

ΠΑΝΕΠΙΣΤΗΜΙΟ ΔΥΤΙΚΗΣ ΑΤΤΙΚΗΣ

ΣΧΟΛΗ ΕΠΙΣΤΗΜΩΝ ΥΓΕΙΑΣ ΚΑΙ ΠΡΟΝΟΙΑΣ Τμήμα Φυσικοθεραπείας

## **PhD Thesis Summary**

MARCELLOU, EFFIMIA-MIMI

ATHENS 21/9/2021

## **PhD Thesis Summary**

## **Dissertation Topic:**

Exploring the level of efficacy of pelvic floor physiotherapy intervention for the treatment of the Genitourinary Syndrome of Menopause (GSM) in women after the treatment of breast cancer.

This project will evaluate the effectiveness of a combined physiotherapy protocol for improving quality of life in women with sexual dysfunction after treatment for breast cancer. The percentage of European health professionals who know how to manage these symptoms is very low (10.3%). The usual management of the symptoms experienced by this patient population includes a use of vaginal dilators in combination with moisturizing and lubricating creams, which have been approved by the FDA. This treatment shows good results in terms of improving patients' symptoms, but it is short term and there are no clinically proven standardized protocols with instructions for use yet. Pelvic floor physical therapy (PFPT) is recommended by the International Continence Society (ICS) as a first-line treatment for the management of symptoms of genitourinary syndrome of menopause (GSM) and symptoms of sexual dysfunction. Despite its promising results, PFPT is not widely used and is not widespread among either patients or health care professionals.

The research protocol of this project involves the creation of two groups of patients. Group A (intervention group) will follow the combined physiotherapy treatment protocol including retraining of the pelvic floor muscles, use of relaxation techniques and vaginal dilators. Group B (control group) will follow a "usual treatment" protocol with the application of specific lubricating and moisturizing applications and counselling. Thereafter, the progress of the two groups will be monitored and recorded. Then the results of the two groups will be recorded and correlated.

The aim of this randomized clinical control study is to evaluate physiotherapeutic intervention in the treatment of genitourinary syndrome of menopause (GSM) and sexual dysfunction symptoms, such as vaginal dryness and dyspareunia, in women after treatment for breast cancer (BRCA). In particular, the main objective is to evaluate the effectiveness of a combined protocol with pelvic floor muscle training (PFMT), use of relaxation techniques and vaginal dilators to improve sexual function and quality of life in the study population.

## **Selective References**

- Burstein HJ, Lacchetti C, Griggs JJ. Adjuvant endocrine therapy for women with hormone receptor-positive breast cancer: American society of clinical oncology clinical practice guideline update on ovarian suppression summary. J Oncol Pract [Internet]. 2016;12(4):390– 3.
- National Cancer Institute 2020. Cancer Stat Facts: Female Breast Cancer [Internet]. [cited 2020 Oct 30]. Available from: https://seer.cancer.gov/statfacts/html/breast.html
- Greenlee H, Balneaves LG, Carlson LE, Cohen M, Deng G, Hershman D, et al. Clinical Practice Guidelines on the Use of Integrative Therapies as Supportive Care in Patients Treated for Breast Cancer. J Natl Cancer Inst Monogr [Internet]. 2014;(50).
- 4. Gupta P, Sturdee DW, Palin SL, Majumder K, Fear R, Marshall T, et al. Menopausal symptoms in women treated for breast cancer: The prevalence and severity of symptoms and their perceived effects on quality of life. Climacteric. 2006;9(1):49–58.
- 5. Shim S, Park K, Chung Y, Kim M. Updates on Therapeutic Alternatives for Genitourinary Syndrome of Menopause : Hormonal and Non-Hormonal Managements. 2021;1–7.
- Sousa MS, Peate M, Jarvis S, Hickey M, Friedlander M. A clinical guide to the management of genitourinary symptoms in breast cancer survivors on endocrine therapy. Ther Adv Med Oncol [Internet]. 2017;9(4):269–85.
- Ganz PA, Rowland JH, Desmond K, Meyerowitz BE, Wyatt GE. Life after breast cancer: Understanding women's health-related quality of life and sexual functioning. J Clin Oncol. 1998;16(2):501–14.
- Liu M, Juravic M, Mazza G, Krychman ML. Vaginal Dilators: Issues and Answers. Sexual Medicine Reviews. Elsevier B.V.; 2020.
- 9. Rogers RG, Pauls RN, Thakar R, Morin M, Kuhn A, Petri E, et al. An International Urogynecological Association (IUGA)/International Continence Society (ICS) joint report on the terminology for the assessment of sexual health of women with pelvic floor dysfunction. Neurourol Urodyn. 2018;37(4):1220–40.

- Juraskova I, Jarvis S, Mok K, Peate M, Meiser B, Cheah BC, et al. The Acceptability, Feasibility, and Efficacy (Phase I/II Study) of the OVERcome (Olive Oil, Vaginal Exercise, and MoisturizeR) Intervention to Improve Dyspareunia and Alleviate Sexual Problems in Women with Breast Cancer. J Sex Med. 2013;10(10):2549–58.
- Yang EJ, Lim JY, Rah UW, Kim YB. Effect of a pelvic floor muscle training program on gynecologic cancer survivors with pelvic floor dysfunction: A randomized controlled trial. In: Gynecologic Oncology. Academic Press; 2012. p. 705–11.
- 12. Mercier J, Morin M, Zaki D, Reichetzer B, Lemieux MC, Khalifé S, et al. Pelvic floor muscle training as a treatment for genitourinary syndrome of menopause: A single-arm feasibility study. Maturitas. 2019 Jul 1;125:57–62.
- Ghaderi F, Bastani P, Hajebrahimi S, Jafarabadi MA, Berghmans B. Pelvic floor rehabilitation in the treatment of women with dyspareunia: a randomized controlled clinical trial. Int Urogynecol J. 2019;30(11):1849–55.
- Frawley HC, Galea MP, Phillips BA, Sherburn M, Boø K. Reliability of pelvic floor muscle strength assessment using different test positions and tools. Neurourol Urodyn. 2006;25(3):236–42.
- Messelink B, Benson T, Berghmans B, Bø K, Corcos J, Fowler C, et al. Standardization of terminology of pelvic floor muscle function and dysfunction: Report from the pelvic floor clinical assessment group of the International Continence Society. Neurourol Urodyn. 2005;24(4):374–80.
- Bø K, Finckenhagen HB. Vaginal palpation of pelvic floor muscle strength: Inter-test reproducibility and comparison between palpation and vaginal squeeze pressure. Acta Obstet Gynecol Scand. 2001;80(10):883.
- de Andrade RL, Bø K, Antonio FI, Driusso P, Mateus-Vasconcelos ECL, Ramos S, et al. An education program about pelvic floor muscles improved women's knowledge but not pelvic floor muscle function, urinary incontinence or sexual function: a randomised trial. J Physiother [Internet]. 2018;64(2):91–6.