Original Articles/นิพนธ์ต้นฉบับ

Quality of Life in Women with Pelvic Organ Prolapse Attending Urogynecology Clinic, Ramathibodi Hospital

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Abstract

Objective: To assess the impact of pelvic organ prolapse (POP) on quality of life (QOL) of women and factors associated with their effect.

Methods: This cross-section study was conducted by interviewing 140 women who came to the urogynecology clinic, Ramathibodi hospital. Demographic data, information about lower urinary tract symptoms and severity of POP were collected. Seven aspects of QOL including household work, entertainment activity, physical recreation, travel, participation social activity, emotion health and feeling frustration were assessed, using Thai version modified pelvic floor impact questionnaires-short form (PFIQ 7).

Results: The average age of subjects was 67.5 years. Seventy four percent were married , 80 % were housewives and almost all (99.3%) had at least one parity. Fifty percent had stage II of POP, and 80% had associated urinary symptoms. Regarding QOL, the most affected aspect was travel. All 7 aspects of QOL scores were significantly associated with severity of POP. Physical recreation, travel, emotional health and feeling frustration aspects of QOL scores were significantly associated with parity.

Conclusion: Majority of women with POP who came to urogynecology clinic were diagnosed at least stage II POP and mostly had associated urinary symptoms. Seven aspects of QOL of women were affected by POP especially travel domain.

Keywords Pelvic organ prolapse; Quality of life; Associated factors

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Introduction

Pelvic organ prolapse (POP) is a defect of a specific vaginal segment characterized by downward descent of the vagina and associated pelvic organ. It can affect the anterior vaginal wall, posterior vaginal wall, and uterus or apex of the vagina, usually in some combination.[1] This condition results from disruption or dysfunction of pelvic floor support caused by many risk factors such as vaginal childbirth, advancing age, and obesity, varying from patient to patient.[2] The affected women may present either with one symptom, such as vaginal bulging or pelvic pressure, or with several complaints, including bladder, bowel, and pelvic symptoms, depend on the severity or stage and compartment of prolapse.

Pelvic organ prolapse is a condition predominantly affecting middle-aged and elderly women. The exact prevalence of pelvic organ prolapse is difficult to determine, the reported prevalence of any degree of prolapse in women ages 20 to 59 years is estimated to be 30.8%.The lifetime risk of requiring at least 1 operation to correct incontinence or prolapse is estimated at approximately 11 %.[3] In Thailand, the prevalence of women having any type of genital prolapse varied from 40 to 70%.[4,5] Information from these studies made all health care providers realize the high prevalence of POP especially in the elderly women.

Although POP is not life threatening, symptoms associated to the condition can have a profound psychosocial, physical and mental impact on women quality of life and well-being. However, its effects on quality of life in affected women were not thoroughly evaluated. The purpose of this study was to evaluate the effect of POP on quality of life (QOL) and also study factors associated with QOL in women with pelvic organ prolapse attending urogynecology clinic at Ramathibodi Hospital.

Materials and methods

The study was a cross-sectional survey. Eligible women were patients with pelvic organ prolapse symptom who came to urogynecology clinic, Faculty of Medicine, Ramathibodi Hospital and were willing to participate in the present study, during January-April 2012. Women were interviewed using a structured questionnaire. The demographic and medical data collected from each subject included age, marital status, parity, occupation, menopausal status. Presence of concurrent lower urinary tract symptoms was asked using simple questions which was further divided into 4 groups; no symptom, presence of storage or incontinence symptom, presence of obstructed voiding symptom and mixed symptoms. Severity of POP was evaluated by gynecologist using standard pelvic organ prolapse quantitative system.[6]

Seven aspects of QOL including household work, entertainment activity, physical recreation, travel, participation social activity, emotion health and feeling frustration were assessed using Thai version modified pelvic floor impact questionnaires-short form (PFIQ 7). The score of the QOL was calculated by scoring 1 to 5, with a higher score representing the worst possible quality of life.[7]

The sample size was calculated according to the following formula of Hair JF[8] As a result, 140 women were required. Statistical analyses were performed using SPSS for Windows (version 18.0).The descriptive statistics were frequency and percentage (qualitative variables), mean and standard deviation

Table 1 Demographic characteristic of the subjects (N=140)

Characteristics	n (%)
Age	
Mean ± SD, range (year)	67.5±7.4, 34-85
Marital status	
Single	1(0.7)
Married	104(74.3)
Widowed or divorced	35(25.0)
Occupation	
Entrepreneur	11(7.9)
Housewife	112(80.0)
Government officer	7(5.0)
Employee	10(7.1)
Parity	
0	1(0.7)
1-2	41(29.3)
3-4	68(48.6)
≥5	30(21.4)
Menopausal status	
Pre-menopause	3(2.2)
Post-menopause	137(97.8)
Sexually active	
No	130(92.9)
Yes	10(7.1)

Table 2 Severity of pelvic organ prolapse (POP) and associated urinary symptoms (N=140)

Characteristics	n (%)
Severity Of POP	
Stage 0	8(5.7)
Stage I	47(33.6)
Stage II	71(50.7)
Stage III	14(10.0)
Urinary symptoms	
None	25(17.9)
Incontinence	12(8.6)
Obstructed Voiding	71(50.7)
Mixed	32(22.8)

Table 3 QOL of women with pelvic organ prolapse (N=140)

QOL aspects	QOL scores, n (%)					
	No (1)	Mild (2)	Moderate (3)	Severe (4)	Very severe (5)	Mean ± SD
Household work	21(15.0)	63(45)	40(28.6)	16(11.4)	0(0)	2.36±0.87
Entertainment activity	24(17.1)	58(41.4)	40(28.6)	17(12.1)	1(0.7)	2.38±0.93
Physical recreation	27(19.3)	52(37.1)	46(32.9)	15(10.7)	0(0)	2.35±0.91
Travel	17(12.1)	40(28.6)	62(44.3)	21(15.0)	0(0)	2.62±0.89
Participation social activity	20(14.3)	61(43.6)	41(29.3)	17(12.1)	1(0.7)	2.41±0.91
Emotion health	19(13.6)	66(47.1)	36(25.7)	18(12.9)	1(0.7)	2.40±0.90
Feeling frustration	15(10.7)	70(50.0)	38(27.1)	17(12.1)	0(0)	2.41±0.84

Table 4 Association between demographic characteristics, severity of POP, urinary symptoms and quality of life (all aspects of QOL) (N=140)

Characteristic	QOL scores		p-value	
	1-3 (%)	4-5 (%)	X2	Fisher's exact
Age				
< 70	65(60.7)	21(63.6)		
≥70	42(39.3)	12(36.4)	0.383	
Marital status				
Married	79(73.8)	25(75.8)		
Single or widowed or divorced	28(26.2)	8(24.2)	0.412	
Occupation				
Entrepreneur & employee	21(19.6)	7(21.2)		
Housewife	86(80.4)	26(78.8)	0.421	
Parity				
≤3	73(68.2)	25(75.8)		
≥4	34(31.8)	8(24.2)	0.204	
Severity of POP				
Stage 0-I	53(49.5)	2(6.1)		
Stage II-III	54(50.5)	31(93.9)		0.000
Urinary Symptom				
None	9(8.4)	3(9.1)		
Incontinence & Obstructed Voiding	98(91.6)	30(90.9)		0.285

(quantitative variables). The association between QOL of women with POP and associated factors were analyzed using the Chi-square test, Fisher's exact test. A 5% level of significance was used throughout the study.

Results

The mean age of the subjects was 67.5 ± 7.4 (range 34-85) years old. Demographic characteristics are presented in Table 1. Regarding POP stage, about 50% of women diagnosed stage II of genital prolapse, 33% had stage I and 10% had stage III prolapse. Five percent of women with prolapse symptom could not demonstrate any compartment of prolapse on vaginal examination. Eighty percent reported associated urinary symptoms; 50.9% had obstructed voiding symptom, 8.6% had storage symptom and 22.9% had mixed urinary symptoms. (Table 2)

Table 3 summarized QOL in women with POP in various aspects. About 60-70% of genital prolapse women reported mild to moderate effect of POP on their QOL, which the average PFIQ score range from 2.35 to 2.62. The least affected aspect of QOL was physical recreation whereas the most affected aspect was travel.

The association between demographic characteristic (age, marital status, occupation, and parity), severity of POP, present of urinary symptoms and quality of life scores are shown in Table 4. Overall QOL and each 7 aspects were significantly associated with severity of POP. The more severe prolapse group has a greater effect from genital prolapse on their overall quality of life. Parity is another factor that associated with PFIQ score but only in some aspects of QOL whereas age, marital status, occupation and presence of urinary symptoms showed no significant association with quality of life scores.

Discussion

Although pelvic organ prolapse rarely results in severe morbidity or mortality, it causes symptoms of the lower genital, urinary, and gastrointestinal tracts that can affect a woman's daily activities and quality of life.[9] Pelvic organ prolapse can affect many aspects of QOL and result in physical, psychological, social and sexual lifestyle limitations.[9-11] Women with pelvic organ prolapse may restrict their physical and social activity because of their prolapse symptoms. In general, only weak-to-moderate correlations exist between severity or stage of prolapse and presence of specific symptoms such as bulging, heaviness, and voiding dysfunction.[10,12] Several symptoms typically attributed to prolapse might, in fact, not be related. Because the clinical measures of genital prolapse do not reflect an individual perspective, therefore addition of quality of life assessment in clinical practice is important for evaluation impact of pelvic organ prolapse.

Several condition specific health-related quality of life instruments have been developed to measure pelvic floor dysfunction specific aspects of quality of life. These instruments can provide more objective and comprehensive assessment of women's symptoms and quality of life. Pelvic Floor Distress Inventory (PFDI) and Pelvic Floor Impact Questionnaire (PFIQ) are the instruments widely used in assessment of quality of life in women with pelvic floor disorders. They are reliable, valid, and comprehensive condition specific and QOL instruments for these genital prolapse women.

In this study, the modified pelvic floor impact questionnaire (PFIQ 7), Thai version was used in the assessment. The terminology used in the questionnaire was the language understandable for every Thai woman. About 70% of women with POP in this study

had mild to moderate severity of QOL scores with mean score ranged from 2.35-2.62 (0=no, 5=very severe) in 7 aspects; household work, physical recreation, entertainment activity, travel, participation social activity, emotion health and feeling frustration. The most affected aspect of quality of life was travel. This indicates that pelvic organ prolapse had a moderate impact on quality of life.

Regarding factors affecting their QOL, severity of POP has significant association with PFIQ scoring in all 7 aspects. It was noteworthy that more proportion of stage 0/I genital prolapse women scored significantly lower compared with the stage II/III group. This implies that stage 0/I pelvic organ prolapse women regarded themselves as having better quality of life than women with a greater degree of prolapse. This is consistent with several literatures demonstrating that pelvic organ prolapse have been associated with impaired quality of life.[13, 14] The study was in contrast with the study of Digesu GA and colleague which found that prolapse severity and quality of life scores were significantly different only in those women symptomatic of prolapse.[15]

Our study uses a standardized staging system of pelvic organ prolapse in assessment prolapse severity and uses a clinically validated condition specific health related quality of life questionnaires; pelvic floor impact questionnaire. The combination of standard prolapse evaluation and standard reliable instrument can provide reliable information that can compare to other studies. However, there are some limitations in our study. Firstly, according to the research design, our study could not establish a causal association between the significant associated factors (marital status and presence of urinary symptoms) and severity of pelvic organ prolapse. Secondly, there are several factors that lead to the occurrence of pelvic organ prolapse which was not included in this study. Another potential weakness of this study is the generalizability of the findings. The studied subjects were recruited from the symptomatic patient attending urogynecology clinic, and selection bias is always a possibility. Further research will need to clarify these problems.

Conclusion

Women with prolapse symptoms attending urogynecology clinic had an average mean age over 60 years. Most of them had stage II pelvic organ prolapse and up to eighty percent of them had associated urinary symptoms. Quality of life of these women was associated with severity of their prolapse and number of children. With the gradual increase in life expectancy of population in developed countries over the past century, obstetrician-gynecologists are expected to be familiar with disorders of the elderly population. Assessment of quality of life together with thorough evaluation of each individual prolapse condition is an important point to do for all health care providers who care for older women.

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Original Articles/นิพนธ์ต้นฉบับ

การศึกษาปัจจัยที่มีผลกระทบต่อคุณภาพชีวิตของสตรีที่มีภาวะอวัยวะอุ้งเชิงกรานหย่อนในคลินิกนรีเวชทางเดินปัสสาวะและอวัยวะสืบพันธุ์ คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี

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บทคัดย่อ

วัตถุประสงค์ เพื่อศึกษาผลกระทบของภาวะอวัยวะอุ้งเชิงกรานหย่อนต่อคุณภาพชีวิตของสตรี และปัจจัยที่เกี่ยวข้องกับผลกระทบดังกล่าว

วิธีการวิจัย การศึกษาแบบภาคตัดขวางนี้ ทำการเก็บข้อมูลในสตรีที่มารับบริการที่คลินิกนรีเวชทางเดินปัสสาวะและอวัยวะสืบพันธุ์ คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี จำนวน 140 ราย บันทึกข้อมูลพื้นฐาน อาการระบบทางเดินปัสสาวะและความรุนแรงของภาวะอวัยวะอุ้งเชิงกรานหย่อน และประเมินคุณภาพชีวิตครอบคลุมทั้ง 7 ด้าน ได้แก่ การทำงานบ้าน การออกกำลังกาย การสันทนาการ การเดินทาง การพบปะสังสรรค์นอกบ้าน อารมณ์และความรู้สึกคับข้องใจ โดยใช้แบบสอบถาม modified pelvic floor impact questionnaires-short form (PFIQ 7) ฉบับภาษาไทย

ผลการศึกษา กลุ่มศึกษามีอายุเฉลี่ย 67.5 ปี ร้อยละ 74.3 มีสถานภาพสมรสคู่ ร้อยละ 80 อาชีพแม่บ้าน ร้อยละ 99.3 เคยคลอดบุตรอย่างน้อย 1 ครั้ง ร้อยละ 50 มีระดับความรุนแรงของภาวะอวัยวะอุ้งเชิงกรานหย่อนอยู่ที่ระดับ 2 และร้อยละ 80 มีอาการผิดปกติทางระบบปัสสาวะร่วมด้วย เมื่อประเมินคุณภาพชีวิตทั้ง 7 ด้าน พบว่า คุณภาพชีวิตด้านการเดินทางมีผลกระทบมากที่สุด คะแนนคุณภาพชีวิตทั้ง 7 ด้าน มีความสัมพันธ์อย่างมีนัยสำคัญทางสถิติกับความรุนแรงของโรค คะแนนคุณภาพชีวิตด้านการออกกำลังกาย การเดินทาง อารมณ์และความรู้สึกคับข้องใจ มีความสัมพันธ์อย่างมีนัยสำคัญทางสถิติกับจำนวนการคลอด

สรุป ส่วนใหญ่ของสตรีที่มารับการตรวจรักษาที่คลินิกนรีเวชทางเดินปัสสาวะและอวัยวะสืบพันธุ์ มีความรุนแรงของภาวะอวัยวะอุ้งเชิงกรานหย่อนโรคอย่างน้อยที่ระดับ 2 ขึ้นไป และมักมีอาการทางระบบปัสสาวะร่วมด้วย ภาวะอุ้งเชิงกรานหย่อนมีผลกระทบต่อคุณภาพชีวิตทั้ง 7 ด้าน โดยเฉพาะด้านการเดินทาง

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