Original Articles/นิพนธ์ต้นฉบับ

Sexual Function in Women with Pelvic Organ Prolapse and Urinary Incontinence

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Abstract

Objective: To describe the sexual function of women with pelvic organ prolapse and urinary incontinence and to investigate the association between the presence of pelvic floor symptoms and degree of bother related to their problems and sexual function using a condition-specific sexual function questionnaire.

Methods: Women with pelvic organ prolapse/urinary incontinence, attending the Urogynaecolgy Clinic, Ramathibodi Hospital were recruited in the study. Information about the presence and degree of bother related to pelvic floor symptoms over the previous 1 month and sexual function were assessed; using the Thai version Pelvic Floor Bother Questionnaire (PFBQ) and the Thai version Pelvic Organ Prolapse/ Urinary Incontinence Sexual Questionnaire (PISQ-12), respectively.

Results: The subjects were 289 women aged 60.9 ± 11.4 years. One hundred and eighty eight (65%) were sexually active. There was no difference in sexual activity in women with different pelvic floor symptoms. Compared to sexually inactive group, sexually active women had significantly higher PFBQ score. Regarding to pelvic floor problems, there was no statistically significant difference in PISQ-12 scores in women with different pelvic floor symptoms. The degree of bother related to pelvic floor problems was significantly correlated with impairment of sexual function.

Conclusion: Pelvic organ prolapse and urinary incontinence have an impact on sexual function. Women with more bother related to pelvic floor problems have more sexual impairment.

Keywords Pelvic organ prolapse; Urinary incontinence; Sexual function

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Introduction

Pelvic organ prolapse and urinary incontinence are common conditions affecting nearly one third of premenopausal and about half of postmenopausal women.[1] These disorders have a significant impact on the quality of life.[2] Sexual health is a state of physical, emotional, mental, and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction, or infirmity.[3] It is considered an important aspect of a women's overall quality of life. The pathophysiology of sexual dysfunction as related to pelvic floor disorders has not been well understood.[4] Moreover; it is unclear whether sexual problems are due to the physical or emotional impact of pelvic floor dysfunction. From the previous report, up to 60% of sexually active women attending urogynecology clinic suffer from sexual dysfunction.[5] Although it is a very common problem, sexual complaints in these patients are still less addressed. Women with pelvic floor symptoms may be reluctant to ask about sexual concerns while seeking health care and health care providers are hesitant to inquire about sexual function. To date, studies of the effect of pelvic floor dysfunction on the quality of life have focused mostly on general aspect of quality of life, with little emphasis on sexual function. Moreover, the relationship between pelvic floor symptoms and sexual function remains conflicting.[6-9] The aim of this study was to gather the information on pelvic floor symptoms and sexual function in women with pelvic organ prolapse and urinary incontinence and investigate the association between the presence of pelvic floor symptoms and degree of bother related to their problems and sexual function.

Material and Method

All women with pelvic organ prolapse and urinary incontinence symptoms, attending the urogynecology clinic, Department of Obstetrics and Gynaecology, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, who never seek medical attention for their problems and were willing to participate, were recruited in the present study. Women without a partner were excluded. Questions asked were about demographic data (age, occupation), menopausal status, parity and pelvic floor symptoms (lower urinary tract symptoms, prolapse symptoms and bowel symptoms within the previous 1 month). For the assessment of pelvic floor symptom distress, a Thai version of the Pelvic Floor Bother Questionnaire (PFBQ) was used. This questionnaire consists of nine items that includes symptoms and bother related to prolapse, bowel and bladder symptoms. Each answer is scored in a range from 0 to 5 with higher scores indicating more severe bother. The item scores were summed and then transformed to a 0 to 100 scale.[10] To measure sexual function in sexually active women, we administered a Thai version of Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12). This questionnaire consists of 12 items about physical, behavioral-emotive and partner-related aspects of sexual functioning. The sum score ranges from 0 to 48, with a higher score indicating better sexual function.[11,12] The Pelvic Floor Bother Questionnaire and short form Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire are self-report instruments specific to pelvic organ prolapse and urinary incontinence and previously tested for validity and reproducibility.[10-12] The PFBQ and PISQ-12 have been translated forward and backward. The back-translation and the original were compared and the Thai version questionnaires were validated by three gynecologists with special interest in urogynecology. They were asked to critically assess the questionnaire in terms of specificity and sensitivity of the question in the Thai language. The terminology used in the questionnaire was the language understandable for every Thai woman. Written informed consent was obtained before entering the study.

Statistical analysis

Data were coded and analyzed using descriptive statistics, which are reported as the mean, median, standard deviation and quartile (quantitative variables) or as the number and percentage (qualitative variables). For statistical analysis, patients were divided into sexually active and inactive groups and the sexually active group was further divided into 7 groups of different pelvic floor symptoms. The statistical analysis were carried out using Independent t tests, Mann-Whitney U and Kruskal-Wallis test for continuous data and Chi-square test for categorical data. Pearson correlation coefficient was used to investigate the association between PFB scores and PISQ-12 scores. All reported probability values are two-tailed; P<0.05 was considered to be statistically significant. Statistical analyses were performed using SPSS for Windows (version 18.0).

Results

The subjects were 289 women aged 60.9 ± 11.4 years (range 21-95 years). One hundred and eighty eight (65.1%) were sexually active. The characteristics of subjects are presented in Table 1. Comparing between the sexually active and inactive groups, women in the sexually active group were younger than the inactive group ($p < 0.01$). The proportion of premenopausal women in the sexually active group was significantly higher than the inactive group ($p < 0.01$). There was no difference in sexual activity in women with different pelvic floor symptoms. However, women in sexually active group had significant higher PFBQ score than that of sexually inactive group ($p < 0.05$). Regarding to the presence of pelvic floor problems in the sexually active group, there was no statistically significant difference in PISQ-12 scores among women with different pelvic floor symptoms. (Figure 1) The degree of bother related to pelvic floor problems assessed by PFBQ was significantly correlated with impairment of sexual function ($r = 0.38$, $p < 0.01$).

Discussion

Sexual inactivity and dysfunction are multifactorial problems affecting women with pelvic organ prolapse (POP) and urinary incontinence (UI). Although the pathophysiology of sexual dysfunction as related to pelvic floor disorders has not been well understood, it may be due to biological change and psychological consequences of pelvic floor dysfunction.[4,13,14] Regarding urinary incontinence, common sexual complaints are low desire, vaginal dryness, dyspareunia and fear of coital incontinence. Women with POP may have sexual dysfunction due to mechanical obstruction. However, the reasons probably extend beyond the physical effects. It has been shown that women seeking treatment for advanced prolapse have decreased body image and quality of life scores.[4]

In order to thoroughly assess the effects of prolapse and urinary incontinence on sexual function, it is important to consider possible confounding variables such as older age and postmenopausal status. These confounding, common in women with pelvic floor dysfunction, are also associated with sexual impairment.[15] In clinical setting, the simplest way to assess sexual function in women with pelvic floor problems is to ask the patient simple questions: Are you sexually active? Do you have any problems? Do you have any pain with sexual activity? Another way of assessing sexual function more structurally is to use a validated questionnaire. Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaires (PISQ-12) is a validated and reliable condition-specific questionnaire, highly recommended by the International Continence Society, used for the assessment sexual function among women with urinary incontinence and pelvic organ prolapse.[16]

In this study, about 65% of women were sexu-

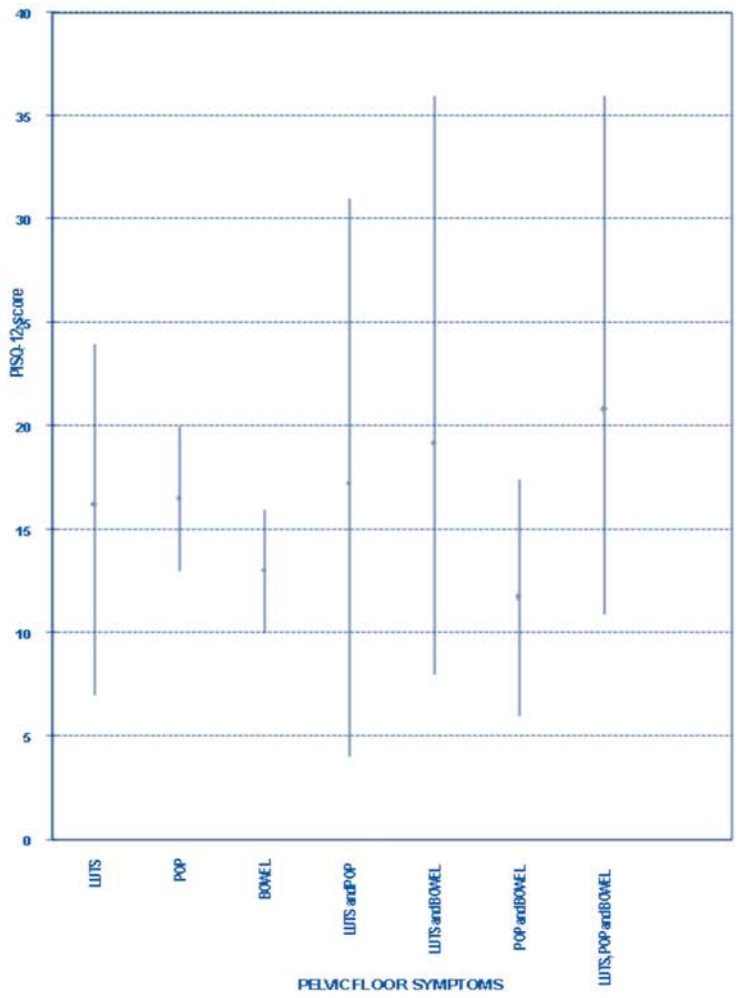

Figure 1 *The PISQ-12 score in women by pelvic floor symptoms (n=188). Mean score and range are represented with squares and vertical lines respectively.*

ally active and women in sexually active group were younger than the sexually inactive group. This is in agreement with the previously studies which found that increasing age was associated with sexual inactivity.[7,17,18] However, the presence of pelvic floor symptoms was not different between sexually active and inactive groups. This indicates that sexually inactive women do not abstain from sexual intercourse because of pelvic floor symptoms.

In the sexually active women, poorer sexual functioning was associated with degree of bother related to pelvic floor symptoms, not with the presence of more pelvic floor problems. This agrees with several previously published study which concluded that worse sexual function is associated with more severe pelvic floor symptoms or distress as a result of pelvic floor symptoms.[18-20] The results of this study may encourage the gynecologists and general practitioner to ask questions about sexual problems in women who present with pelvic floor symptoms and quantify the severity of their bothersome problems.

The strength of our study is that the study included both sexually active and sexually inactive women with a partner. The absence of a partner is the main cause of sexual inactivity among older women.[7,9] Therefore, this selection allows examination of whether it is likely that these sexually inactive women abstain from sexual intercourse because of pelvic floor symptoms. Another strength is that a condition specific questionnaire for sexual function

Table 1 Patient's characteristics

Characteristics	Sexually active n = 188	Sexually inactive n = 101	P value
Age (year, mean + SD, range)	57.3 + 10.7, 21-84	67.6 + 9.5, 37-95	< .01[a]
Menopausal status, n (%)			
- Pre/perimenopause	47 (25.0)	3 (3.0)	< .01[b]
- Postmenopause	141 (75.0)	98 (97.0)	
Parity, n (%)			
- Nulliparity	20 (10.6)	12 (11.9)	.748[b]
- Multiparity	168 (89.4)	89 (88.1)	
Occupation, n (%)			
- Government officer	55 (29.3)	14 (13.9)	
- Employee	17 (9.0)	11 (10.9)	.03[b]
- Commerce	19 (10.1)	10 (9.9)	
- Housewife	97 (51.6)	66 (65.3)	
Pelvic floor symptoms, n (%)			
- Urinary	39 (20.7)	28 (27.7)	
- Prolapse	2 (1.1)	2 (2.0)	
- Bowel	2 (1.1)	0 (0)	
- Urinary and prolapse	37 (19.7)	15 (14.9)	.460[b]
- Urinary and bowel	46 (24.5)	20 (19.8)	
- Prolapse and bowel	2 (1.1)	0 (0)	
- Urinary, prolapse and bowel	60 (31.9)	36 (35.6)	
PFB scores, median (25th to 75th percentile)	33.33 (20.05 to 52.78)	28.89 (13.33 to 43.33)	.015[c]
PISQ-12 scores, median (25th to 75th percentile)	18.00 (16.00 to 21.00)	n/a	n/a

[a] Independent Student T test
[b] Chi square test
[c] Mann-Whitney U test

was used in this study; this type of questionnaire is more sensitive than general questionnaires for detecting differences in sexual function that are due to pelvic floor symptoms.[21] The limitation of this study was that subjects included in the study were recruited from patients attending urogynecology clinic; they are selected group of patients whom their pelvic floor symptoms are severe enough to seek medical consultation. Therefore, care must be taken in generalizing the results of this study to women with mild pelvic floor problems. Another limitation is the presence of pelvic organ prolapse and urinary incontinence are based entirely on patients' reports of symptoms; there was no clinical examination and/or urodynamic testing to confirm the diagnosis. However the result from several studies showed the association of sexual functioning with distress related pelvic floor dysfunction, not with the severity of POP and UI.[18-20]

Conclusion

Pelvic organ prolapse and urinary incontinence have an impact on sexual function. Women with more bother related to pelvic floor problems have more sexual impairment. In clinical practice, health care provider should ask about sexual function in women with pelvic floor symptoms.

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Original Articles/นิพนธ์ต้นฉบับ

ภาวะทางเพศในสตรีที่มีภาวะอวัยวะในอุ้งเชิงกรานหย่อนและปัสสาวะเล็ดราด

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บทคัดย่อ

วัตถุประสงค์ เพื่อศึกษาภาวะทางเพศในสตรีที่มีภาวะอวัยวะในอุ้งเชิงกรานหย่อนและปัสสาวะเล็ดราดและศึกษาความสัมพันธ์ระหว่างอาการทางอุ้งเชิงกราน ระดับความรู้สึกรบกวนจากอาการทางอุ้งเชิงกรานกับภาวะทางเพศโดยใช้แบบสอบถาม

วิธีการวิจัย ทำการศึกษาในสตรีที่มีภาวะอวัยวะในอุ้งเชิงกรานหย่อนและปัสสาวะเล็ดราดที่มารับบริการที่คลินิกนรีเวชทางเดินปัสสาวะและอวัยวะสืบพันธุ์ โรงพยาบาลรามาธิบดี บันทึกข้อมูลเกี่ยวกับอาการทางอุ้งเชิงกราน และประเมินระดับความรู้สึกรบกวนจากอาการทางอุ้งเชิงกราน และภาวะทางเพศในช่วง 1 เดือนที่ผ่านมา โดยใช้แบบสอบถาม Pelvic Floor Bother Questionnaire (PFBQ) และ Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12) ฉบับภาษาไทย

ผลการศึกษา กลุ่มศึกษาทั้งหมด 289 ราย อายุเฉลี่ย 60.9 ± 11.4 ปี มีสตรี 188 ราย (ร้อยละ 65) ที่ยังคงมีเพศสัมพันธ์ ไม่พบความแตกต่างของอาการทางอุ้งเชิงกรานระหว่างสตรีที่มีและไม่มีเพศสัมพันธ์ สตรีที่ยังมีเพศสัมพันธ์มีระดับคะแนนความรู้สึกรบกวนจากอาการทางอุ้งเชิงกรานมากกว่าสตรีที่ไม่มีเพศสัมพันธ์แล้ว ในกลุ่มสตรีที่ยังมีเพศสัมพันธ์ไม่พบความแตกต่างของคะแนนภาวะทางเพศในกลุ่มอาการทางอุ้งเชิงกรานต่างๆ ระดับความรู้สึกรบกวนจากอาการทางอุ้งเชิงกรานมีความสัมพันธ์กับปัญหาภาวะทางเพศอย่างมีนัยสำคัญทางสถิติ

สรุปผลการศึกษา ภาวะอวัยวะในอุ้งเชิงกรานหย่อนและปัสสาวะเล็ดราด เป็นภาวะที่มีผลกระทบต่อภาวะทางเพศ สตรีที่มีความรู้สึกรบกวนจากอาการทางอุ้งเชิงกรานมากจะมีปัญหาทางเพศมากกว่า

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