PEDro Newsletter 12 April 2021

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PEDro

Physiotherapy Evidence Database

A. PEDro update (12 April 2021)

PEDro contains 50,302 records. In the 12 April 2021 update you will find:

- 38,912 reports of randomised controlled trials (38,122 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 10,701 reports of systematic reviews, and
- 689 reports of evidence-based clinical practice guidelines.

PEDro was updated on 12 April 2021. For latest guidelines, reviews and trials in physiotherapy visit *Evidence in your inbox*.

B. DiTA update (12 April 2021)

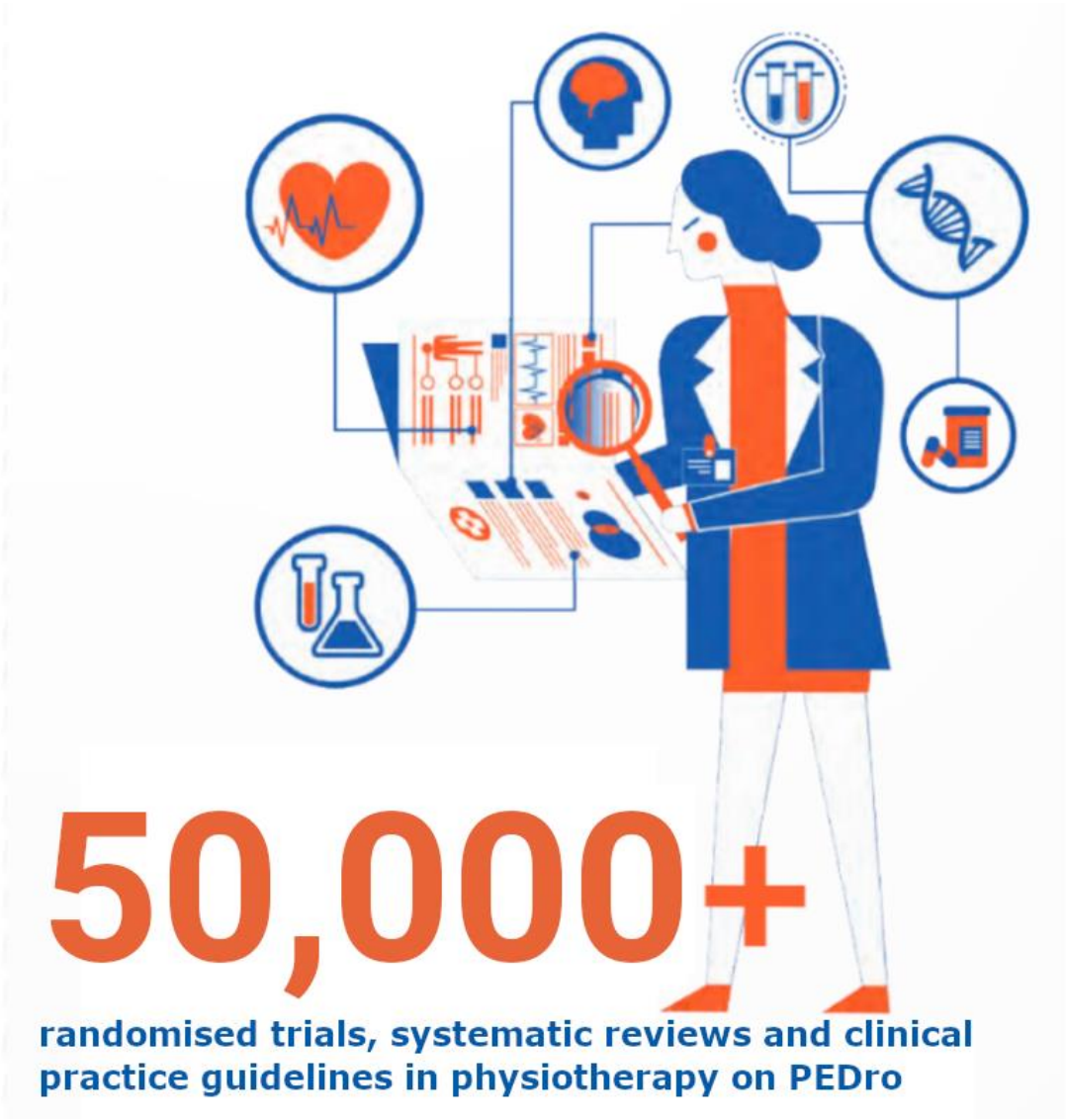
DiTA contains 2,074 records. In the 12 April 2021 update you will find:

- 1,871 reports of primary studies, and
- 203 reports of systematic reviews.

DiTA was updated on 12 April 2021. For the latest primary studies and systematic reviews evaluating diagnostic tests in physiotherapy visit *Evidence in your inbox*.

C. PEDro now contains 50,000+ reports of trials, reviews and guidelines

We are pleased to announce that PEDro has just achieved a new milestone. There are now 50,000+ reports of trials, reviews and guidelines indexed on PEDro.



D. 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 sph.pedro@sydney.edu.au.

E. Rachael Cowan wins PEDro prize for the best trial presented at #WorldPhysio2021!

The PEDro prize is awarded to the person who presents the best report of a randomised controlled trial at the World Physiotherapy Congress. The award recognises the achievements of researchers who conduct high quality, clinically important randomised controlled trials. To be eligible, the presentation must have been a primary report for a completed randomised controlled trial that evaluates the effects of a physiotherapy intervention.

Judging was carried out by a panel of international trialists. Scoring was based on quality (risk of bias, size, design and analysis of the trial) as well as significance (importance of the findings for clinical practice).

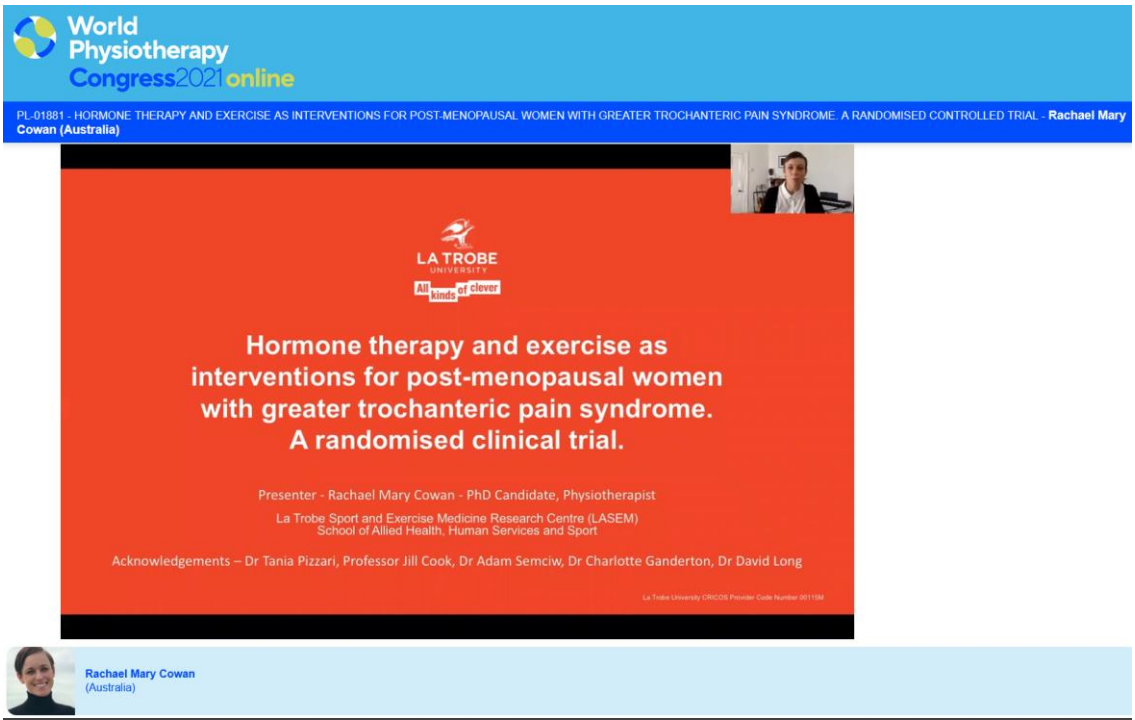
The #WorldPhysio2021 winner was Rachael Cowan for her presentation titled "Hormone therapy and exercise as interventions for post-menopausal women with greater trochanteric pain syndrome: a randomised controlled trial". The trial concluded that menopausal hormone therapy combined with any exercise and education resulted in reduced pain and increased function for post-menopausal women with greater trochanteric pain syndrome when body mass index was <25. Exercise with education surrounding avoidance of gluteal tendon compression is beneficial for this population, regardless of body mass index.

The results of the trial will be published soon, and we are looking forward to indexing this article in PEDro. Links to the trial protocol and trial registration are provided below.

Ganderton C, et al. Does menopausal hormone therapy (MHT), exercise or a combination of both, improve pain and function in post-menopausal women with greater trochanteric pain syndrome (GTPS)? A randomised controlled trial. *BMC Women's Health* 2016;16(32):Epub

Cowan R. Does menopausal hormone therapy (MHT), exercise or a combination of both, improve pain and function in post-menopausal women with greater trochanteric pain syndrome (GTPS)? A randomised controlled trial. Australian and

[New Zealand Clinical Trials Register ACTRN12614001157662; last updated 2 March 2021]



Pictured is Rachael Cowan presenting at #WorldPhysio2021.

F. Watch the third short video of PEDro advanced search for "You Ask #PEDroAnswers"

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 third question to be answered is “In people with a cervical disc herniation, does computerised traction reduce pain more than exercise therapy?”

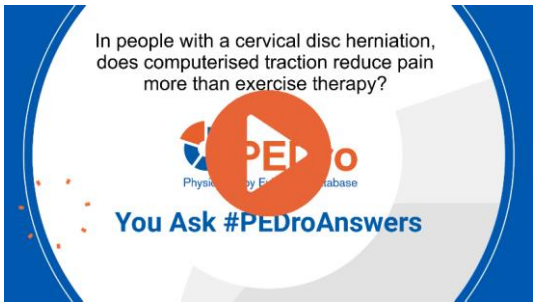
The Search terms are:

- “mechanical traction” (Abstract & Title)
- head or neck (Body Part).

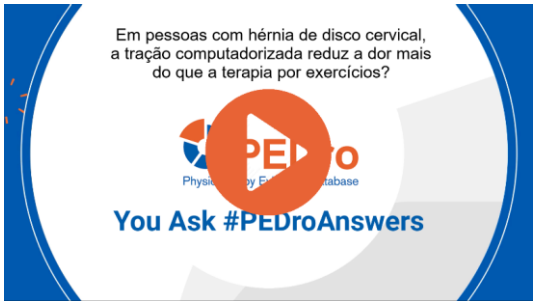
PEDro acknowledges the contributions of: Ana Helena Salles from Faculdade de Ciências Médicas de Minas Gerais, Brazil who translated and recorded the Portuguese version; and, Sébastien Matéo and Matthieu Guémann from the Société Française de Physiothérapie who translated and recorded the French version.

You can submit your question for the “You Ask #PEDroAnswers” campaign

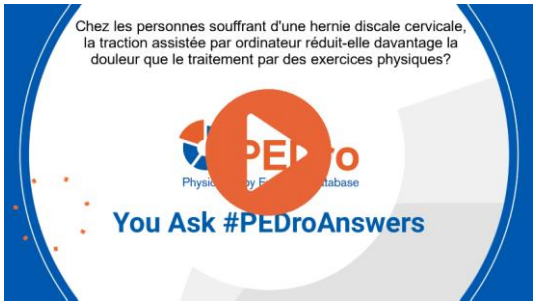
at https://pedro.org.au/english/learn/you-ask-pedro-answers/.



English



Portuguese



French

G. "You Ask #PEDroAnswers" search tip #3 - Use the PEDro Advanced Search (not Simple)

Throughout 2021 we will be sharing some tips on how to use the PEDro Advanced Search. The third tip is "Use the PEDro Advanced Search (not Simple)".

PEDro has three search pages (Advanced, Simple and Consumer). We strongly encourage health professionals to use the Advanced Search option, which contains a series of fields to define search terms with precision. For this reason, the SEARCH buttons in the header and footer of the PEDro website and the SEARCH wedge of the navigation wheel on the PEDro homepage take you directly to the Advanced Search page.

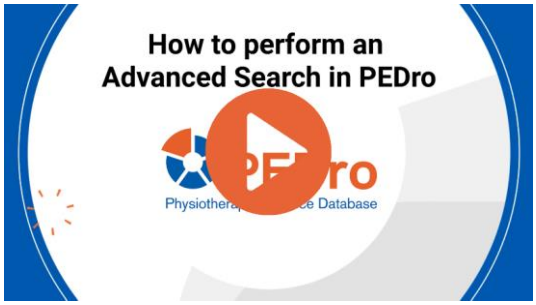
The PEDro Advanced Search page has 13 fields that you can use to enter the search terms generated from your clinical question. But it is important to note that you do not need to enter search terms in EVERY field. Specifying terms in one to three fields is usually sufficient.

Six fields have pull-down lists that you can choose from (Therapy, Problem, Body Part, Subdiscipline, Topic and Method). These are indicated by the arrow symbol. For example, the pull-down list for the Body Part field contains the different anatomical regions that might be the focus of your intervention, from the head or neck down to the foot or ankle. This field is particularly useful if your clinical question relates to the treatment of a musculoskeletal condition. You can select a term by clicking on it. You can only select one term in a pull-down list.

Three fields let you enter numbers or dates. These let you identify articles that are published in or after a particular year, added to PEDro since a particular date or, for trials only, have a minimum cut-off value for the total PEDro score.

Four fields allow you to type text into them (Abstract & Title, Author/Association, Title Only and Source). For example, you can search for words that appear in the abstract or title of an article in the Abstract & Title field. Generally it is most efficient to search by typing one or two words into the Abstract & Title field.

You need to use English words in text fields because most of the database behind PEDro is in English. For example, searching for 'incontinência' in the Abstract & Title field will return no articles. In contrast, searching for 'incontinence' returns hundreds of articles. If you type non-English letters into text fields you will receive an error message reminding you to remove any non-English letters.



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

Those who are new to searching may like to begin with the Simple Search, which contains a single text field. Patients and other users of physiotherapy can access the Consumer Search, which has less technical language.

H. Call for ergonomics and occupational health questions for "You Ask #PEDroAnswers" campaign

April 28 is World Day for Safety and Health at Work. To reflect on the challenges presented by the COVID-19 pandemic, the theme for 2021 is 'Anticipate, prepare and respond to crises'. It encourages workplaces to reflect on the lessons learned during the

pandemic and to build resilience to face crises now and in the future.

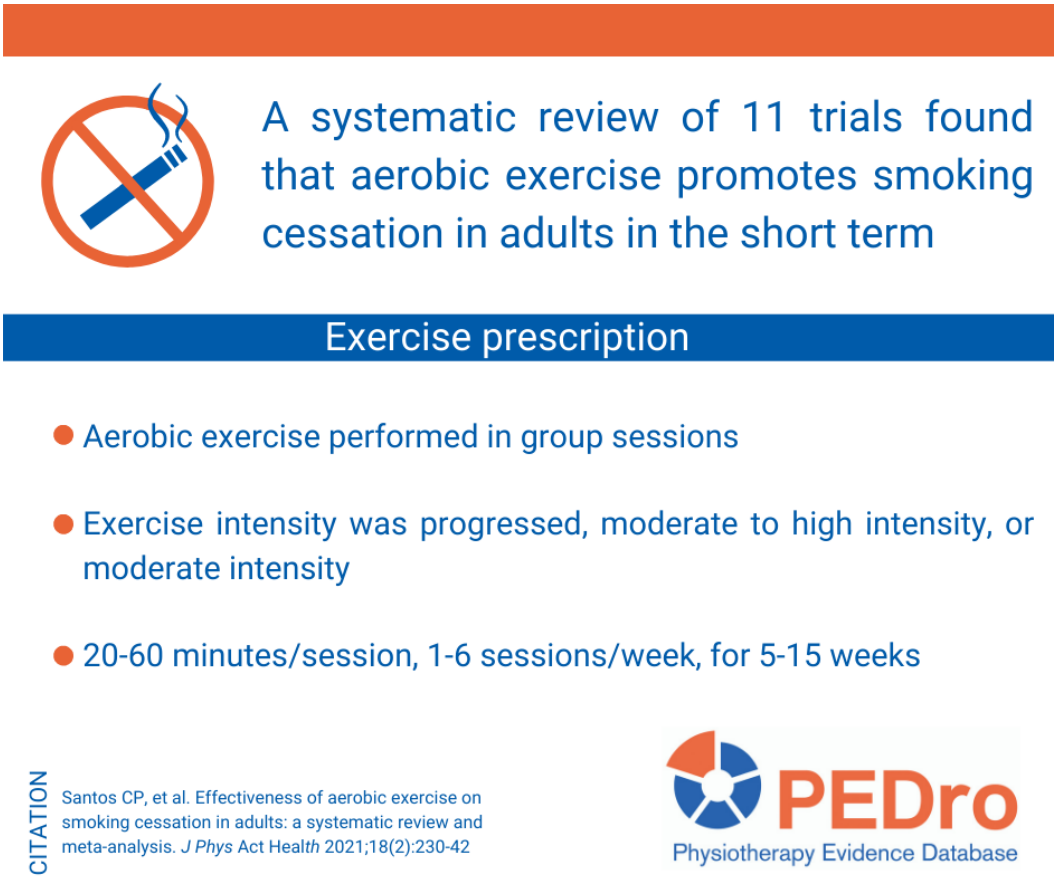
This month we invite physiotherapists to submit a clinical question related to ergonomics and occupational health to the “You Ask #PEDroAnswers” campaign. You can submit a question using a form on the PEDro web-site, tag us in a Tweet (@PEDro_database or @PEDrinho_dbase), or on Facebook (PEDro or PEDrinho) 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 PEDro *Evidence in your inbox* feed for ‘Ergonomics and occupational health’.

I. Infographic for systematic review that found that aerobic exercise promotes smoking cessation in adults in the short term

Last month we summarised the systematic review by Santos et al. The review concluded that aerobic exercise promotes smoking cessation in adults in the short term.

Some suggestions for exercise prescription to promote smoking cessation are included in this infographic.



Santos CP, et al. Effectiveness of aerobic exercise on smoking cessation in adults: a systematic review and meta-analysis. *J Phys Act Health* 2021;18(2):230-42

Read more on PEDro.

J. Systematic review found passive physical treatments for low back pain were most likely to help people who were younger with higher disability and lower psychological distress and psychological treatments were more likely to help those with severe disability

Proven treatments for low back pain only provide modest overall benefits. Matching people to treatments that are likely to be most effective for them may improve clinical outcomes and makes better use of healthcare resources. This systematic review aimed to understand which people with low back pain are most likely to benefit from different treatment approaches (active physical treatments, passive physical treatments, and psychological treatments).

Sensitive searches were performed in four databases, including Medline. Randomised controlled trials that had interventions delivered by a therapist and a sample size >179 were included. Since this was an individual patient data meta-analysis, authors of trials were invited to share data with the research team. Interventions were categorised as: control (non-active usual care), sham control (sham acupuncture, electrotherapy, advice/education, mock transcutaneous electrical nerve stimulation), active physical (exercise and graded activity), passive physical (individual physiotherapy, manual therapy, acupuncture) and psychological (advice/education, psychological therapy). Follow-up was classified as: short- (2 and 3 months), mid- (6 months) and long-term (12 months post randomisation). Thirty-two outcomes were classified into physical disability, pain, psychological distress and non-utility quality of life domains.

Pooled analyses were performed on individual patient data from at least two trials so as not to replicate original analyses. Missing data was not imputed. Potential moderators were identified from a previous systematic review on treatment moderators (ie, factors measured pre-randomisation indicating who benefits most and least from a treatment) and by including individual patient data from all trials in a single mixed-effects meta-analysis model for each follow-up time (with moderators declared statistically significant ($p<0.05$) or weakly significant ($p<0.20$)). Two approaches were used to identify sub-groups: Recursive Partitioning and Adaptive Refinement by Directed Peeling. Both aim to identify subgroups of participants who experience treatment effects larger than other participants.

19 trials (n=9,328 participants) were included in the analyses. The average age of

participants was 49 years, 57% were female and the average Roland Morris Disability Questionnaire score at baseline was 10 out of 24 points (14 trials). Three treatment types were chosen for the exploration of potential moderators: active physical treatments, passive physical treatments, and psychological treatments. Control arms included non-active usual care and sham interventions. Age, gender, low back pain disability and severity, and psychological state were at least weakly significant in one or more of the moderator analyses and were considered for further subgroup analysis.

Participants with greater psychological distress and physical disability had the greatest improvement on the Mental Component Scale of Short Form Health Survey (12 or 36 item) from passive physical treatment compared to non-active usual care (treatment effects 4.3; 95% confidence interval (CI) 3.4 to 5.2). Recursive partitioning method found that participants with worse disability at baseline had the greatest reductions in disability measured using the Roland Morris Disability Questionnaire from psychological treatment compared to non-active usual care (treatment effects 1.7; 95% CI 1.1 to 2.3). Adaptive risk group refinement did not find any subgroup that would experience a larger benefit from psychological treatment over non-active usual care. Neither statistical method identified any subgroups that would experience a larger benefit from active physical treatment over non-active usual care.

Passive physical treatments for low back pain were most likely to help people who were younger with higher levels of disability and low levels of psychological distress. Psychological treatments were more likely to help those with severe disability. Active physical treatments appeared to help all subgroups equally. However, the size of the additional benefit achieved in the subgroups was small and unlikely to be clinically important. These findings do not support the use of sub-grouping for people with low back pain.

Hee SW, et al. Identification of subgroup effect with an individual participant data meta-analysis of randomised controlled trials of three different types of therapist-delivered care in low back pain. *BMC Musculoskelet Disord* 2021;22(191):Epub.

Read more on PEDro.

K. PEDro World-Wide Journal Club on using advanced telehealth technology to deliver exercise therapy for chronic obstructive pulmonary disease is now available

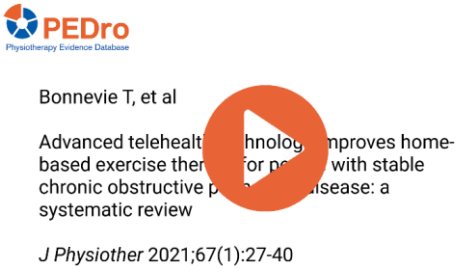
Welcome to the PEDro World-Wide Journal Club. The purpose of the PEDro World-Wide Journal Club is to encourage the global physiotherapy community to read trials, reviews

and guidelines that have important implications for clinical practice. We hope that facilitating discussion of this research will help physiotherapists to implement the results into their clinical practice.

Journal clubs are a great way to translate research into practice. In March 2020 PEDro published a blog that outlined some key features of running a successful journal club. During 2020 we ran three journal clubs as a proof of concept. The journal clubs were well received, so we have decided to run a series of five or six journal clubs during 2021. The idea is for physiotherapists to use resources provided by PEDro as the basis for running a local journal club with their peers.

The first PEDro World-Wide Journal Club for 2021 is about using advanced telehealth technology to deliver exercise therapy for chronic obstructive pulmonary disease. We will be discussing the systematic review by Bonnevie et al. We encourage physiotherapists with an interest in cardiopulmonary rehabilitation to participate in a five-step process:

If you are interested in being involved, please visit the PEDro web-site for more information.



1. invite your colleagues to be involved
2. read the article
3. watch (or listen to) the video summarising the advanced telehealth technology to deliver exercise therapy for chronic obstructive pulmonary disease review

4. watch (or listen to) the video of the panel discussing the advanced telehealth technology to deliver exercise therapy for chronic obstructive pulmonary disease review
5. meet with your colleagues to have your own discussion about the advanced telehealth technology to deliver exercise therapy for chronic obstructive pulmonary disease review.

L. Support for PEDro comes from the Australian Physiotherapy Association, Taiwan Physical Therapy Association and Norsk Fysioterapeutforbund

We thank Australian Physiotherapy Association, Taiwan Physical Therapy Association and Norsk Fysioterapeutforbund who have just renewed their partnership with PEDro for another year.

M. Next PEDro and DiTA updates (May 2021)

The next PEDro and DiTA updates are on Monday 3 May 2021.

Proudly supported by

AUSTRALIAN PHYSIOTHERAPY ASSOCIATION

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