View this email in your browser

PEDro
Physiotherapy Evidence Database

Welcome to the PEDro Newsletter for 6 November 2023

Thank you to Lietuvos Kineziterapeutų Draugija, Panhellenic Physiotherapists' Association and AXXON Physical Therapy in Belgium who have renewed their partnership with PEDro for another year.

In this issue:

- Meet PEDro Singapore
- World COPD Day on 15 November
- Infographic
- PEDro now contains 60,000+ reports of trials, reviews and guidelines
- Systematic review summary
- PEDro update
- DiTA update

PEDro satellite centres contribute to developing the PEDro and DiTA databases. Meet PEDro Singapore.

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 Singapore 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?
Associate Professor Kwah Li Khim is the director of programmes at the Health and Social Sciences Cluster of Singapore Institute of Technology, and Honorary Secretary and Mentor to Education Committee at the Singapore Physiotherapy Association. Her research interests are stroke rehabilitation, evidence-based practice and implementation science.

Mr John Tan is Senior Principal Physiotherapist at the Singapore General Hospital and the Chair of Education Committee at the Singapore Physiotherapy Association. His research interest is clinical outcomes for patients following knee arthroplasty.

What is the role of PEDro Singapore within PEDro?
PEDro Singapore has assembled a team of volunteer PEDro raters from the Singapore Physiotherapy Association. They regularly contribute to the PEDro database by using the PEDro Scale to rate trials.

How did your satellite form?
PEDro Singapore was initiated by the Singapore Physiotherapy Association, as we share common goals with PEDro to promote evidence-based physiotherapy. We hope that we can create a strong network of local clinicians and researchers who can meet regularly to

learn and exchange ideas for quality improvement and research projects.

What are the benefits of being a satellite for PEDro?
We are privileged to be recognised as a PEDro satellite centre. Through this collaboration with PEDro, the Singapore Physiotherapy Association has gained credibility by joining and contributing towards a renowned global physiotherapy institution. We also benefit from access to resources and training provided by PEDro, as well as regular talks from various expert researchers. This will assist local physiotherapists in gaining more knowledge and skills in evidence-based practice, and expanding their network to explore potential collaboration opportunities with international expert researchers.

What are potential areas of development for PEDro Singapore?
We aim to continue to lead the training of PEDro raters in Singapore, and hope to engage more of the physiotherapy community in Singapore to join us as PEDro raters.

Read more on PEDro.

World COPD Day on 15 November

This year's Global Initiative for Chronic Obstructive Lung Disease (GOLD) theme is 'Breathing is Life – Act Earlier'.

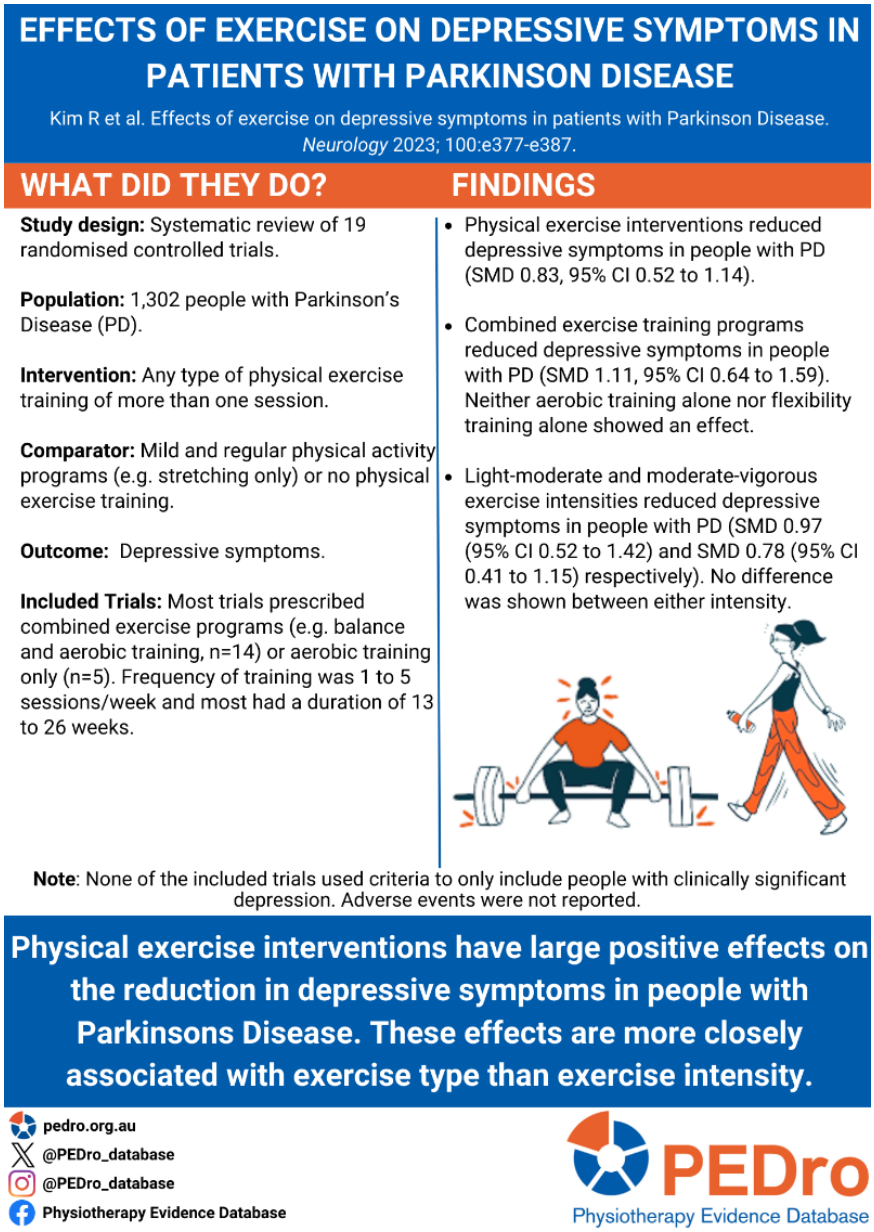
World COPD Day is organized by the Global Initiative for Chronic Obstructive Lung Disease (GOLD) in collaboration with health care professionals and COPD patient groups throughout the world.

Inform your COPD clinical practice with PEDro. [Sign up to receive up-to-date evidence delivered straight to your inbox](#).

Infographic: Systematic review found that physical exercise interventions showed significant effects on the reduction in depressive symptoms in people with Parkinson's Disease.

[Last month we summarised the systematic review by Kim et al](#). The review concluded that physical exercise interventions showed significant effects on the reduction in depressive symptoms in people with Parkinson's Disease.

Some findings are included in this infographic.

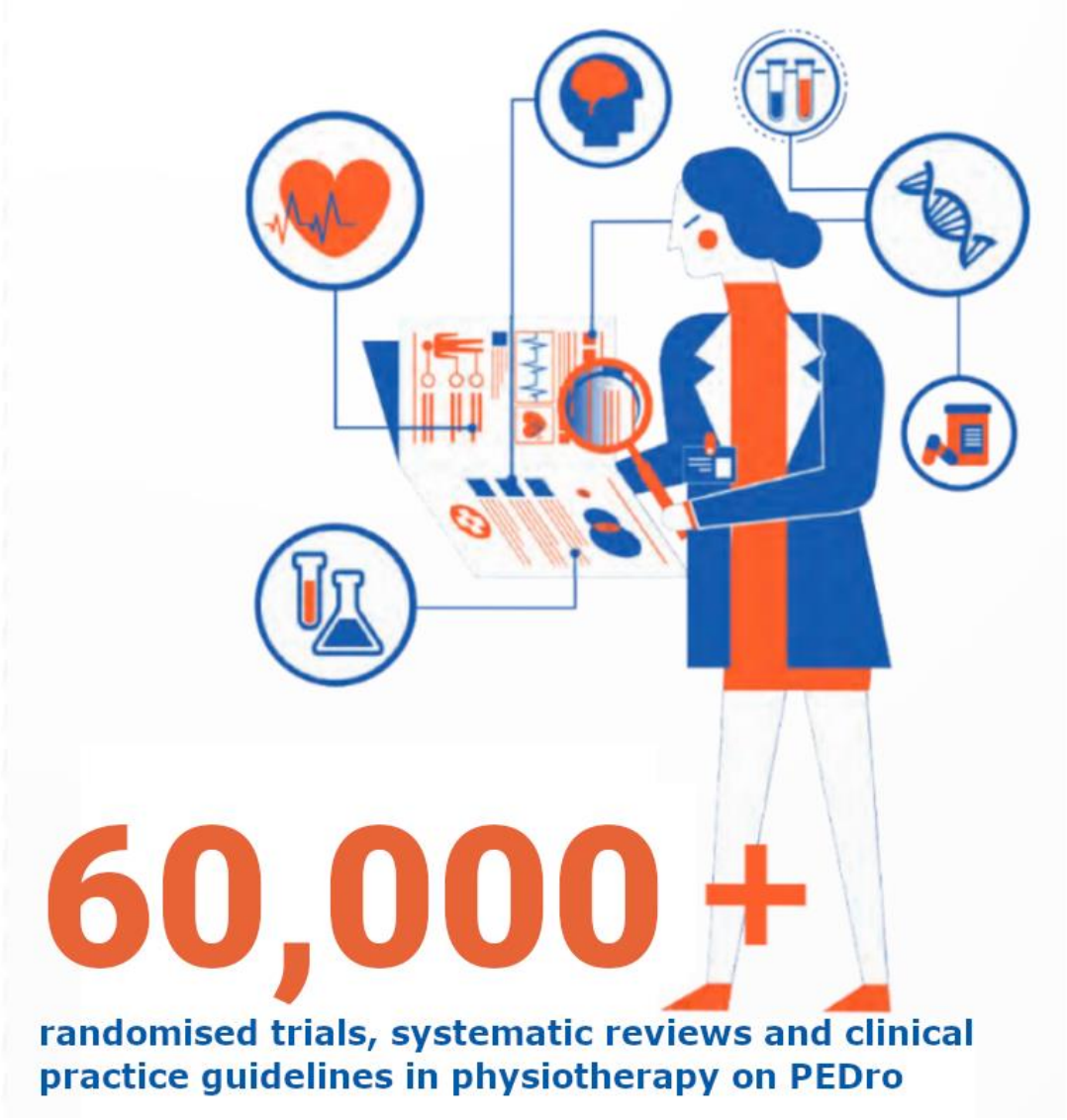


Kim R, Lee TL, Lee H, Ko DK, Jeon B, Kang N. Effects of exercise on depressive symptoms in patients with Parkinson Disease. *Neurology* 2023; 100:e3777-e387.

Read more on PEDro.

PEDro now contains 60,000+ reports of trials, reviews and guidelines

We are pleased to announce that PEDro has just achieved a new milestone. There are now 60,000+ reports of trials, reviews and guidelines indexed on PEDro.



Systematic review found that physical activity may improve cognitive functioning in people who had childhood cancer.

Individuals affected by childhood cancer may experience long-term cognitive impairments. Although exercise has been recommended for other cancer-related symptoms, the effect of physical activity on cognitive functioning in those affected by childhood cancer remains unknown. This systematic review aimed to estimate the effects of physical activity interventions compared to no intervention or usual care on cognitive function in people affected by childhood cancer.

Seven electronic databases were searched for randomised (RCTs) and quasi-randomised controlled trials, and non-randomised studies of interventions (NRSIs). There were no language or date restrictions. Eligible studies included individuals diagnosed with cancer at age 0-19 who received or are receiving cancer treatment. The intervention could be any frequency, intensity, volume, duration, or type of exercise or physical activity and delivered in any setting (e.g., gym). Control participants either had no treatment or usual care. The primary outcome of interest was performance on any standardised and objective academic or neuropsychological test of cognitive function. Outcomes related to cognitive function were categorised into 6 domains: complex attention, executive function, learning and memory, language, perceptual-motor function, and social cognition. Two independent reviewers screened for eligible studies, data extraction, assessment of risk of bias and certainty of evidence. Risk of bias was assessed using the Cochrane Risk of Bias Tool 2 for randomised and quasi-randomised controlled trials. Certainty of evidence was assessed for each outcome using the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) approach. A meta-analysis pooled all trials using a random-effects model to estimate the standardised mean difference (Hedges' g) between the intervention and control conditions at the end of the intervention period. A composite score was calculated for each study to determine the overall intervention effect on general cognitive performance, which was used in the meta-analysis of the primary outcome.

Twenty-two studies were included in the review (n = 1,277). The median age at recruitment was 12 years (IQR 11-14), and the median time since treatment completion was 2.5 years (IQR -1.1-3.0). Interventions included aerobic, strengthening, and/or coordination-based exercises, with a median period of 12 weeks (IQR 10.24). Sessions lasted a median duration of 45 minutes (IQR 40-60) across a median of 3 days/week (IQR 2.5-5.0). Adverse events were reported in two studies, of which nine events were noted (minor wrist cut, muscle strain, nausea, vomiting, drop in systolic blood pressure, dizziness, and nosebleed).

Five randomised controlled trials (n = 245) were included in the meta-analysis of the primary outcome. No RCT in the primary outcome meta-analysis was considered high risk of bias. There was moderate certainty evidence that physical activity resulted in small-to-moderate improvements in objective tests of cognitive function compared with control (SMD 0.40, 95% CI 0.07 to 0.73).

Physical activity and exercise interventions improve cognitive function in people who had childhood cancer. Future research should explore the optimal frequency, intensity, volume, duration, and type of physical intervention across different patient characteristics (e.g., type of cancer) for improving cognitive function.

Bernal JDK, Recchia F, Yu DJ, et al. Physical activity and exercise for cancer-related cognitive impairment among individuals affected by childhood cancer: a systematic review and meta-analysis. *Lancet Child Adolesc Health*. 2023;7(1):47-58. doi:10.1016/S2352-4642(22)00286-3

Read more on PEDro.

PEDro update (6 November 2023)

PEDro contains 60,230 records. In the 6 November 2023 update you will find:

- 46,097 Reports of randomised controlled trials (44,808 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 13,359 reports of systematic reviews, and
- 774 reports of evidence-based clinical practice guidelines.

For latest guidelines, reviews and trials in physiotherapy visit *Evidence in your inbox*.

DiTA update (6 November 2023)

DiTA contains 2,440 records. In the 6 November 2023 update you will find:

- 2,169 reports of primary studies, and
- 271 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 (December 2023)

The next PEDro and DiTA updates are on 4 December 2023.

Proudly supported by

Our mailing address is:
Physiotherapy Evidence Database (PEDro)
PO Box M179
MISSENDEN ROAD, NSW 2050
Australia