Correlation between FSFI general mean scores and PFDI, P-QOL and PISQ-12 mean scores was analyzed and it was found that there was a negative, significant relationship between PFDI-20 and P-QOL; and positive, significant relationship with PISQ-12. It was indicated that FSFI scores would increase with the decrease in PFDI and P-QOL scale scores and increase in PISQ-12 scores. Findings indicated that sexual function would be positively affected by the decrease in the complaints about pelvic floor and improvement in quality of life (see Table-4).

There was a statistically significant relationship between education level and FSFI scores ($p:0.039$). According to Bonferroni correction Mann Whitney U test, this difference was found to result from the education level difference between primary school and high school ($p < 0.01$). Findings indicated that

FSFI scores would increase with the increase in education level. The difference between number of deliveries and PFDI ($p:0.012$), P-QOL ($p:0.008$) and FSFI ($p:0.008$) total scores was found to be statistically significant, but no statistically significant difference was found with PISQ-12 ($p:0.058$) total score. There was an increase in PFDI and P-QOL total scores and a decrease in FSFI total scores with the increase in the number of deliveries. An evaluation of the relationship between menopause and total scores of the scales showed that statistically significant difference was found only with P-QOL total score. According to Bonferroni correction Mann Whitney U test, this difference was between those who went through menopause and those who did not ($p < 0.01$). The relationship between constipation complaint and all scale total scores was found to be statistically significant. According to Bonferroni correction Mann Whitney U test, this difference was resulted from the relationship of each of the “never”, “rarely” and “always” groups with each other ($p < 0.017$). The relationship between smoking and PFDI and P-QOL general total scores was found to be significant ($p < 0.017$).

Table 4. Correlation between FSFI general mean scores and PFDI, P-QOL and PISQ-12 mean scores

FSFI	PTDE	PQOL	PISQ-12
r	-0.475	-0.448	0.407
p	0.000	0.000	0.000
n	191	191	81

*Spearman's Correlation

Whether deliveries were interventional or not created a statistically significant relationship only with FSFI total scale scores ($p:0.000$). A significant relationship was identified between having received hormone replacement treatment and PFDI scale scores ($p:0.003$).

General scale scores of those who received HRT were found to be higher. Receiving HRT did not create a significant difference in terms of the P-QOL, PISQ-12 and FSFI general scores. Pelvic organ prolapse family history indicated a statistically significant relationship with all total scores ($p:0.000$) of the scales.

PFDI ($p:0.000$) and FSFI ($p:0.000$) total scores indicated significant relationships in those who had chronic cough complaint. There was an increase in PFDI scores and a decrease in FSFI scores with the increase in chronic cough. PFDI ($p:0.009$), P-QOL

($p:0.004$) and PISQ-12 ($p:0.008$) scores of those who had POP family history were found to be higher, and FSFI ($p:0.005$) scores were lower.

In the logistic regression model, the first gestational age, voluntary pregnancy termination, and constipation are factors that out of analysis. The number of pregnancies, the number of births, mode of delivery, the state of menopause, the POP story in the family were identified as risk factors associated with POP. While number of pregnancies, number of births, states of menopause are in a negative relationship, mode of delivery and family history are in a positive relationship. While the number of pregnancies reduced the POP rate by 1.6 times, assisted delivery was increased rate by 2.8 times. The POP rate is reduced by 3.5 times while the number of births is decreasing and increased by 5.8 times if there is family history (see Table 5).

Table 5: Logistic regression model analysis of related factors with POP

	β	Standart Error	Wald	p	Exp (B)	95.0% C.I.for EXP(B)	
						Lower	Upper
Number of pregnancy	-.414	0.106	15.343	0.000	1.661	0.538	2.813
Assisted delivery	1.059	0.403	6.916	0.009	2.883	1.310	6.346
Number of birth	-.596	0.171	12.105	0.001	3.551	0.394	7.771
Menopause	-.360	0.130	7.629	0.006	0.698	0.540	0.901
Family history	1.762	0.343	26.364	0.000	5.825	2.973	11.413

DISCUSSION

The related literature acknowledges the strong relationship between obstetric factors and pelvic floor dysfunction. Parity and delivery method is accepted to be the main risk factor for the weakening of pelvic floor muscles and POP development. This effect is reported to be caused by the damage in muscles, fascia, ligaments and peripheral nerves as a result of vaginal delivery. The related literature indicates pregnancy and number of deliveries as changeable risk factors for POP²¹. In this study, number of pregnancies, delivery method, number of deliveries, and being in menopause variables of the case group were significantly different from the control group. In line with other studies, POP risk increases with pregnancy and number of deliveries. Studies that analyzed the relationship of parity and delivery method with pelvic floor dysfunction indicated the risk factors associated with POP development as family history, bad obstetric history, and having being in menopause for more than 10 years^{22,23}.

Results of the present study showed that pelvic floor dysfunction complaints were more common in women with POP history in family; and quality of life and sexual functions were affected more negatively. Miedel et al. found that POP family history increased POP risk prevalence 3.3 times more²⁴. In their systemic review, Lince et al. investigated the relationship between hereditary factors and POP and reported that positive POP history in family was an important risk factor for POP development and emphasized the underlying genetic factors²⁵⁻²⁷. Although studies conducted in different societies display similarity, different results were also obtained, which is considered to result from ethnic factors²⁸⁻³⁰.

Pelvic floor muscles have an important place in POP development in terms of structural support. Muscle activities are closely associated with

compatibility with position changes and intra-abdominal pressure. Beside the cases increasing intra-abdominal pressure, risk factors that increase POP incidence are reported to be the presence of disease history such as liver diseases, chronic cough, diabetes, kidney diseases²⁹. The present study found that, among the cases that increase intra-abdominal pressure, only constipation caused statistical differences between the case and control group. In this study, 70% of the women with POP were found to have cystocele or rectocele complaint. POP and urinary incontinence are both common complaints and may coexist in the same patient. Kudish et al. found that 34.8% of women had cystocele diagnosis, 18.4% had rectocele diagnosis, and 13.4% had uterine prolapse diagnosis³⁰. In a similar vein, Dietz reported that 32% of the women with urogenital prolapse had cystocele, 34% had rectocele, and 15% had uterine prolapsed³¹. Tok et al. found cystecole prevalence in women with POP as 56%⁴. Zargham et al. reported cyctecole in 76% and rectocele in 60% of the women³²; Celik et al. found cystocele in 80% of women with POP⁶. Findings of this study are similar to the findings in previous studies.

According to PFDI-20, P-QOL, FSFI and PISQ-12 scores in our study, quality of life decreases with the increase in pelvic floor dysfunction and sexual function is affected negatively. Factors such as interventional deliveries, POP history in family, hormone replacement treatment, constipation complaint and heart disease cause negative effects on quality of life and sexual functions³³⁻³⁶. In this study, PFDI general mean score of the case group was significantly higher than that of the control group ($p < 0.000$). Pelvic floor function disorders complaints of the women in our study were at moderate level. PFDI-20 results of with literature studies display similarity with our findings³⁷⁻³⁹. P-QOL scale which aimed to identify prevalence of the symptoms and their effects on quality of life showed that P-QOL general mean scores and all

sub-dimensions of the case group were significantly higher than that of the control group. Based on these results, quality of life of women with POP were lower. Literature information and results of the study are similar.

Age in women with POP is reported to be an important indicator for quality of life ³⁷, and quality of life is reported to be highly affected by the negativity experienced in physical mobility, pain, emotional reactions, social isolation, and energy and sleep state ^{37,39-42}. One of the inclusion criteria for this research is to be over age 40 and above. In this respect, it is thought that poor quality of life and sexual function of the individuals in the control group is related with age.

PISQ-12 and FSFI correlations indicated that the scales were associated with each other. Case and control group sexual functions were interpreted in line with the significance in general scores and sub-dimensions as a result of the FSFI and PISQ-12 correlation results. Similar to the studies in the related literature, the present study also found that women with POP experienced more sexual dysfunctions. Sexual functions of the POP group were affected negatively in all sub-dimensions. Total score is a score that is below FSFI cut-off score (<26.55). Siff et al. reported that frequently ignored psychological factors significantly affected coping with pelvic floor symptoms, efficiency of the treatment, quality of life, and sexual life ⁴³. Especially body image, which is considered to be associated with sexual desire and satisfaction, was reported to be a factor that should be taken into consideration in women experiencing sexual dysfunction due to POP ^{2,3,5,37}.

Pelvic floor function that can be affected by even a single pregnancy is decreasing due to many factors such as number of births and pregnancy, mode of delivery, family history and menopause. POP that can develop as a result of exposure to these factors, causes increasing of pelvic floor dysfunction complaints, negatively affecting of life quality and increasing of sexual dysfunction. Increasing awareness of health professionals and women about risks is important for negative effects on quality of life and sexuality of the pelvic organ prolapse. It should not be forgotten that this negative situation is a problem not only for the woman but also for her family and partner. In this regard further work is needed to understand how this condition affects women and her partners.

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