

#### A. PEDro update (7 June 2021)

PEDro contains 50,914 records. In the 7 June 2021 update you will find:

- 39,340 reports of randomised controlled trials (38,567 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 10,882 reports of systematic reviews, and
- 692 reports of evidence-based clinical practice guidelines.

PEDro was updated on 7 June 2021. For latest guidelines, reviews and trials in physiotherapy visit *Evidence in your inbox*.

#### B. DiTA update (7 June 2021)

DiTA contains 2,138 records. In the 7 June 2021 update you will find:

- 1,929 reports of primary studies, and
- 209 reports of systematic reviews.

DiTA was updated on 7 June 2021. For the latest primary studies and systematic reviews evaluating diagnostic tests in physiotherapy visit *Evidence in your inbox*.

### C. Vote for which infographic you prefer for the systematic review that found that providing group-based pelvic floor muscle training for all women during pregnancy is more efficient than individual training

Last month we summarised the <u>systematic review by Brennen et al</u>. The review concluded that providing group-based pelvic floor muscle training for all women during pregnancy is more efficient than individual training.

The PEDro Education and Training Subcommittee have been thinking about the format of the infographics we have been producing to summarise the implications of important systematic reviews. This month we have produced two versions. We invite all PEDro users to give us feedback about their preferred format. We'd like to know which format (original or alternate) would make you more likely to use the infographic to apply the evidence in clinical practice. You can submit your preference by:

- using the <u>PEDro web-site</u>
- tagging us in a Tweet (<u>@PEDro\_database</u>), or
- commenting on our infographic Facebook post on 11 June 2021
   (<u>@PhysiotherapyEvidenceDatabase.PEDro</u>).

Both infographics provide some suggestions for efficient models of care for providing pelvic floor muscle training during pregnancy. Which do you prefer?

#### Original



Modelled cost-effectiveness analysis of 11 trials included in a recent Cochrane review found that providing group-based pelvic floor muscle training for all women during pregnancy is more efficient than individual training for treating and preventing urinary and faecal incontinence

Costs to the health service (compared to no intervention)

- Individual training during pregnancy: \$768 per urinary incontinence case prevented
- Group-based training during pregnancy: cost-saving of \$14 (at least 8 participants per session), savings were greater if more participants attend each group
- Individual postnatal training: \$2,784 per faecal incontinence case prevented or cured, \$1,970 per urinary incontinence case treated

TATION



#### **Alternate**

Group-based pelvic floor muscle training for all women during pregnancy is more cost-effective than postnatal training for women with urinary incontinence: cost-effectiveness analysis of a systematic review. Brennen R, et al. J Physiother 2021;67(2):105–14

#### STUDY DESIGN

Modelled cost-effectiveness analysis of 11 trials included in a recent Cochrane review that found:

antenatal pelvic floor muscle training for continent women can prevent urinary incontinence in late pregnancy and postpartum

#### **INCLUSION CRITERIA**

Study types: Randomised or quasi randomised controlled trials

Population: Pregnant or postnatal women

Intervention: Group or individual pelvic floor muscle training

Comparator: No pelvic floor muscle training, an alternative pelvic floor training program, placebo, or usual care

Outcome: Self-reported postpartum urinary or faecal incontinence

#### COST EFFECTIVENESS ANALYSIS

Calculated in 2019 Australian dollars for incremental cost effectiveness of each mode of intervention delivery to successfully prevent or cure one case of incontinence



Calculated using trials that:

- reported statistically significant between-group differences in preventing or treating incontinence;
- ii) could be categorised as (1) individual, group-based or mixed individual and group intervention; and (2) during or after pregnancy

#### **FINDINGS**



Health service costs to prevent or cure one case of incontinence (compared to no intervention):

- Individual training during pregnancy: \$768 per urinary incontinence case prevented
- Group-based training during pregnancy: cost-saving of \$14 (at least 8 participants per session), savings were greater if more participants attend each group
- Individual postnatal training: \$2,784 per faecal incontinence case prevented or cured, \$1,970 per urinary incontinence case treated



#### TAKE AWAY

Providing group-based pelvic floor muscle training for all women during pregnancy is more efficient than individual training for treating and preventing urinary and faecal incontinence

Brennen R, et al. Group-based pelvic floor muscle training for all women during pregnancy is more cost-effective than postnatal training for women with urinary incontinence: cost-effectiveness analysis of a systematic review. *J Physiother* 2021;67(2):105-14

#### Read more on PEDro.

# D. Systematic review found that pain neurophysiology education may reduce pain and psychological distress in people with chronic musculoskeletal pain

Musculoskeletal pain is prevalent, disabling and associated with high socioeconomic costs. In the 2000's there was a paradigm shift in using education to treat musculoskeletal pain. Traditional education strategies focused on anatomy, biomechanics and the biomedical model for pain (eg, back schools). The contemporary pain neurophysiology (or neuroscience) education model focused on increasing knowledge of pain, the nervous system and the factors modulating pain to reconceptualise pain, including that experiencing pain often relates to hypersensitivity of the nervous system rather than tissue

damage. This systematic review aimed to estimate the effects of pain neurophysiology education compared to control on pain, disability and psychological distress in people with musculoskeletal pain.

Guided by a protocol, sensitive searches in seven databases (including Medline, Embase and Cochrane CENTRAL), citation tracking and contacting experts were conducted to identify randomised controlled trials evaluating pain neurophysiology education in people with musculoskeletal pain. Trials recruiting adults with acute or chronic musculoskeletal pain in any body part (spinal or in the extremities) were included. All forms and durations of pain neurophysiology education were accepted (group- or individual-based delivered in person or via other media in isolation or as part of an intervention program). Any intervention or control condition that did not involve pain neurophysiology education could be used as a comparator. The main outcomes were pain intensity, disability and psychological distress (hierarchy of outcomes were Pain Catastrophising Scale, Tampa Scale of Kinesiophobia then other composite scores) measured immediately postintervention and in the long-term (about 1 year after intervention). Adverse events were also investigated. Two reviewers independently selected trials for inclusion, extracted data and evaluated trial quality and certainty of evidence. Any disagreements were resolved through discussion or by arbitration from a third reviewer. Trial quality was evaluated using the Cochrane risk of bias tool (version 2.0). Certainty of evidence was evaluated using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. Meta-analysis was used to calculate standardised mean differences and 95% confidence intervals (CI) for between-group differences for each outcome at each time point. The standardised values for pain and disability were transformed to a 0- to 10-point scale by the reviewers. The pre-planned subgroup analyses were acute vs. chronic pain and spinal vs. extremity pain.

18 trials (1,585 participants) were included in the meta-analysis. About 70% of participants were women. The mean age ranged from 37 to 70 years. Three trials recruited people with acute pain and 15 with chronic pain. Participants had spinal pain (10 trials), extremity pain (2), a mix of spinal or extremity pain (1) or other pain conditions (5). Most trials provided individual- or group-based pain neurophysiology education (16 trials) in 1 to 4 sessions lasting 5 to 60 minutes/session. The remaining two trials delivered the intervention as a booklet. The comparator was an alternate form of education (11 trials), usual care (6) or placebo (1).

Mean pain intensity with pain neurophysiology education was lower than control intervention by -0.9 points out of 10 (95% CI -1.7 to -0.1; 11 trials; 944 participants; low certainty) immediately post-intervention and by -1.2 points (-2.3 to -0.1; 10 trials; 903 participants; low certainty) at 1-year. Mean disability with pain neurophysiology education was lower than control intervention by -0.7 points out of 10 (-1.3 to 0.0; 11 trials; 990 participants; low certainty) immediately post-intervention and by -1.0 points (-2.3 to 0.2; 11 trials; 947 participants; low certainty) at 1-year. Mean psychological distress with pain

neurophysiology education was -0.36 standard deviations lower than control post-intervention (-0.67 to -0.06; 12 trials; 1,048 participants; low certainty), but the 95% CI for the 1-year estimate included no effect (standardised mean difference -0.37; -0.75 to 0.01; 10 trials; 888 participants; low certainty). There were no adverse events (3 trials).

The pre-planned subgroup analyses revealed no clinically relevant effects for pain intensity, disability and psychological distress immediately post-intervention and at 1-year for participants with acute pain. Standardised mean differences for pain were 0.00 (95% CI -0.19 to 0.19; 2 trials) post-intervention and -0.03 (-0.25 to 0.20; 2 trials) at 1-year. Standardised mean differences for disability were -0.19 (-0.38 to 0.00; 2 trials) postintervention and 0.01 (-0.33 to 0.35; 2 trials) at 1-year. Standardised mean differences for psychological distress were -0.07 (-0.27 to 0.12; 2 trials) post-intervention and 0.01 (-0.21 to 0.23; 2 trials) at 1-year. In contrast, moderate effects were observed for pain intensity and psychological distress, but not disability, in favour of pain neurophysiology education at post-intervention and 1-year for those with chronic pain. Standardised mean differences for pain were -0.42 (-0.74 to -0.11; 9 trials) post-intervention and -0.52 (-0.97 to -0.06; 8 trials) at 1-year. Standardised mean differences for disability were -0.18 (-0.43 to 0.07; 9 trials) post-intervention and -0.34 (-0.74 to 0.06; 9 trials) at 1-year. Standardised mean difference for psychological distress was -0.46 (-0.83 to -0.08; 10 trials) post-intervention and -0.48 (-0.95 to -0.02; 8 trials) at 1-year. Stratifying by area of pain revealed a tendency for larger effect sizes for spinal pain compared to extremity pain. For example, the standardised mean difference for pain intensity at 1-year was -0.33 (-0.79 to 0.14; 5 trials) for spinal pain and 0.28 (-0.44 to 1.00; 1 trial) for extremity pain.

Pain neurophysiology education may improve pain intensity and psychological distress in people with chronic musculoskeletal pain.

Bulow K, et al. Effectiveness of pain neurophysiology education on musculoskeletal pain: a systematic review and meta-analysis. *Pain Med* 2021;22(4):891-904

#### Read more on PEDro.

#### E. Participants required for a pilot study about PEDro searching

We are looking for 10 volunteers for a pilot study to work out how best to measure PEDro searching skills. The study is conducted at The University of Sydney. Participants need to:

- be a licensed physiotherapist working mainly in clinical practice
- have good English-language proficiency, and
- be willing to fill out an online survey (~5 minutes) and meet with a researcher on Zoom (~20 minutes).

Participants will receive feedback on how to improve their PEDro search strategies.

If you are interested in contributing to this study, please email Alla Melman at <a href="mailto:sph.pedro@sydney.edu.au">sph.pedro@sydney.edu.au</a>.

## F. Fifth video of PEDro Advanced Search for the "You Ask #PEDroAnswers" campaign

Each month in 2021 we will share short videos illustrating how to use the PEDro Advanced Search to find the best research to answer clinical questions submitted by PEDro users.

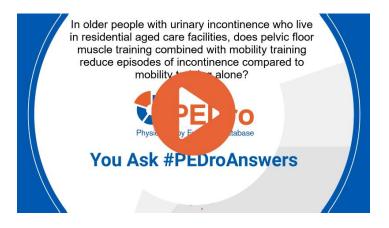
The fifth question to be answered is "In older people with urinary incontinence who live in residential aged care facilities, does pelvic floor muscle training combined with mobility training reduce episodes of incontinence compared to mobility training alone?"

The Search terms are:

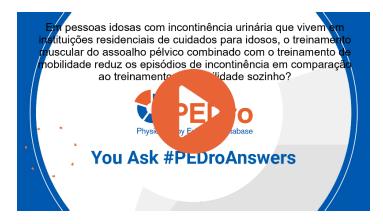
- gerontology (Subdiscipline)
- incontinence (Problem)
- institution\*, resident\* or "care home" (Abstract & Title).

PEDro acknowledges the contributions of: Ana Helena Salles from Faculdade de Ciências Médicas de Minas Gerais, Brazil who translated and recorded the Portuguese version; and, Elodie Louvion and Sébastien Matéo from the <u>Société Française de Physiothérapie</u> who translated and recorded the French version.

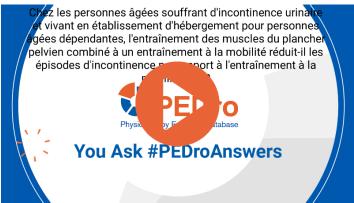
You can submit your question for the "You Ask #PEDroAnswers" campaign at <a href="https://pedro.org.au/english/learn/you-ask-pedro-answers/">https://pedro.org.au/english/learn/you-ask-pedro-answers/</a>.



**English** 



#### Portuguese



**French** 

#### G. "You Ask #PEDroAnswers" search tip #5 - Use phrase searching

Throughout 2021 we will be sharing some tips on how to use the PEDro Advanced Search. The fifth tip is "Use phrase searching".

Phrase searching is a strategy that combines two or more terms into a single term and is done by placing double quotation marks (" ") around the words. This is useful when a specific construct, like "lateral epicondylitis", involves more than one word. Phrase searching is a way of combining several search terms as if you were using the AND Boolean operator.

Let's use lateral epicondylitis as an example. When you search for lateral epicondylitis without quotation marks, you will retrieve articles that contain both words (lateral AND epicondylitis) in their abstract or title, but not articles containing just lateral OR just epicondylitis.

Adding quotation marks ("lateral epicondylitis") will make your search more specific to the construct. You will retrieve articles that contain all words between the double quotation marks together and in that order (eg, treatment of lateral epicondylitis). You will NOT retrieve articles containing the words separately (eg, treatment of epicondylitis) or in a different order (eg, treatment of epicondylitis of the lateral elbow).

In other words, using phrase searching will make your search become more precise, as you will be looking specifically for articles that have two or more words combined in the abstract or title. However, you might end up missing articles that use a different nomenclature for lateral epicondylitis (eg, epicondylitis only or epicondylalgia).

Phrase searching cannot be combined with wildcards, such as \* or @. If you want to use wildcards to identify articles that use different variants of the word epicondylitis (eg, epicond\*), make sure you don't use these wildcards in conjunction with phrase searching (eg, "lateral epicond\*"). Using wildcards in conjunction with phrase searching will return no articles. More information on how to use wildcards is available in a recent blog (https://pedro.org.au/english/you-ask-pedroanswers-search-tip-4-use-wildcards-truncation/).

Phrase searching can be used in text fields in both the Simple Search and Advanced Search in PEDro. Three more examples of phrase searching are:

- "multiple sclerosis"
- "patellofemoral pain"
- "blood pressure".

We've recently revised the PEDro video tutorial on how to do an Advanced Search.

### H. Call for continence and women's health questions for "You Ask #PEDroAnswers" campaign

21-27 June 2021 is World Continence Week. The week aims to raise awareness about the impact of incontinence related issues on daily life and encourages people to seek help to improve their health and quality of life.

To mark World Continence Week we invite physiotherapists to submit a clinical question related to continence and women's health to the "You Ask #PEDroAnswers" campaign. You can submit a question using a form on the <a href="PEDro web-site">PEDro web-site</a>, tag us in a Tweet (<a href="PEDro\_database">PEDro\_database</a>), or on <a href="Facebook">Facebook</a> by commenting on a "You Ask #PEDroAnswers" post or by sending us your question via Messenger.

To keep up to date with the latest evidence, subscribe to the <u>PEDro Evidence in your inbox</u> feed for 'continence and women's health'.

I. Support for PEDro comes from the American Physical Therapy
Association, Koninklijk Nederlands Genootschap voor Fysiotherapie,
Physioswiss, Fysioterapeuterna, Associação Espanola de Fisioterapeutas,
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and Macau Physical Therapists Association

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#### J. Next PEDro and DiTA updates (July 2021)

The next PEDro and DITA updates are on Monday 5 July 2021.





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