PEDro Newsletter 6 July 2020 View this email in your browser

Physiotherapy Evidence Database

A. PEDro update (6 July 2020)

PEDro contains 47,574 records. In the 6 July 2020 update you will find:

- 36,964 reports of randomised controlled trials (36,115 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 9,925 reports of systematic reviews, and
- 685 reports of evidence-based clinical practice guidelines.

PEDro was updated on 6 July 2020. For latest guidelines, reviews and trials in physiotherapy visit *Evidence in your inbox*.

B. DiTA update (6 July 2020)

DiTA contains 1,807 records. In the 6 July 2020 update you will find:

- 1,636 reports of primary studies, and
- 171 reports of systematic reviews.

DiTA was updated on 6 July 2020. For the latest primary studies and systematic reviews evaluating diagnostic tests in physiotherapy visit *Evidence in your inbox*.

C. PEDro celebrates Juvenile Arthritis Awareness Month July 2020

Juvenile arthritis is an umbrella term used for paediatric rheumatic disease, it is an

autoimmune condition affecting 1 in 1000 children worldwide. The most common type is juvenile idiopathic arthritis, but the term also includes juvenile lupus, vasculitis, juvenile myositis and juvenile scleroderma.

Physiotherapists provide pain management, land and aquatic based exercise therapy, braces and orthotics, and advice on structured physical activity in order to improve range of motion, functional ability, fitness, and quality of life for children with juvenile arthritis. Clinicians, caregivers, and patients use a shared decision-making process that considers patients' values and preferences when formulating a treatment plan.

There is a growing amount of high-quality clinical research to guide the physiotherapy management of juvenile arthritis. PEDro currently indexes over 50 clinical practice guidelines, systematic reviews and randomised controlled trials evaluating physiotherapy treatment of juvenile arthritis.

You may like to review the following practice guidelines, which provide useful summaries for physiotherapists working with children in this clinical area:

- Ringold S, et al. 2019 <u>American College of Rheumatology/Arthritis Foundation</u> <u>Guideline for the treatment of juvenile idiopathic arthritis: therapeutic approaches</u> <u>for non-systemic polyarthritis, sacroiliitis, and enthesitis</u>. *Arthritis Care* <u>Res</u> 2019;71(6):717-34
- Cavallo S, et al. <u>Ottawa Panel evidence-based clinical practice guidelines for</u> <u>structured physical activity in the management of juvenile idiopathic arthritis</u>. *Arch Phys Med Rehabil* 2017;98(5):1018-41
- Brosseau L, et al (2015). <u>Ottawa Panel evidence-based clinical practice quidelines</u> for foot care in the management of juvenile idiopathic arthritis. *Arch Phys Med Rehabil* 2016;97(7):1163-81

Useful systematic reviews regarding exercise therapy for juvenile arthritis include:

- Klepper S, et al. <u>Effects of structured exercise training in children and adolescents</u> with juvenile idiopathic arthritis. *Pediatr Phys Ther* 2019;31(1):3-21
- Kuntze G, et al. <u>Exercise therapy in juvenile idiopathic arthritis: a systematic review</u> and meta-analysis. Arch Phys Med Rehabil 2018;99(1):178-93

To keep up-to-date with the latest trials, reviews and guidelines evaluating physiotherapy interventions for children with juvenile arthritis, subscribe to the "paediatrics" feed of PEDro's *Evidence in your inbox*. Subscription is free.

D. PEDro scale training program available online

The ability to appraise the quality of randomised controlled trials is an important skill in evidence-based practice. PEDro runs online training for physiotherapists and other health professionals looking to improve their skills in evaluating trials. The training is available anywhere in the world, and can be completed at your own pace, whenever suits you.

Our training program focuses on using the PEDro scale to evaluate key methodological features (eg, allocation to groups and blinding of key people) and data reporting (eg, point measures and variability) in trials. Video instruction, examples, and opportunities to practice and obtain feedback are provided for each item of the PEDro scale. The PEDro scale training program is currently available in English and Portuguese.

For a small fee (AUD 50), individual users can subscribe to the program for 3 months. Institutional subscription is also available. All proceeds from the online training are used to produce and further develop PEDro.

The training program includes an accuracy test to confirm that items are being judged in a similar way to other raters. A certificate is issued for those subscribers who pass the accuracy test.

https://training.pedro.org.au/

E. The PEDro World-Wide Journal Club is being used by the global physiotherapy community

Journal clubs are a great way to translate research into practice. In March 2020 <u>PEDro</u> <u>published a blog</u> that outlined some key features of running a successful journal club. Since then we have released material for two journal clubs: <u>Constraint induced movement</u> <u>therapy after stroke</u> and <u>Exercise for falls prevention in community dwelling older people</u>.

The idea is for physiotherapists to use resources provided by PEDro as the basis for running a local journal club with their peers. The resources provided include: a research article that addresses an important evidence-practice gap; a video summary of the article; a panel discussion about the article that explores applying the results into practice; and, links to resources to support ongoing discussion and implementation.

The PEDro World-Wide Journal Club has attracted the attention of the global physiotherapy community. In just under 3 months nearly 3,000 physiotherapists have

visited the Journal Club web-site and the YouTube videos have been viewed 757 times. Posts on Facebook and Twitter about the Journal Club have a reach of nearly 14,000.



Sherebanu Ujjainwala and her colleagues, alumni from the Physiotherapy School and Centre at the TN Medical College and the BYL Nair Charitable Hospital in Mumbai, have shared their experience with running the Constraint induced movement therapy after stroke journal club with the PEDro Team. Because of the social distancing measures in place for the COVID-19 pandemic, this group of physiotherapists held their discussion via Zoom. It was their first try of a journal club format.

They saw it as a great opportunity to encourage reading and critical appraisal of clinical research. The panel discussion video and links to resources were particularly useful for their local discussion. Sherebanu said: "the information regarding barriers and challenges to application was interesting and became a key point of discussion for our group."

If you have run a local journal club using the PEDro materials, <u>please let us know</u>. We'd like to know what your local journal club experience was like and any feedback you may have about the materials provided by PEDro.

The purpose of the PEDro World-Wide Journal Club is to encourage the global physiotherapy community to read trials, reviews and guidelines that have important implications for practice. We hope that facilitating discussion of this research will help physiotherapists to implement the results into their clinical practice. We plan to release material for two more journal clubs later in 2020.

F. Infographic for systematic review that found that stroke patients who receive stroke unit care are more likely to be alive, independent, and living at home at 1 year post-stroke

Last month we summarised the <u>Langhorne et al</u>. The review concluded that stroke patients who receive stroke unit care are more likely to be alive, independent, and living at home 1 year after the stroke.

Some suggestions for providing stroke unit care are in this infographic.



A systematic review of 29 trials found that stroke patients who receive stroke unit care are more likely to be alive, independent, and living at home at 1-year poststroke

Key practice points

- Dedicated stroke wards, mobile stroke teams or mixed rehabilitation wards are models of multi-disciplinary stroke unit care
- Benefits all stroke patients regardless of age, sex, stroke severity, and stroke type
- Largest effect was observed in trials where the stroke unit was a dedicated stroke ward

Langhorne P, et al. Organised inpatient (stroke unit) care for stroke: network meta-analysis. *Cochrane Database Syst Rev* 2020;Issue 4



Langhorne P, et al. Organised inpatient (stroke unit) care for stroke: network metaanalysis. *Cochrane Database Syst Rev* 2020;Issue 4

Read more on PEDro.

G. Systematic review found that antenatal pelvic floor muscle training can prevent urinary incontinence

Pelvic floor dysfunction and incontinence are common after pregnancy and childbirth. In the first 3 months after childbirth about one-third of women have urinary incontinence and up to one-tenth have faecal incontinence. Pelvic floor muscle training is recommended to prevent and treat incontinence. A recent systematic review aimed to assess the effects of pelvic floor muscle training (antenatal or postnatal) for preventing or treating urinary and faecal incontinence in late pregnancy and after childbirth.

The Cochrane Incontinence Specialised Register was searched to identify randomised or quasi-randomised trials which compared pelvic floor muscle training to no training, usual care, another treatment, or an alternative form of pelvic floor muscle training in pregnant women (could be either continent or incontinent at the time of randomisation). The primary

outcome was the self-reported presence of urinary or faecal incontinence. Where possible, risk ratios and 95% CIs were calculated at five time points using meta-analysis: late in pregnancy, in the early (0-3 months), mid (3-6 months) and late (6-12 months) postnatal periods and in the long term (> 5 years). Two reviewers independently selected trials for inclusion, extracted data, and evaluated trial quality. Any disagreements were resolved by discussion. Risk of bias was evaluated using the Cochrane tool and certainty of evidence was evaluated using the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) approach. Separate analyses were performed for trials recruiting women who were continent (ie, prevention), women who were incontinent (ie, treatment), mixed prevention and treatment samples, and whether the pelvic floor muscle training occurred before or after delivery. 46 trials (10,832 participants) were included in the analyses.

Prevention of urinary incontinence

Compared with usual care, urinary continent pregnant women performing antenatal pelvic floor muscle training reduced the risk of becoming incontinent in late pregnancy (risk ratio 0.38, 95% CI 0.20 to 0.72, 6 trials, 624 participants, moderate-quality evidence) and in the early (risk ratio 0.38, 95% CI 0.17 to 0.83, 5 trials, 439 participants, GRADE not provided) and mid (risk ratio 0.71, 95% CI 0.54 to 0.95, 5 trials, 673 participants; high-quality evidence) postnatal periods. This effect was not evident in the small number of trials reporting data for the late postnatal period (risk ratio 1.20, 95% CI 0.65 to 2.21, 1 trial, 44 participants, low-quality evidence) and in the long term (risk ratio 1.07, 95% CI 0.77 to 1.48, 2 trials, 352 participants, GRADE not provided).

Treatment of urinary incontinence

Antenatal pelvic floor muscle training in incontinent women did not decrease urinary incontinence in late pregnancy (risk ratio 0.70, 95% CI 0.44 to 1.13, 3 trials, 345 participants, very low-quality evidence) and in the early (risk ratio 0.75, 95% CI 0.37 to 1.53, 2 trials, 292 participants, GRADE not provided), mid (risk ratio 0.94, 95% CI 0.70 to 1.24, 1 trial, 187 participants, low-quality evidence) or late (risk ratio 0.50, 95% CI 0.13 to 1.93, 2 trials, 869 participants, very low-quality evidence) postnatal periods. Pelvic floor muscle training started after delivery for women with urinary incontinence did not reduce the risk of incontinence in the late postnatal period (risk ratio 0.55, 95% CI 0.29 to 1.07, 3 trials, 696 participants, low-quality evidence).

Mixed prevention or treatment of urinary incontinence

Antenatal pelvic floor muscle training in women with or without urinary incontinence (ie, in mixed prevention and treatment samples) probably decreases urinary incontinence in late pregnancy (risk ratio 0.78, 95% CI 0.64 to 0.94, 11 trials, 3,307 participants, moderatequality evidence) and in the early (risk ratio 0.83, 95% CI 0.71 to 0.99, 6 trials, 806 participants, GRADE not provided) and mid (risk ratio 0.73, 95% CI 0.55 to 0.97, 5 trials, 1,921 participants, low-quality evidence) postnatal periods. This effect was not evident in the late postnatal period (risk ratio 0.85, 95% CI 0.63 to 1.14, 2 trials, 244 women, moderate-quality evidence) or in the long term (risk ratio 1.38, 95% CI 0.77 to 2.45, 1 trial, 188 participants, GRADE not provided). Pelvic floor muscle training started after delivery for mixed prevention and treatment samples did not reduce the risk of incontinence in the late postnatal period (risk ratio 0.88, 95% CI 0.71 to 1.09, 3 trials, 826 participants, moderate-quality evidence).

Faecal incontinence

Only eight trials reported faecal incontinence outcomes. No trials evaluated antenatal pelvic floor muscle training to prevent or treat faecal incontinence. In women in mixed prevention and treatment samples, there was no evidence that antenatal pelvic floor muscle training reduced the risk of faecal incontinence in late pregnancy (risk ratio 0.64, 95% CI 0.36 to 1.14, 3 trials, 910 participants, moderate-quality evidence) or in the early postnatal period (risk ratio 0.76, 95% CI 0.34 to 1.70, 2 trials, 130 participants, GRADE not provided). Pelvic floor muscle training started after delivery for women with incontinence (risk ratio 0.68, 95% CI 0.24 to 1.94, 2 trials, 620 participants, very low-quality evidence) or in mixed prevention and treatment samples (risk ratio 0.73, 95% CI 0.13 to 4.21; 1 trial, 107 participants, low-quality evidence) did not reduce the risk of incontinence in the late postnatal period.

Structured 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 periods. Uncertainty surrounds the effects of pelvic floor muscle training as a treatment for urinary incontinence in antenatal and postnatal women and for the treatment of faecal incontinence.

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.

H. Support for PEDro comes from the Physiotherapy New Zealand, Physio Austria, and Združenje Fizioterapevtov Slovenije

We thank <u>Physiotherapy New Zealand</u>, <u>Physio Austria</u>, and <u>Združenje Fizioterapevtov</u> <u>Slovenije</u> who have just renewed their partnership with PEDro for another year.

I. Next PEDro and DiTA updates (August 2020)

The next PEDro and DiTA updates are on Monday 3 August 2020.



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