



# Brazilian Journal of Physical Therapy

<https://www.journals.elsevier.com/brazilian-journal-of-physical-therapy>



## EDITORIAL

### The Brazilian Journal of Physical Therapy (BJPT) Special Issue on Women's Health Physical Therapy



In Yokohama, Japan in 1998, the International Organization of Physical Therapists in Women's Health (IOPTWH) was formed as a subgroup of the World Confederation for Physical Therapy.<sup>1</sup> Jill Boissonnault, the founder and first president of the subgroup, had been inspired by all the high-quality research that had been presented and published in the area of physical therapy in women's health. She managed to initially gather 14 member-nations to join forces.<sup>1</sup> By focusing on women's health issues, it is our aim to follow the mission of IOPTWH: To improve health care for women internationally through facilitation and promotion of best-practice women's health physical therapy. The objectives are to: foster cooperation between physical therapists practicing in women's health throughout the world; encourage improved standards and consistency of practice in women's health care by physical therapists; advance practice through communication and exchange of information; encourage scientific research; and promote opportunities for the spread of knowledge of new developments in the field of women's health.<sup>1</sup>

More than 20 years have passed since the foundation of IOPTWH and its mission remains highly relevant in today's world context. According to the World Health Organization (WHO): "The health of women and girls is of particular concern because, in many societies, they are disadvantaged by discrimination rooted in sociocultural factors."<sup>2</sup> Women's health is underfocused and under-investigated, and many norms and "normal values" in diagnosis and treatment are still based on research on males.

We are very happy to present this special issue of the BJPT, in which we have published research on important areas of women's health conducted by researchers from many countries. Papers from lead researchers cover a broad spectrum of important women's health issues.

Readers will be intrigued by six original research manuscripts that include a variety of methodological designs answering clinically important questions. The development and analysis of a new tool to measure maternal perception of childbirth fatigue<sup>3</sup> will certainly be useful for women's

health physical therapists (PTs) and interdisciplinary teams working in maternity settings. Women's health PTs will find the cultural adaptation of an internationally recognized questionnaire to assess pelvic girdle pain in pregnancy<sup>4</sup> very relevant. Although pregnant women are frequently encouraged to train their abdominal muscles to enhance normal birth, a cohort study including 36,124 nulliparous pregnant women in Norway found no association between reports of regular abdominal strength training before and during pregnancy and delivery outcomes.<sup>5</sup>

This issue includes two randomized controlled trials (RCT),<sup>6,7</sup> one crossover trial<sup>8</sup> and one pragmatic trial conducted in a primary health setting.<sup>9</sup> These are interesting contributions to the field. They include diverse populations: pregnant women, sedentary healthy overweight women, women with a history of breast cancer-related lymphoedema, and women reporting urinary incontinence. Exercise is a core intervention in women's health PT practice, and readers will be updated with some results substantiating positive effects of exercise and other studies contributing to overthrowing certain myths. A RCT showed that exercise during pregnancy can reduce the risk of gestational diabetes.<sup>6</sup> However, a secondary analysis of another RCT showed no effect of twelve weeks of heavy load resistance training on self-reported musculoskeletal pain in overweight women.<sup>7</sup> In the field of breast cancer-related lymphoedema, an alternative aquatic exercise called Ai Chi was shown to be more effective than conventional aquatic exercise immediately after the intervention for arm volume. However, there was no difference between the two interventions after one hour.<sup>8</sup>

Readers will be delighted to find an update of a very important Cochrane review intitled "Pelvic floor muscle training versus no treatment, or inactive control treatments, for urinary incontinence in women."<sup>10</sup> It is notable that women with stress UI were eight times more likely to report a cure after pelvic floor muscle training (PFMT). Despite the high level of evidence for PFMT in the treatment of urinary incontinence in women, their access to prevention

<https://doi.org/10.1016/j.bjpt.2019.02.015>

1413-3555/© 2019 Associação Brasileira de Pesquisa e Pós-Graduação em Fisioterapia. Published by Elsevier Editora Ltda. All rights reserved.

and treatment is still limited in many countries. Successful implementation of a patient-oriented physical therapy intervention including PFMT and bladder training in primary health care centers is presented by Vaz et al (2019), and may serve as a model in similar settings.<sup>9</sup>

Women's health physical therapists and other healthcare professionals should encourage all women to practice regular physical activity. However, although the literature has consistently indicated the benefits of regular physical activity for cancer survivors, a systematic review showed that levels of physical activity remained low in gynecological cancer survivors up to three years after diagnosis<sup>11</sup>.

All these articles clearly indicate a path for further relevant research in women's health physical therapy. We will highlight the growing need for RCTs of high methodological quality, and also the importance of intervention quality<sup>12,13</sup>. Studies of cost-effectiveness and diagnosis that may guide more specific and effective physical therapeutic interventions are also warranted. Additionally, it is important to highlight that a combination of health and social factors can lead to a lower quality of life for women. The WHO points out ten factors related to gender issues (including widespread violence against women) that have important consequences for women's health<sup>14</sup> and should be part of the agenda for research on women's health physical therapy.

Critical analysis of the large volume of articles that are produced and published is a challenge for both researchers and clinicians. This special issue had the contribution of renowned researchers. In the masterclass section, they offer their expertise in a critical analysis of the evidence about using different types of exercises in different phases of women's life cycle, assisting with the interpretation of the literature, clinical decision-making, and the creation of new research ideas. We sincerely thank and congratulate all the authors; their contributions and hard work increase our knowledge of important women's health issues. We hope readers will enjoy this special issue, feel inspired to maintain high standards for evidence-based practice contributing to women's quality of life!

## References

1. <https://www.wcpt.org/iopthwh/about>.
2. <https://www.who.int/topics/womens.health/en/>.
3. Delgado A, Oliveira PDNF, Góes PSA, Lemos A. Development and analysis of measurement properties of the "maternal perception of childbirth fatigue questionnaire" (MCFQ). *Braz J Phys Ther.* 2019 Jan;19, <http://dx.doi.org/10.1016/j.bjpt.2019.01.004>, pii: S1413-3555(18)30324-1.
4. Fagundes FML, Cabral CMN. Cross-cultural adaptation of the Pelvic Girdle Questionnaire (PGQ) into Brazilian Portuguese and clinimetric testing of the PGQ and Roland Morris questionnaire in pregnancy pelvic pain. *Braz J Phys Ther.* 2018 Nov;17, <http://dx.doi.org/10.1016/j.bjpt.2018.11.003>, pii: S1413-3555(18)30342-3.
5. Rise E, Bø K, Nystad W. Is there any association between abdominal strength training before and during pregnancy

- and delivery outcome? The Norwegian Mother and Child Cohort Study. *Braz J Phys Ther.* 2018 Jul;6, <http://dx.doi.org/10.1016/j.bjpt.2018.06.006>, pii: S1413-3555(18)30231-4.
6. Barakat R, Refoyo I, Coteron J, Franco E. Exercise during pregnancy has a preventative effect on excessive maternal weight gain and gestational diabetes. A randomized controlled trial. *Braz J Phys Ther.* 2018 Nov;17, <http://dx.doi.org/10.1016/j.bjpt.2018.11.005>, pii: S1413-3555(18)30351-4.
  7. Rustaden AM, Haakstad LAH, Paulsen G, Bø K. Does low and heavy load resistance training affect musculoskeletal pain in overweight and obese women? *Secondary analysis of a randomized controlled trial.* *Braz J Phys Ther.* 2019 Jan;18, <http://dx.doi.org/10.1016/j.bjpt.2019.01.005>, pii: S1413-3555(18)30930-4.
  8. Deacon R, de Noronha M, Shanley L, Young K. Does the speed of aquatic therapy exercise alter arm volume in women with breast cancer related lymphoedema? A cross-over randomized controlled trial. *Braz J Phys Ther.* 2018 Nov;17, <http://dx.doi.org/10.1016/j.bjpt.2018.11.004>, pii: S1413-3555(18)30370-8.
  9. Vaz CT, Sampaio RF, Saltiel F, Figueiredo EM. Effectiveness of pelvic floor muscle training and bladder training for women with urinary incontinence in primary care: a pragmatic controlled trial. *Braz J Phys Ther.* 2019 Jan;19, <http://dx.doi.org/10.1016/j.bjpt.2019.01.007>, pii: S1413-3555(18)30292-2.
  10. Cacciari LP, Dumoulin C, Hay-Smith EJ. Pelvic floor muscle training versus no treatment, or inactive control treatments, for urinary incontinence in women: a cochrane systematic review abridged republication. *Braz J Phys Ther.* 2019 Jan;22, <http://dx.doi.org/10.1016/j.bjpt.2019.01.002>, pii: S1413-3555(18)30446-5.
  11. Lin KY, Edbrooke L, Granger CL, Denehy L, Frawley HC. The impact of gynaecological cancer treatment on physical activity levels: a systematic review of observational studies. *Braz J Phys Ther.* 2018 Nov;17, <http://dx.doi.org/10.1016/j.bjpt.2018.11.007>, pii: S1413-3555(18)30424-6.
  12. Bø K, Herbert RD. When and how should new therapies become routine clinical practice? *Physiotherapy.* 2009 Mar;95(1):51-57, <http://dx.doi.org/10.1016/j.physio.2008.12.001>.
  13. Herbert RD, Bø K. Analysis of quality of interventions in systematic reviews. *BMJ.* 2005 Sep 3;331 (7515):507-9 Review. PubMed PMID: 16141160.
  14. <https://www.who.int/gender/documents/10facts.womens.health.en.pdf?ua=1>.

Cristine Homsí Jorge Ferreira<sup>a,\*</sup>, Patrícia Driusso<sup>b</sup>, Kari Bø<sup>c</sup>

<sup>a</sup> Department of Health Science, Postgraduation Program in rehabilitation and functional performance, Ribeirão Preto Medical School, Universidade de São Paulo (USP), Ribeirão Preto, SP, Brazil

<sup>b</sup> Department of Physical Therapy, Postgraduation Program in Physical Therapy, Universidade Federal de São Carlos (UFSCar), São Carlos, SP, Brazil

<sup>c</sup> Norwegian School of Sports Science, Oslo, Norway

\* Corresponding author. Avenida Bandeirantes, 3900, Monte Alegre, CEP 14049-900 Ribeirão Preto-SP-Brazil  
E-mail address: [cristine@fmrp.usp.br](mailto:cristine@fmrp.usp.br) (C.H. Ferreira).