



A. PEDro update (1 April 2019)

PEDro contains 43,040 records. In the 1 April 2019 update you will find:

- 33,658 reports of randomised controlled trials (32,844 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 8,708 reports of systematic reviews, and
- 674 reports of evidence-based clinical practice guidelines.

PEDro was updated on 1 April 2019. For latest guidelines, reviews and trials in physiotherapy visit [Evidence in your inbox](#).

B. PEDro indexes 43,000+ reports



We are pleased to announce that PEDro has just achieved a new milestone for the amount of evidence. There are now 43,000+ reports of trials, reviews and guidelines indexed on PEDro.



C. Nominate a trial for PEDro's top 5 trials in 2014-2019



PEDro will be celebrating its 20th anniversary in October 2019. To mark this important milestone we want to identify 5 of the most important randomised controlled trials in physiotherapy published in the years 2014-2019.

High-quality randomised controlled trials are essential for physiotherapy practice and teaching. Back in 2014 we commemorated PEDro's 15th birthday by identifying the best 15 physiotherapy trials of all time. These were ground-breaking trials that changed the way people with a variety of conditions are treated. Some of the trials set the stage for breakthroughs, some represented a paradigm shift, and all of them marked important milestones in the evolution of physiotherapy treatment. Interviews with the lead authors of the top 15 trials are available in the [PEDro top 15 trials page](#).

We now want to expand this list by adding the top 5 trials published in 2014-2019.

PEDro users are invited to nominate randomised controlled trials evaluating physiotherapy interventions for consideration. The trials need to answer important clinical questions in a robust and innovative way. Only trials that have results published in a peer-reviewed journal article in the years 2014-2019 will be considered.

Nominations close on Monday 2 September 2019. Nominations will be judged by an independent panel of international trialists. The top 5 trials will be announced in October 2019.

[Visit the PEDro web-site to nominate a trial.](#)

D. Support for PEDro comes from the Fysioterapeuterna, Združenje Fizioterapevtov Slovenije and Cambodian Physical Therapy Association

We thank [Fysioterapeuterna](#), [Združenje Fizioterapevtov Slovenije](#), and [Cambodian Physical Therapy Association](#) who have just renewed their partnership with PEDro for another year.

E. #MyPTArticleOfTheMonth resource – how to read a systematic review

A systematic review brings together the results of individual studies that answer a focused clinical question using rigorous research methods. It is common for systematic reviews to include a statistical procedure called meta-analysis to estimate the overall size of the effect and its precision. When well-conducted,

systematic reviews are a useful source of evidence to guide physiotherapy practice and should be used in preference to individual studies.

Unfortunately, not all systematic reviews are well-conducted. This means that clinicians need to be able to identify reviews that are credible and contain effect estimates that they can be confident about. The Journal of the American Medical Association (JAMA) Users' Guides to the Medical Literature provide an excellent framework for how to read systematic reviews that focus on questions about treatment effectiveness and apply the results to patient care. This post briefly summarises the Users' Guide and provides a link to full-text.

The first judgement to make is whether the review has used credible methods. Skim reading the review to answer four questions will help to identify how credible the review methods are. The four questions are:

1. did the review explicitly address a relevant clinical question?
2. was the search for relevant studies exhaustive?
3. were selection and assessments of studies reproducible?
4. did the review present results that are ready for clinical application?

This process will help the physiotherapist to decide whether it is worthwhile to read the systematic review in more detail.

The second judgement to make is how confident you are about the estimates of effect. The [Grading of Recommendations Assessment, Development and Evaluation \(or "GRADE"\)](#) is a framework to evaluate the certainty of evidence in systematic reviews. The six questions to help physiotherapists decide on the quality of the evidence in a review, and hence how confident they can be about the effect estimates are:

1. how serious is the risk of bias in the body of evidence?
2. are the results consistent across studies?
3. how precise are the results?
4. do the results directly apply to my patient?
5. is there concern about reporting bias?
6. are there reasons to increase the confidence rating?

This process will help the physiotherapist to decide whether it is worthwhile to apply the results of the systematic review in clinical practice.

These processes to confirm credibility and confidence in systematic reviews, along with some clinical examples, are explained in full in the full-text for the Users' Guide:

[Murad MH, et al. How to read a systematic review and meta-analysis and apply the results to patient care: users' guides to the medical literature. JAMA 2014 Jul;312\(2\):171-9](#)

Your ability to read scientific articles reporting the results of systematic reviews will improve with practice.

Make the commitment to read at least one article per month and share your reading with the global physiotherapy community in #MyPTArticleOfTheMonth.

F. #MyPTArticleOfTheMonth – what is Melissa Locke reading?



Melissa Locke is a Specialist Paediatric Physiotherapist, as awarded by the Australian College of Physiotherapists. She is Managing Director and co-owner of Movement Solutions Physiotherapy which operates from four locations in South East Queensland and provides physiotherapy services to children, teens and young adults of all abilities. Melissa is also on the Board of Directors for the Australian Physiotherapy Council.

Melissa subscribes to the PEDro [Evidence in your inbox](#) feed for paediatrics because it makes it easy to identify relevant, good quality articles in her area of practice and interest. Two articles recently caught Melissa's attention.

[Saitta M et al. Park-based physical activity interventions for persons with disabilities: a mixed-methods systematic review. *Disabil Health J* 2019 Jan;12\(1\):11-23](#)

Park-based physical activity interventions improve health in the general population and provide an alternative model of care for people with disabilities. This review identified limited, low level, preliminary evidence demonstrating objective and perceived short-term health and well-being improvements in children/adolescents and older adults with disabilities for park-based interventions. People with disabilities appear to experience the same biopsychosocial health benefits of park-based physical activity as the general population. Melissa says, "I've started using park-based physical activity with some of my clients is it is a great way to achieve therapeutic intervention using real-world activities and environments."

[Bale P et al. The effectiveness of a multidisciplinary intervention strategy for the treatment of symptomatic joint hypermobility in childhood: a randomised, single centre parallel group trial \(the Bendy study\). *Pediatr Rheumatol Online J* 2019;17\(2\):Epub](#)

Symptomatic joint hypermobility is a relatively common childhood problem. This is one of the first trials to evaluate the effects of a multidisciplinary intervention programme using rigorous methods. The trial concluded that no additional benefit could be shown from the intervention compared to standard management. Melissa says, "we see many children and young people with symptomatic joint hypermobility in my practice, a treatment alternative which could be tested is the physiotherapist playing a more educational role (possibly using Apps or video blogs) rather than providing hands on care."

G. WCPT Congress 2019

The [World Confederation for Physical Therapy \(WCPT\) Congress 2019](#) will be held in Geneva, Switzerland on 10-13 May 2019. As a WCPT Professional Partner, PEDro will be participating in the Congress scientific program and exhibition.

At 16:00-17:30 on Sunday 12 May 2019 a seminar entitled "[Consumption of research reports: how to find reports of reliable clinical research](#)" will be conducted in Room E. Lead by Mark Elkins, Rob Herbert, Mark Kaizik and Carsten Juhl, this seminar will update conference delegates on strategies that can be used to find reports of high-quality clinical research.

The "[Application of evidence: strategies to improve the application of evidence to individual patients](#)" focused symposia will run in Room A at 8:30-10:00 on Sunday 12 May 2019. Featuring Mark Elkins, Philip van der Wees, Leonardo Costa, Rebecca Craik and Sallie Lamb, this symposia will provide participants with strategies to overcome challenges to evidence-based practice.

Four "Rapid 5" style papers relating to PEDro will be presented on Monday 13 May 2019. The session times and rooms are listed below, but please consult the [Congress iPlanner](#) for more information.

Monday, 13 May 2019 10:45-12:15, Room P

Research methodology & knowledge translation session (PLR5-11)

- PEDro searching has improved over time: a comparison of search commands from two 6-month periods 3 years apart (PLR5-722)
- The number of randomised controlled trials of physiotherapy interventions doubles every 6 years: a survey of the Physiotherapy Evidence Database (PLR5-3351)
- Meet PEDro's partner, DiTA, a database of studies of diagnostic test accuracy relevant to physiotherapy (PLR5-1109)

Monday 13 May, 15:45-17:15, Room V

Professional issues session (PLR5-12)

- PEDro: tackling the language barrier to translating research into practice (PLR5-2119)

A half day post-congress course entitled "[Research in the clinical setting: understanding and applying randomised trials](#)" will be run on 14 May 2019. In the course, participants will develop knowledge and skills in using randomised controlled trials to guide clinical practice. The value of randomised trials will be explored. We will delve into some key design features used in trials, including random allocation, concealed allocation, intention to treat analysis, reporting of between-group comparisons, and blinding of therapists, subjects and assessors.

Please come and visit PEDro at stand T12 in the Exhibition Hall. The PEDro team will be available during the Welcome Networking Reception plus the morning tea, lunch and afternoon tea breaks to give guided tours of PEDro and answer any questions you may have.

H. Systematic review found that spinal manipulative therapy for chronic low back pain produces similar effects to therapies recommended by clinical guidelines

This systematic review evaluated the benefits and harms of spinal manipulative therapy for the treatment of chronic low back pain. Randomised controlled trials conducted in adults 18 years and older with more than 50% of participants reporting pain lasting more than 3 months were included. Spinal manipulative therapy was compared against guideline-recommended interventions, non-guideline-recommended interventions, sham spinal manipulation, and combined therapies. Risk of bias was assessed using the criteria described by Cochrane Back and Neck Review group. Primary outcomes were pain intensity (0-100 scale) and back specific functional status. Treatment effects were reported at 1, 3, 6 and 12 months post-randomisation.

47 trials were included (n = 9,211 participants). Several health professionals were involved in providing treatment, with most being chiropractors (16 studies) or physiotherapists (14 studies).

Compared to guideline-recommended interventions, moderate quality evidence suggests that spinal manipulative therapy was not better for pain at 1 month (mean difference -3.17, 95% confidence interval (CI) -7.85 to 1.51) and 12 months (mean difference -1.86, 95% CI -4.79 to 1.07). A statistically significant difference was found at 6 months (mean difference -3.09, 95% CI -5.42 to -0.77) but this was not considered to be clinically relevant. Compared to interventions not recommended by guidelines, spinal manipulative therapy was significantly better at reducing pain at 1 month (mean difference -7.48, 95% CI -11.50 to -3.47, high quality evidence), 6 months (mean difference -7.54, 95% CI -13.29 to -1.79, moderate quality evidence), and 12 months (mean difference -7.80, 95% CI -14.19 to -1.41). Compared to sham spinal manipulation, there was low quality evidence that spinal manipulative therapy did not reduce pain at 1 month (mean difference -7.55, 95% CI -19.86 to 4.76), and very low quality evidence that it did not reduce pain at 6 months (mean difference 0.96, 95% CI -6.34 to 8.26) and 12 months (mean difference 0.20, 95% CI -5.33 to 5.37).

For back specific functional status, there was moderate quality evidence that spinal manipulative therapy was statistically better to guideline-recommended treatments at 1 month, but not at 6 and 12 months. Compared to interventions not recommended by guidelines, there was high quality evidence that spinal manipulative therapy was significantly better at 1 month, and these effects were clinically relevant, with moderate and low quality evidence that spinal manipulative therapy was statistically and clinically better than interventions not recommended by guidelines at 6 and 12 months, respectively. Compared to sham spinal manipulation, there was low quality evidence that spinal manipulation improved functional status at

1 month, and this improvement was clinically relevant.

Spinal manipulative therapy produces similar effects to guideline-recommended therapies for chronic low back pain, and it appears to be better than non-guideline-recommended interventions for improvement in function in the short-term.

Rubinstein SM, et al. Benefits and harms of spinal manipulative therapy for the treatment of chronic low back pain: systematic review and meta-analysis of randomised controlled trials. *BMJ* 2019;364:l689

[Read more on PEDro.](#)

I. An overview of PEDro

A short article providing an overview of the [Physiotherapy Evidence Database \(PEDro\)](#) has recently been published. PEDro is a free, searchable online resource that can be used by physiotherapists to assist their efforts to undertake evidence-based practice. In February 2019 PEDro indexed the details of over 42,000 pieces of published evidence about the effects of physiotherapy interventions, and the number of articles is growing exponentially. PEDro is searched millions of times each year by users worldwide. In addition to searching PEDro to answer clinical questions, physiotherapists can browse the latest evidence in their area of practice using the PEDro Evidence in your inbox service. Training for using the search interface and to develop skills in evidence-based practice is provided in 12 languages. The article concludes by outlining the collaboration between the Società Italiana de Fisioterapia (SIF) and PEDro. In addition to providing financial support, about 40 SIF members have completed the PEDro scale training program and have rated over 400 of the trials indexed on PEDro.

[Elkins M, et al. Società Italiana de Fisioterapia and the Physiotherapy Evidence Database \(PEDro\). *Archives of Physiotherapy* 2019 Mar 14;9\(5\):Epub](#)

J. Next PEDro update (May 2019)

The next PEDro update is on Monday 6 May 2019.

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