

LUMBOPELVIC PAIN IN WOMEN WITH PELVIC FLOOR DYSFUNCTION: A CROSS-SECTIONAL STUDY



Cecchi Salata M¹, Farias Porto J¹, da Silva Xavier S¹, da Cruz Silva A¹, Gontijo Ribeiro T¹

1 UNICEPLAC, PHYSIOTHERAPY DEPARTAMENT BRASÍLIA –DF BRAZIL

Introduction

A Pelvic Floor Dysfunction (PFD) has several causes and is mainly characterized by muscle weakness, low resistance, muscle tightness, difficulty in relaxation, and changes in muscle tone. This can lead to urinary incontinence (UI), pelvic organ prolapse, pelvic pain, sexual dysfunctions, among other issues^{1,2}.

The pelvic floor is a musculoskeletal structure that performs several functions, among which stand out the support for the pelvic organs, the maintenance of urinary and fecal continence and sexual function³. In addition, it contributes to intra-abdominal control, supports load transfers and plays a role in dynamic control during functional movements of the lumbar spine^{1,4}.

Lumbopelvic pain can manifest in the lumbar region, pelvis, hip and gluteal region, and is present in 95% of women with PFD. Among the complications of PFD, UI is the most common in most women with primary complaints of low back pain^{1,5,6}.

The literature already demonstrates the relationship between the PFD and the muscles that promote trunk stabilization, although the association between PFD and low back pain is still increasing in studies.

Considering the significance of both conditions and their impact on women's pelvic floor function, the study aimed to analyze the prevalence of lower back pain in women with pelvic floor dysfunction, as well as to correlate the two conditions.

Methods

Study Design

This was a retrospective cross-sectional observational study, conducted between 2019 and 2022, through medical record analysis at university center, Federal District, Brazil.

Ethics

The study was approved by the Human Research Ethics Committee of the of UNICEPLAC with number: 40693020.8.0000.5058.

Data collection

Data collection was based on obtaining information from medical records, where the following variables were collected: age, reproductive status, obstetric history, voiding, anal and sexual complaints, presence of pelvic organ prolapse and low back pain. Dysfunctions were based on patient reports.

Eligibility criteria

Female patients, aged between 18 and 60 years old, who presented complaints of pelvic floor dysfunction. Incompletely completed medical records were excluded from this study.

Statistical analysis

The variables were tabulated in the Microsoft Excel program, as well as the descriptive analysis of the data. Numerical variables were presented in means, medians, standard deviations and categorical variables in absolute frequency and percentages.

Results

The sample consisted of 80 medical records of which 49 (61,25%) reported low back pain, as shown in Table 1, mean age of 40,69 years (SD: 9.12), most of them were married (58,75%) and higher education completing high school. Regarding obstetric history, the participants had a median of 2 pregnancies and 1 vaginal deliveries.

Table 1 – Complaint of lumbopelvic pain in women with pelvic floor muscle dysfunction.

VARIABLE	N	%
Lumbopelvic pain		
Refers	49	61,25
Does not refer	31	38,75
Total	80	100

In our analysis, as demonstrated in Table 2, we found 75,4% of women with PFD and low back pain complained of urinary incontinence. Another important finding was the high prevalence (77.5%) of genito-pelvic pain/penetration disorder in the group of women with low back pain.

Table 2 – Pelvic floor disorders in women with low back pain.

VARIABLE	N	%
Dysfunctional voiding		
Mixed urinary incontinence	18	36,7
Stress urinary incontinence	15	30,6
Urgency incontinence	4	8,1
Does note refer	12	24,4
Anorectal dysfunction		
Anal incontinence	5	10
Constipation	0	0
Does not refer	44	90
Sexual dysfunctions		
Genito-pelvic pain/penetration disorder	38	77,5
Does not refer	11	22,4
Prolapse (pelvic organ) symptoms		
Refers	13	26,5
Does not refer	36	73,4

Conclusion

Most of the women with pelvic floor dysfunction experienced lumbopelvic pain, as well as associated urinary incontinence and dyspareunia.

It is suggested that more randomized clinical trials be carried out, to verify the effectiveness of the combined interventions, so that it is possible to develop more effective and lasting treatment proposals.

References

- 1 Dufour S, Vandyken B, Forget MJ, Vandyken C. Association between lumbopelvic pain and pelvic floor dysfunction in women: A cross sectional study. Musculoskelet Sci Pract. 2018 Apr;34:47-53. doi: 10.1016/j.msksp.2017.12.001.
- 2 Segedi LM, Ilić KP, Curcić A, Visnjevac N. [Quality of life in women with pelvic floor dysfunction]. Vojnosanit Pregl. 2011 Nov;68(11):940-7. Serbian. doi: 10.2298/vsp1111940m.
- 3 Lee AY, Baek SO, Cho YW, Lim TH, Jones R, Ahn SH. Pelvic floor muscle contraction and abdominal hollowing during walking can selectively activate local trunk stabilizing muscles. J Back Musculoskelet Rehabil. 2016 Nov 21;29(4):731-739. doi: 10.3233/BMR-160678.
- 4 Bernard S, Gentilcore-Saulnier E, Massé-Alarie H, Moffet H. Is adding pelvic floor muscle training to an exercise intervention more effective at improving pain in patients with non-specific low back pain? A systematic review of randomized controlled trials. Physiotherapy. 2021 Mar;110:15-25. doi: 10.1016/j.physio.2020.02.005.
- 5 Ghaderi F, Mohammadi K, Amir Sasan R, Niko Kheslat S, Oskouei AE. Effects of Stabilization Exercises Focusing on Pelvic Floor Muscles on Low Back Pain and Urinary Incontinence in Women. Urology. 2016 Jul;93:50-4. doi: 10.1016/j.urology.2016.03.034. 6 Keizer A, Vandyken B, Vandyken C, Yardley D, Macedo L, Kuspinar A, Fagahani N, Forget MJ, Dufour S. Predictors of Pelvic Floor Muscle Dysfunction Among Women With Lumbopelvic Pain. Phys Ther. 2019 Dec 16;99(12):1703-1711. doi: 10.1093/ptj/pzz124.