



Welcome to the PEDro Newsletter for August 2023

Thank you to [Félag Sjúkraþjálfara](#) and [Deutsche Gesellschaft für Physiotherapiewissenschaft](#) who have renewed their partnership with PEDro for another year.

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Meet PEDro Brazil

PEDro satellite centres contribute to developing the PEDro and DiTA databases. Earlier this year the PEDro Steering committee announced the global expansion of the PEDro and DiTA databases and launched the PEDro satellite centres. The four satellite centres that are currently contributing to the maintenance of the PEDro and DiTA databases are PEDro Canada (Université de Sherbrooke), PEDro OsloMet, PEDro Brazil, PEDro Singapore. The PEDro Steering Committee is grateful for these satellite centres and all volunteers involved.

This month PEDro introduces PEDro Brazil and the key people working in the satellite centre.

Who are the key people in your PEDro satellite, and what organisation/s are represented by your satellite?

PEDro Brazil is led by Bruno Saragiotto, Tiê Yamato, Leonardo Costa, Luciola Costa at the Universidade Cidade de Sao Paulo. Additionally, PEDro Brazil benefits from the collaboration of dedicated PhD students Junior Fandim, Mariana Leite and Veronica Souza.



Prof Leonardo
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What is the role of PEDro Brazil within PEDro?

PEDro Brazil assists with the production of the PEDro database including database searches for clinical trials, systematic reviews and clinical practice guidelines. PEDro Brazil is also responsible for screening for potentially eligible trials and practice guidelines, using the PEDro Scale to rate trials, processing and coding practice guidelines.

How did your satellite form?

The 4 leaders of PEDro Brazil had previously worked with PEDro during their PhD candidature at the University of Sydney and had volunteered for various PEDro projects. When PEDro moved to the satellite system, the leaders of PEDro Brazil took the opportunity to contribute to PEDro in a different way. PEDro Brazil was formed to contribute to the production of PEDro but also to give the Brazilian physiotherapy community the honour of being part of the most important evidence-based physiotherapy community around the world by becoming volunteer PEDro raters.

What are the benefits of being a satellite for PEDro?

Being a satellite for PEDro brings visibility and credibility. As part of the global PEDro network, the satellite center gains recognition as a trusted source of evidence-based information and research support in the field of physiotherapy. This can attract collaboration opportunities with other international research networks and facilitates access to resources and training provided by PEDro. It also allows PEDro to extend its reach and impact within Brazil, a country with a large and active physiotherapy community that also faces lots of challenges to evidence-based practice.

What are potential areas of development for PEDro Brazil?

We believe the potential areas of development in PEDro Brazil are the engagement and involvement of Brazilian physiotherapists in the PEDro rating process. This could include training Brazilian researchers (including students) to become PEDro raters, thereby strengthening the Brazilian contribution to the PEDro database and promoting a sense of collaboration within the Brazilian physiotherapy community.



Systematic review found that there were no differences between home-based exercise programs and centre-based exercise programs for improving upper-limb impairments and activity limitations in adults with stroke

This systematic review aimed to estimate the effects of home-based exercises compared to centre-based exercises on improving motor dexterity, recovery, strength, upper-limb movement performance, upper-limb movement quality and participation in people with acute to chronic stroke.

This review included randomised controlled trials that investigated the effectiveness of home-based exercise compared to centre-based exercises for adults at any time after stroke. Eligible trials were identified from seven electronic databases. Trials were included if they compared home-based exercise (at least 2/3 of the exercise was performed at home) targeting the paretic upper-limb with a minimum of 4 sessions over a minimum of 2 weeks and control group of centre-based exercises provided in a hospital, private practice

or community centre. Impairments and activity were measured by six outcomes of interest: dexterity (e.g., 9-hole peg test), motor recovery (e.g., The Box and Block Test), strength (e.g., dynamometry), upper-limb movement performance (e.g., Box and Block test), upper-limb movement quality (e.g., Motor Activity Log), and participation (e.g., Assessment of Life Habits). No outcome was nominated as primary.

The review included 8 randomised controlled trials. There were 488 participants aged 55 to 70 years in the acute/sub-acute phase (1 trial), chronic phase (2 trials) and both acute and chronic phase (5 trials). Exercises were completely supervised, semi-supervised in person, or remotely supervised. For home-based exercises, participants trained for 40-120 minutes per session, 5 times per week for 4-13 weeks. The control groups had similar dosages and were performed mainly in clinics.

For impairments, there was no difference between home-based exercise centre-based exercise for upper-limb movement performance for dexterity (MD -0.01 pegs/s, 95% CI -0.04 to 0.05; 5 trials, 212 participants, moderate certainty evidence), motor recovery (MD 1.4 points, 95% CI -0.9 to 3.8; 5 trials, 212 participants, moderate certainty evidence), and strength (MD 0.30 kg, 95% CI -2.4 to 3.0; 1 study, 88 participants, low certainty evidence).

For activity limitations, there was no difference between home-based exercise centre-based exercise for upper-limb movement performance (SMD -0.04, 95% CI -0.25 to 0.18; 4 studies, 328 participants, high certainty evidence) and upper-limb movement quality (MD 0.11 points 95% CI -0.23 to 0.44; 3 studies, 198 participants, moderate certainty evidence).

No studies assessed the effect of home-based exercise and centre based exercise on participation.

Home-based exercise is similar to centre-based exercise in people with stroke for improving dexterity, motor function, strength, upper-limb movement performance and upper-limb movement quality following stroke. This indicates that the location that exercises take place is less important than the amount and type of exercise. This may have implications for people with limited access to healthcare facilities such as those living in rural or remote locations.

Nascimento LR, Gaviorno LF, Brunelli M, Gonçalves JV, da Silva Arêas FZ. Home-based is as effective as centre-based rehabilitation for improving upper limb motor recovery and activity limitations after stroke: A systematic review with meta-analysis. *Clinical Rehabilitation* 2022, 36(12): 1565-1577. DOI: 10.1177/02692155221121015

[Read more on PEDro.](#)

PEDro update (7 August 2023)

[PEDro](#) contains 59,720 records. In the 7 August 2023 update you will find:

- 45,706 Reports of randomised controlled trials (44,230 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 13,249 reports of systematic reviews, and
- 765 reports of evidence-based clinical practice guidelines.

For latest guidelines, reviews and trials in physiotherapy visit [Evidence in your inbox](#).

DiTA update (7 August 2023)

[DiTA](#) contains 2,422 records. In the 7 August 2023 update you will find:

- 2,156 reports of primary studies, and
- 266 reports of systematic reviews.

For the latest primary studies and systematic reviews evaluating diagnostic tests in physiotherapy visit [Evidence in your inbox](#).

Next PEDro and DiTA updates (September 2023)

The next [PEDro](#) and [DiTA](#) updates are on 4 September 2023.

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