PEDro

Physiotherapy Evidence Database

## Welcome to the PEDro Newsletter for 3 June 2024

In this issue:



## Help power PEDro into the future! Donate to keep PEDro freely accessible.

For 25 years, PEDro has been the leading global resource for physiotherapy evidence. We provide free, rapid access to the best evidence for better patient outcomes.

The volume of physiotherapy evidence is exploding and PEDro needs support from users to keep up.

Today, we ask you to become a PEDro Supporter to help power PEDro into the future.

Please donate any amount that you can. Every dollar will help.

**Click here to donate**

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## PEDro is updating website content in 17 languages

PEDro reaches physiotherapists across the world with the best evidence-based resources available in 17 languages. We are updating the website content and are seeking the kind help of translators.

Let us know if you are fluent in English and any of the following languages, and would like to contribute to updating the PEDro content!

- Arabic
- Korean
- Romanian

Contact us: sph.pedro@sydney.edu.au

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## PEDro's Top 25 Trials!

To celebrate PEDro's 25th anniversary we are looking to expand PEDro's Top 20 Trials to the Top 25 Trials.

You can help us by nominating a trial published between July 2019 – August 2024.
Eligible trials:

- Randomised controlled trial
- Evaluate the effects of a physiotherapy intervention
- Primary report published in a peer reviewed journal between July 2019 – August 2024
- Answer an important clinical question
- Methodologically robust and innovative

Nominations close 11 August 2024.

**Click here to nominate now!**

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## Celebrating 25 years of PEDro!

This year we are celebrating 25 years of PEDro. We invite PEDro users to help us celebrate as we share:

- **PEDro resources**
  - Using PEDro to answer your clinical questions
  - #PEDroTacklesBarriers to evidence-based physiotherapy
  - PEDro's World-Wide Journal Club
  - PEDro Scale Training Program - **New!**
  - Stay up-to-date with the latest research with PEDro - **New!**
- **PEDro's history**
  Available later in 2024
- **Celebrating our PEDro volunteers**
  Available later in 2024

- **Connecting with prominent physiotherapists around the globe**
  Available later in 2024
- **PEDro's Top 25 Trials**
  We are also looking to expand PEDro's Top 20 trials to the Top 25. You can help us by nominating a trial published between July 2019 – August 2024.

Learn more.

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## PEDro's World-Wide Journal Club

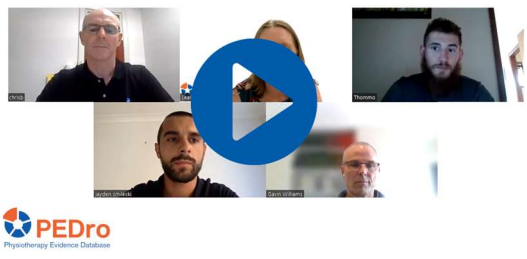
PEDro's World-Wide Journal Club on ballistic resistance training for people with traumatic brain injury is now available

We encourage physiotherapists with an interest in neurology and neurotrauma physiotherapy to participate in a five-step process of the journal club.

1. invite your colleagues to be involved
2. read the article

3. watch (or listen to) the video summarising ballistic resistance training on mobility compared to non-ballistic exercise rehabilitation in people with a traumatic brain injury


4. watch (or listen to) the video of the panel discussing ballistic resistance training on mobility compared to non-ballistic exercise rehabilitation in people with a traumatic brain injury




5. meet with your colleagues to have your own discussion about ballistic resistance training on mobility compared to non-ballistic exercise rehabilitation in people with a traumatic brain injury

Access the full summary on PEDro's blog

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## We are excited to announce that the #PEDroTacklesBarriers to evidence-based physiotherapy campaign is now available in Spanish, Ukranian and Turkish!

The '#PEDroTacklesBarriers to evidence-based physiotherapy' campaign will help you to tackle the four biggest barriers to evidence-based physiotherapy.

This campaign was inspired by a recent systematic review by Matteo Paci and colleagues that investigated the barriers to evidence-based physiotherapy. The review included 29 studies reporting the opinions of nearly 10,000 physiotherapists. Lack of time was the most frequently encountered barrier and was reported by 53% of physiotherapists. This was followed by language (36%), lack of access (34%), and lack of statistical skills (31%).

Thank you to Antonia Gomez, Carmen Suarez and Gerardo Candoni for kindly translating the content into Spanish; Mykola Romanyshyn into Ukranian; and Gül Öznur Karabıçak, Betül Atmış, Helin Merve Sapan, Siddika Fatma Uygur into Turkish.

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## Infographic: Systematic review found that interventions that promote coping and encourage movement and activity were most effective for temporomandibular disorders.

Some findings are included in this infographic.

# MANAGEMENT OF CHRONIC PAIN SECONDARY TO TEMPOROMANDIBULAR DISORDERS

Yao L et al. *BMJ.* 2023;15;383:e076226

## WHAT DID THEY DO?

**Study design:** Systematic review and network meta-analysis of 153 randomised controlled trials.

**Population:** Adults living with chronic pain associated with temporomandibular disorders.

**Intervention:** 23 conservative interventions, 15 pharmacological interventions, 7 combinations of pharmacological and conservative interventions, 13 surgical interventions with or without adjunct treatments.

**Comparator:** Placebo/sham.

**Outcome:** Pain relief - risk difference (RD, 95% CI) for achieving the minimally important difference in pain relief of 1 point out of 10.

148 trials (7,867 participants) evaluating 59 interventions had data on pain.

## FINDINGS

Most effective treatments for pain relief:

- Cognitive behavioural therapy + biofeedback or relaxation therapy (RD: 36%, 95% CI 33 to 39).
- Therapist-assisted jaw mobilisation (RD: 36%, 95% CI 31 to 40).
- Manual trigger point therapy (RD: 32%, 95% CI 29 to 34).

31 studies (n = 1987) reported adverse events. The certainty of evidence for adverse events was low to very low.

**Note:** Certainty of evidence was mostly low or very low.

**Interventions that promote coping and encourage movement and activity were most effective for reducing pain in people with chronic temporomandibular disorders.**

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Infographic prepared by Giovanni Ferreira, Jayden Smileski and Courtney West

Access the full summary in the PEDro blog

Yao L, Sadeghirad B, Li M, Li J, Wang Q, Crandon HN, Martin G, Morgan R, Florez ID, Hunskaar BS, Wells J, Moradi S, Zhu Y, Ahmed MM, Gao Y, Cao L, Yang K, Tian J, Li J, Zhong

L, Couban RJ, Guyatt GH, Agoritsas T, Busse JW. Management of chronic pain secondary to temporomandibular disorders: a systematic review and network meta-analysis of randomised trials. *BMJ*. 2023 Dec 15;383:e076226.

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## Systematic review found that exercise-based cardiac rehabilitation does not affect all-cause mortality in people with heart failure.

- People with heart failure have low exercise tolerance, poor health-related quality of life (HRQoL), increased risk of mortality and hospital admission, and high healthcare costs. This systematic review aimed to assess the effects of exercise-based cardiac rehabilitation (ExCR) on mortality, hospital admissions, and health-related QoL in adults with heart failure.

- Included randomised controlled trials in people ≥18 years with heart failure (either heart failure with reduced (<45%) ejection fraction (HFrEF) or heart failure with preserved (≥45%) ejection fraction (HFpEF)). People were randomised to ExCR (hospital or centre-based, home-based, or digitally-supported programs) with a follow-up of at least six months or to a no-exercise control (such as education or psychological intervention or usual medical care alone). Key outcomes were all-cause mortality, heart failure mortality, all-cause hospital admissions, heart failure-related hospital admissions, and HRQoL. Trial quality was evaluated using the Cochrane risk of bias tool.

- Sixty trials (8,728 participants) were included in the meta-analyses. All trials included aerobic exercise and 21 trials also included resistance training. Exercise dosage varied between 8-120 minutes per session, frequency of 1-7 sessions a week, intensity of 40-80% maximal heart rate to 50-85% maximal oxygen uptake (Vo2 max), duration of 8-120 weeks.

- At 12-month follow-up, there was no evidence of a difference in all-cause mortality when comparing ExCR versus usual care (RR 0.93; 95% CI 0.71 to 1.21; 34 trials; low certainty evidence). ExCR likely reduced risk of all-cause hospital admissions (RR 0.69; 95% CI 0.56 to 0.86; 23 trials; moderate-certainty evidence) and heart failure-related hospital admissions (RR 0.82, 95% CI 0.49 to 1.35; 10 trials; moderate certainty evidence). ExCR may improve HRQoL in the short term, but the

evidence is very uncertain (SMD −0.52; 95% CI −0.70 to −0.34; 33 trials; very low certainty evidence).

- Compared to no-exercise control, there was no evidence of a difference in all-cause mortality following ExCR in people with heart failure. ExCR likely reduced all-cause hospital admissions and heart failure-related hospital admissions and may result in improvements in HRQoL.

Access the full summary in the PEDro blog

PEDro acknowledges Dr Renae McNamara, Clinical Specialist Physiotherapist, Prince of Wales Hospital and Katie Warren, Masters of Physiotherapy Student, University of Technology Sydney for preparing the summary.

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## PEDro update (3 June 2024)

PEDro contains 61,297 records. In the 3 June 2024 update you will find:

- 46,885 reports of randomised controlled trials (46,033 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 13,628 reports of systematic reviews, and
- 784 reports of evidence-based clinical practice guidelines.

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

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# Next PEDro and DiTA updates (July 2024)

The next PEDro and DiTA updates are on 1 July 2024.

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