



A. PEDro update (3 August 2020)

PEDro contains 47,843 records. In the 3 August 2020 update you will find:

- 37,153 reports of randomised controlled trials (36,378 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 10,007 reports of systematic reviews, and
- 683 reports of evidence-based clinical practice guidelines.

PEDro was updated on 3 August 2020. For latest guidelines, reviews and trials in physiotherapy visit [Evidence in your inbox](#).

B. DiTA update (3 August 2020)

DiTA contains 1,830 records. In the 3 August 2020 update you will find:

- 1,655 reports of primary studies, and
- 175 reports of systematic reviews.

DiTA was updated on 3 August 2020. For the latest primary studies and systematic reviews evaluating diagnostic tests in physiotherapy visit [Evidence in your inbox](#).

C. PEDro now contains 10,000+ systematic reviews

We are pleased to announce that PEDro has just achieved a new milestone for the amount of evidence. There are now 10,000+ systematic reviews indexed in PEDro.

<https://www.pedro.org.au>



10,000+

systematic reviews

www.pedro.org.au



D. Videos for PEDro Top 5 Trials 2014-2019 now available in Portuguese

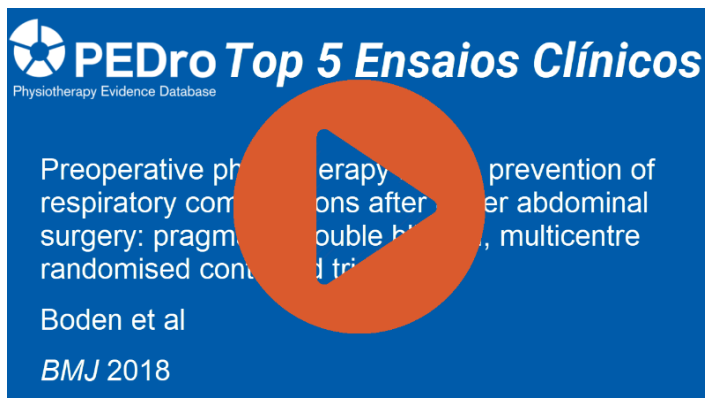
To celebrate PEDro's 20th birthday we identified the five most important randomised controlled trials in physiotherapy published in the years 2014-2019. We invited PEDro users to nominate randomised controlled trials in physiotherapy for consideration. Nominations were judged by a panel of international physiotherapy trialists.

The PEDro Top 5 Trials 2014-2019 are ground-breaking trials that changed the way people are treated for a variety of conditions seen by physiotherapists and other healthcare professionals. Some of these trials set the stage for breakthroughs, some represent a paradigm shift, and all of them mark important milestones in the evolution of physiotherapy treatment.

We are pleased to announce that video summaries of the PEDro Top 5 Trials 2014-2019 are now available in Portuguese.

PEDro would like to thank Ana Helena Salles and Dr Marina de Barros Pinheiro for creating these videos. Ana, who translated and recorded the videos, was doing a 11 month internship at The University of Sydney and is from the Faculdade de Ciências Médicas de Minas Gerais, Brazil. Marina is an NHMRC Early Career Fellow at the Institute for Musculoskeletal Health at The University of Sydney and Sydney Local Health District.

We present the trials in order of publication, from the most recent to oldest.



PEDro Top 5 Ensaios Clínicos
Physiotherapy Evidence Database

Preoperative physiotherapy for prevention of respiratory complications after abdominal surgery: pragmatic double-blind, multicentre randomised controlled trial

Boden et al
BMJ 2018

[Watch a video summarising the LIPPSMAck POP trial.](#)

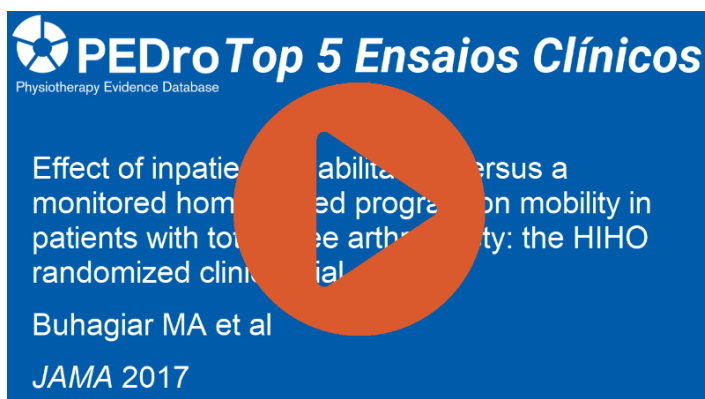


PEDro Top 5 Ensaios Clínicos
Physiotherapy Evidence Database

Hip arthroscopy versus conservative care for the treatment of femoroacetabular impingement syndrome (UK FASHIoN): a multicentre randomised controlled trial

Griffin et al
Lancet 2018

[Watch a video summarising the UK FASHIoN trial.](#)

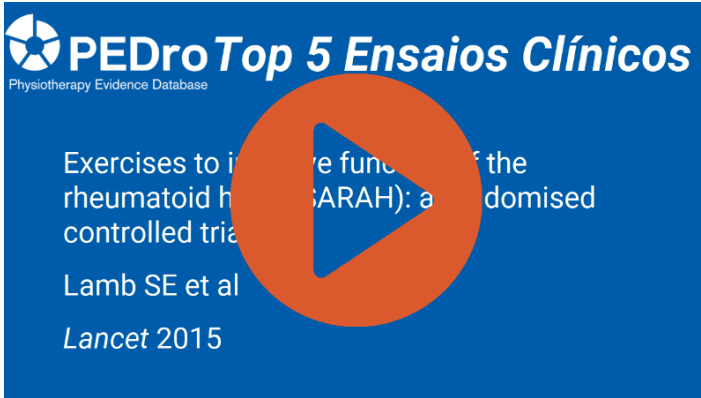


PEDro Top 5 Ensaios Clínicos
Physiotherapy Evidence Database

Effect of inpatient rehabilitation versus a monitored home-based program on mobility in patients with total knee arthroplasty: the HIHO randomized clinical trial

Buhagiar MA et al
JAMA 2017

[Watch a video summarising the HIHO trial.](#)



[Watch a video summarising the SARAH trial.](#)



[Watch a video summarising the AVERT trial.](#)

[These videos are also available in English.](#)

E. Infographic for systematic review that antenatal pelvic floor muscle training can prevent urinary incontinence

Last month we summarised the systematic review by [Woodley et al.](#) The review concluded that antenatal pelvic floor muscle training can prevent urinary incontinence.

Some suggestions for providing antenatal pelvic floor muscle training are in this infographic.



A systematic review of 46 studies found that antenatal pelvic floor muscle training for continent women can prevent the onset of urinary incontinence in late pregnancy and in the early and mid-postnatal period

Key intervention components of prevention trials

- Lasted 12-28 weeks
- Most included supervised exercise (3 sessions/week to 1 session/month) plus daily home exercise
- Adherence ranged from 43 to 90%

Other key findings

The effects of pelvic floor muscle training as a treatment for urinary and faecal incontinence, during or after pregnancy, is uncertain.

CITATION

Woodley SJ, et al. Pelvic floor muscle training for preventing and treating urinary and faecal incontinence in antenatal and postnatal women. *Cochrane Database Syst Rev* 2020;Issue 5



Woodley SJ, et al. Pelvic floor muscle training for preventing and treating urinary and faecal incontinence in antenatal and postnatal women. *Cochrane Database Syst Rev* 2020;Issue 5

[Read more on PEDro.](#)

F. Systematic review found that resisted and progressive exercise reduces pain and dysfunction, but non-resisted or non-progressive exercise does not, in people with rotator cuff related shoulder pain

Shoulder pain is a common musculoskeletal complaint, of which rotator cuff related pain is the predominant diagnosis. Clinical guidelines recommend exercise for rotator cuff related pain but make no distinction about the type of exercise prescribed. This review aimed to estimate the average effect of resisted and progressive exercise and non-resisted or non-progressive exercise, both compared to no treatment or placebo.

Sensitive searches were performed in five databases (Cochrane CENTRAL, Medline, Embase, CINAHL, OpenGray) and two clinical trial registries (ClinicalTrials.gov, who.int/ictpr). Randomised controlled trials of exercise compared to no

treatment or placebo in participants over 16 years of age with a primary complaint of rotator cuff related pain of any duration were included. Exercise was classified as resisted and progressive (ie, explicitly stated how resistance was applied and that there was progression of the volume or the load, or both, over time) or non-resisted or non-progressive (ie, explicitly stated that load was not applied or not progressed, or both). The primary outcome was a composite measure of pain and function measured on any shoulder-specific scale (converted to a 0-100 scale, with 0 being no pain or dysfunction). Secondary outcomes were pain (overall, with activity, and pain at rest; all converted to a 0-100 scale, with 0 being no pain) and the number of participants experiencing an adverse event. Medium-term (6 weeks to 6 months) follow-up was used as the primary timepoint. Two reviewers independently identified trials for inclusion and extracted data, with discrepancies resolved through discussion or by arbitration from a third reviewer. The Cochrane risk of bias tool was used to evaluate trial quality, with all quality ratings extracted from a recent Cochrane review (Page et al, 2016). Confidence in the evidence was conducted using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. Random effects meta-analysis was used to calculate the mean difference and 95% confidence interval (CI) for the composite measure of pain and function and the pain-related secondary outcomes, and the relative risk and 95% CI for adverse events.

Seven trials (468 participants) were included in the analyses: 4 trials (271 participants) evaluated resisted and progressive exercise and 3 trials (197 participants) evaluated non-resisted or non-progressive exercise. The mean age of participants was between 47 and 61 years old and trials largely included males. Baseline composite pain and function was comparable (33 to 50 out of 100).

Compared to no treatment or placebo, resisted and progressive exercise reduces composite pain and dysfunction by a mean of 15 points (95% CI 9 to 21, 4 trials, 271 participants), overall pain by 11 points (95% CI 6 to 16, 3 trials, 197 participants), pain with activity by 25 points (95% CI 14 to 36, 2 trials, 135 participants), and pain at rest by 23 points (95% CI 14 to 32, 2 trials, 135 participants). All results were classified as low certainty. The effect on adverse events is unclear as no trials reported whether any adverse events occurred.

No effect was observed for non-resisted or non-progressive exercise. Compared to no treatment or placebo, non-resisted or non-progressive exercise reduced composite pain and dysfunction by a mean of 4 points (95% CI -2 to 9, 3 trials, 197 participants), overall pain by 3 points (95% CI -1 to 8, 3 trials, 197 participants), pain with activity by 3 points (95% CI -5 to 12, 3 trials, 197 participants), and pain at rest by 2 points (95% CI -7 to 10, 2 trials, 174 participants). Adverse events (short term increase in pain) may be higher with non-resisted or non-progressive exercise compared with placebo (risk ratio 3.77, 95% CI 1.49 to 9.54, 1 trial, 116 participants). Again, all results were classified as low certainty.

Resisted and progressive exercise provides an uncertain clinically meaningful improvement in pain and function compared to no treatment or placebo among people with rotator cuff related pain. In contrast, there is low certainty evidence of no benefit in all outcomes with non-resisted or non-progressive exercise.

Naunton J, et al. Effectiveness of progressive and resisted and non-progressive or non-resisted exercise in rotator cuff related shoulder pain: a systematic review and meta-analysis of randomized controlled trials. *Clin Rehabil* 2020 Jun 22:Epub ahead of print.

[Read more on PEDro.](#)

Articles cited in this post:

[Page MJ, et al. Manual therapy and exercise for rotator cuff disease. *Cochrane Database Syst Rev* 2016;Issue 6](#)

G. Review highlights the need to improve the quality and applicability of trials of physiotherapy interventions for low back pain

Low back pain is a global health problem. Most international clinical practice guidelines recommend that first-line care for low back pain should involve non-pharmacological interventions, including those delivered by a physiotherapist. A recent review aimed to assess the quality and applicability of randomised controlled trials of physiotherapy interventions for low back pain.

The Physiotherapy Evidence Database (PEDro) was searched to obtain reports of trials evaluating physiotherapy interventions to prevent or treat low back pain (of any duration or type) in participants of any age. Data downloaded from PEDro were the citation (including year), participant age (paediatric <18 years; adult 18-70; geriatric >70), [therapy codes](#), and PEDro scale (both total PEDro score and individual items) for methodology quality. Additional data extracted from the trials were type of research question (efficacy, effectiveness, economic evaluation, implementation or translation, unclear), intervention aim (prevention, treatment, combination), low back pain duration (acute <6 weeks, sub-acute 6-12, chronic >12, mixed-duration, not reported), and low back pain classification (non-specific, infection, fracture, inflammatory, radiculopathy, cancer, pregnancy, osteoporosis, mixed diagnosis, other). Two reviewers independently screened trials for inclusion and extracted the additional data, with disagreements resolved by discussion or arbitration by a third reviewer.

The analyses included 2,215 trials indexed in the 1 July 2019 update of PEDro. The majority of trials were for adults (n=2,136, 96%), low back pain without specific aetiology (n=1,863, 84%), and chronic duration (n=947, 43%). The top three most investigated

therapy types were “stretching, mobilisation, manipulation, massage” (n=933, 42%), “strength training” (n=651, 29%), and “education” (n=499, 23%). The quality of trials improved over time, however most were at risk of bias. The mean total PEDro score was 5.4 (standard deviation 1.6) out of 10. Less than half of the trials concealed allocation to intervention (n=813, 37%), used intention-to-treat analysis (n=778, 35%), and blinded assessors (n=810, 37%), participants (n=174, 8%) and therapists (n=39, 2%). These findings did not vary by type of therapy.

The majority of trials evaluating physiotherapy interventions for low back pain are at risk of bias. Although average quality is improving with time, fundamental but simple to implement methodological features such as concealment of allocation and analysis by intention-to-treat are not commonly applied. Greater attention to these methodological features would improve the robustness of trials testing physiotherapy interventions for low back pain. The number of published trials relevant to low back pain has dramatically increased over time. Trials most commonly test exercise, education, and manual therapy interventions in adults with chronic, non-specific low back pain. Other interventions such as health promotion, and populations including children and older people are not well represented. Further efforts to improve the quality and applicability of the evidence are warranted.

[Cashin AG, et al. A systematic review highlights the need to improve the quality and applicability of trials of physical therapy interventions for low back pain. *J Clin Epidemiol* 2020 Jun 27:Epub ahead of print](#)

H. Support for PEDro comes from the Axxon and Singapore Physiotherapy Association

We thank [Axxon](#) and [Singapore Physiotherapy Association](#) who have just renewed their partnership with PEDro for another year.

I. Next PEDro and DiTA updates (September 2020)

The next [PEDro](#) and [DiTA](#) updates are on Monday 7 September 2020.

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