

Knowledge and Acceptance of Thai Women Toward the Pelvic Floor Muscle Training

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Background: Pelvic floor muscle training (PFMT) is considered as an effective management for relieving pelvic organ prolapse (POP) and urinary incontinence (UI). Although the benefits of PFMT are known among the health care professionals, the benefits from PFMT among the Thai women are not known.

Objective: To evaluate the basic knowledge and acceptance of PFMT in women who visited the gynecologic out-patient clinic.

Material and Method: A cross-sectional survey was conducted by administering a brief, anonymous 2-part questionnaire to 415 women who visited the gynecologic out-patient clinic at King Chulalongkorn Memorial Hospital between November 2010 and January 2011. A questionnaire, consisting of 24 questions, was divided into two parts where part one, made up of 10 questions, collected demographic data and the remaining 14 questions in part 2 gathered more information about the knowledge and acceptance towards PFMT. These questionnaires required approximately five minutes for completion.

Results: Mean age of all women was 42.9 years. The percentage of patients having stress urinary incontinence (SUI), urgency urinary incontinence (UUI), and mixed urinary incontinence (MUI) were 21.9%, 5.3%, and 15.2%, respectively. Overactive bladder (OAB) and pelvic organ prolapse (POP) were found in 19.5% and 9.9%, respectively. Half of the respondents were unaware of PFMT efficacy. Most of them (80.2%) never received instruction from their health care providers. However, 52.8% of women expressed interest for requesting PFMT instruction while 84.6% were willing to practice if they were made aware of benefits.

Conclusion: A limited understanding and acceptance of PFMT exists among Thai women. However, if informed, most women express interest in practicing PFMT after clinic visit.

Keywords: Pelvic floor muscle training, Urinary incontinence, Pelvic organ prolapsed, Knowledge, Attitude

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With the advancing age of the Thai population, two urogynecologic diseases, urinary incontinence (UI) and pelvic organ prolapse (POP), are more likely to be encountered. Both conditions are common problems among Thai women especially post-menopausal women⁽¹⁻⁵⁾. These problems are emotional and affect daily living and social activities, leading to a decrease in quality of life^(6,7). Pelvic floor muscle training (PFMT) is considered as the effective management for relieving the impact of the problems^(8,9). Furthermore, PFMT is effective for prevention and treatment of fecal incontinence (FI). Although, FI is less prevalent, it is a particularly

embarrassing and distressing condition that affects quality of life particularly in parous women⁽¹⁰⁾.

Although the benefits of PFMT are commonly known among the health care professionals, the perception of benefits from PFMT among the Thai patients is not known. To help identify the intention to practice PFMT or perception of the efficacy of PFMT, this study aims to evaluate the basic knowledge and acceptance of PFMT among Thai women.

Material and Method

A cross-sectional survey was conducted by administering a brief, anonymous 2-part questionnaire to 415 women who visited the gynecologic out-patient clinic at King Chulalongkorn Memorial Hospital between November 2010 and January 2011. The questionnaire consisting of 24 questions was divided into two parts. Part one, made up of 10 questions, collected demographic data and the remaining

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14 questions in part 2 gathered more information about the knowledge and acceptance towards PFMT. These questionnaires required approximately five minutes for completion. The study protocol was approved by the Institutional Review Board of the Faculty of Medicine, Chulalongkorn University.

Statistical analysis

Data was analyzed with SPSS software version 17.0. Descriptive data are presented as mean, standard deviation number, and percentage.

Results

Four hundred fifteen women completed the questionnaire. Mean age was 42.9 years (SD years) (range 17-77), 54.7% of patients were multiparous, and median number of vaginal deliveries was 2 (range 1-6). One-third of women (32%) were menopausal and 8.9% of them received hormone therapy. Urinary incontinence was prevalent in 42.4% of patients. Stress urinary incontinence (SUI) was the most common type (21.9%). Mixed urinary incontinence (MUI) and urgency urinary incontinence (UUI) were 15.2% and 5.3%, respectively. Urgency or overactive bladder (OAB) was diagnosed in 19.5% of women. Fecal incontinence (FI) was less prevalent (5.8%). There were (9.9%) of women who had POP. Demographic details of patient characteristics are shown on Table 1.

Half of total respondents were unaware of the efficacy of PFMT. Furthermore, 43.6% and 43.9% of women did not know that PFMT could prevent UI and POP, respectively. Only half realized that PFMT could prevent UI and improve symptoms (54.2% and 47.5%, respectively) while, 53.7% and 51.8% of women realized that POP could be prevented and improved with PFMT, respectively. In contrast, 80.9% were unaware that the pelvic floor muscle has a role in bowel movement control and to prevent fecal incontinence. As for basic knowledge of the anatomy of the pelvic floor muscle, most women (86.7%) did not even know the location of pelvic floor muscle. Of these, 333 women (80.2%) had never received education from their health care providers and 52.8% of them were interested to request PFMT instructions. While 84.6% were willing to practice PFMT if they were made aware of the benefits. Less than half of the women (48.4%) had performed PFMT and only 1.2% of them practiced regularly. Interestingly, 13.7% of those women were confident that they practiced PFMT correctly.

Most women (93.2%) did not know that there is equipment helping for PFMT. The preferred route of equipment insertion among 72.5% of women was the vaginal route. However, respondents who preferred the rectal route (25.1%) were sexually inactive, had recurrent vaginal infection and concomitant fecal incontinence.

Discussion

PFMT is considered as a part of behavioral intervention for treatment and possible prevention of UI and POP including FI. The basic pelvic floor muscle anatomy, benefits, training techniques, and the assessment for effective training are considered as key information for PFMT^(11,12). The present survey indicated that knowledge of PFMT was limited among Thai women. Most of respondents did not know the location of pelvic floor muscle and/or the overall benefits of PFMT. These findings are considered as barriers for introducing PFMT as effective prevention and treatment for UI, POP, and FI. However, from the present survey, half of the respondents would request instructions after being informed of PFMT. Furthermore, most patients showed interest and willingness to practice if benefits were clearly perceived. Therefore, PFMT should be introduced to

Table 1. Demographic characteristics (n = 415)

Demographic characteristics	Values
Age (years), mean ± SD (range)	42.9±11.5 (17-77)
Multiparous, n (%)	227 (54.7)
Median No. of vaginal deliveries, n (range)	2 (1-6)
Body mass index (kg/m ²), mean ± SD (range)	23.3±4.3 (14.3-40.9)
Level of education, n (%)	
Illiterate	6 (1.4)
Primary school	85 (20.5)
High school	81 (19.5)
Bachelor degree or higher	243 (58.6)
Menopause, n (%)	133 (32.0)
Receiving hormone therapy, n (%)	37 (8.9)
Urgency symptom, n (%)	81 (19.5)
Urinary incontinence, n (%)	176 (42.4)
Stress urinary incontinence, n (%)	91 (21.9)
Urge urinary incontinence, n (%)	22 (5.3)
Mixed urinary incontinence, n (%)	63 (15.2)
Pelvic organ prolapse, n (%)	41 (9.9)
Fecal incontinence, n (%)	24 (5.8)

all Thai women especially those suffering from urinary incontinence, pelvic organ prolapse, and fecal incontinence. These patients should receive proper PFMT education, and be encouraged to practice regularly.

PFMT is usually conducted by verbal instruction; however, most women are unable to contract the pelvic floor muscle correctly⁽¹³⁾. Various techniques including weighted vaginal cone, biofeedback, and electrical stimulation have been developed to improve PFMT. Recently, the rectal balloon has been proposed as an adjunctive method for PFMT. Up to one-fourth of women in this survey chose rectal equipment assisted PFMT, especially women who were sexually inactive, had recurrent vaginal infection, and concomitant fecal incontinence. As a result, a study about rectal balloon assisted PFMT was conducted⁽¹⁴⁾. However, rectal balloon assisted PFMT and the others such as vaginal cone, electrical stimulation were not superior to the traditional PFMT^(14,15). Therefore, PFMT under supervision is recommended⁽¹⁶⁾.

A major obstacle for PFMT is long-term adherence⁽¹⁷⁾. Although, some women had practiced PFMT, very few women practiced PFMT regularly with a low level of confidence in this study. The patients should be taught the benefits of long-term adherence. Alewijnse et al assessed the predictors of intention to adhere to PFMT among women with UI. The authors found that significant predictors were the amount of urine loss per wet episodes and women's perception of their ability to do the exercises as recommended under various circumstances⁽¹⁸⁾. Washington B et al performed a cross-sectional study among female patients referred to Women and Infants Hospital of Rhode Island for PFMT. The author found that the barriers for PFMT were insurance non-coverage and negative patient perception of efficacy⁽¹⁹⁾. Messer et al also reported that self-perception of efficacy had a positive correlation with adherence⁽²⁰⁾. Almost half of the women in this survey did not realize the efficacy and benefit of PFMT. Moreover, only 1.2% of women practiced PFMT regularly in this study. Therefore, various strategies should be established for expanding information about the efficacy of PFMT to the public.

Conclusion

Knowledge and awareness of PFMT is limited among Thai women; however, once informed for the benefits of PFMT, most women request instructions for PFMT. Although, some women had

practiced PFMT, very few women practiced PFMT on a regular basis. Information gathered from this survey is helpful in developing PFMT education strategies. The scope of PFMT information should include basic anatomy, benefits, training techniques, and the assessment for effective training methods.

Potential conflicts of interest

None.

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ความรู้และการยอมรับต่อการฝึกกล้ามเนื้อพื้นฐานเชิงกรานในหญิงไทย

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ภูมิหลัง: การฝึกบริหารกล้ามเนื้อพื้นฐานเชิงกรานเป็นการรักษาการหย่อนของอวัยวะในช่องเชิงกรานและภาวะปัสสาวะเล็ดที่มีประสิทธิภาพ แม้ว่าประโยชน์ของการฝึกบริหารกล้ามเนื้อพื้นฐานเชิงกรานเป็นที่ทราบกันดีในกลุ่มบุคลากรทางการแพทย์ แต่การรับรู้ถึงประโยชน์ดังกล่าวในหญิงไทยยังไม่เป็นที่ทราบแน่ชัด

วัตถุประสงค์: เพื่อประเมินถึงความรู้พื้นฐานและการยอมรับต่อการฝึกบริหารกล้ามเนื้อพื้นฐานเชิงกรานในหญิงไทยที่มารับบริการทางการแพทย์ที่ห้องตรวจผู้ป่วยนอก แผนกนรีเวช

วัสดุและวิธีการ: สำรวจความเห็นของหญิงไทยที่มารับบริการทางการแพทย์ที่ห้องตรวจผู้ป่วยนอก แผนกนรีเวช แบบตัดขวางด้วยแบบสอบถามที่ไม่ระบุชื่อของผู้ตอบในช่วงเดือนพฤศจิกายน พ.ศ. 2554 ถึง เดือนมกราคม พ.ศ. 2555 แบบสอบถามประกอบด้วยคำถามจำนวน 24 คำถาม ซึ่งแบ่งเป็นสองส่วน ส่วนแรกมีจำนวน 10 คำถาม รวบรวมข้อมูลพื้นฐาน และส่วนที่สองมีจำนวน 14 คำถาม ซึ่งรวบรวมข้อมูลทางด้านความรู้และการยอมรับต่อการฝึกบริหารกล้ามเนื้อพื้นฐานเชิงกราน แบบสอบถามดังกล่าวใช้เวลาประมาณ 5 นาที ในการตอบอย่างสมบูรณ์

ผลการศึกษา: ผู้ตอบแบบสอบถามมีอายุเฉลี่ย 42.9 ปี สัดส่วนของผู้ป่วยที่มีปัญหาปัสสาวะรดเวลาไอหรือจาม, ภาวะปัสสาวะรดขณะที่กำลังปัสสาวะไม่ได้ และภาวะปัสสาวะรดทั้งในขณะที่ไอหรือจามและกำลังปัสสาวะไม่ได้ คิดเป็นร้อยละ 21.9 ร้อยละ 5.3 และร้อยละ 15.2 ตามลำดับ ภาวะกระเพาะปัสสาวะไวเกินและภาวะการหย่อนของอวัยวะในช่องเชิงกรานคิดเป็นร้อยละ 19.5 และร้อยละ 9.9 ตามลำดับ ประมาณครึ่งหนึ่งของผู้ตอบแบบสอบถามไม่ทราบถึงประสิทธิภาพของการฝึกบริหารกล้ามเนื้อพื้นฐานเชิงกราน ผู้ตอบแบบสอบถามส่วนใหญ่ (ร้อยละ 80.2) ไม่เคยได้รับคำแนะนำจากบุคลากรทางการแพทย์ อย่างไรก็ตาม ร้อยละ 52.8 ของผู้ตอบแบบสอบถามแสดงความสนใจที่จะรับคำแนะนำเกี่ยวกับการฝึกบริหารกล้ามเนื้อพื้นฐานเชิงกราน และร้อยละ 84.6 ของผู้ตอบแบบสอบถามยินดีที่จะฝึกหากตนเองรับทราบถึงประโยชน์ของการฝึก

สรุป: ความรู้และการยอมรับการฝึกกล้ามเนื้อพื้นฐานเชิงกรานในหญิงไทยมีค่อนข้างจำกัด หญิงไทยส่วนใหญ่แสดงความสนใจต่อการฝึกกล้ามเนื้อพื้นฐานเชิงกรานเมื่อได้รับข้อมูลถึงประโยชน์ของการฝึก
