PEDro Newsletter 6 April 2020 View this email in your browser



### A. PEDro update (6 April 2020)

PEDro contains 46,649 records. In the 6 April 2020 update you will find:

- 36,330 reports of randomised controlled trials (35,511 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 9,641 reports of systematic reviews, and
- 678 reports of evidence-based clinical practice guidelines.

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

### B. DiTA update (6 April 2020)

DiTA contains 1,749 records. In the 6 April 2020 update you will find:

- 1,588 reports of primary studies, and
- 161 reports of systematic reviews.

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

# C. PEDro honours physiotherapists and other healthcare workers providing frontline care for COVID-19

The PEDro team pays tribute to physiotherapists and other healthcare workers who are providing frontline care during the Coronavirus Disease 2019 (COVID-19) pandemic. We honour your bravery, dedication and expertise, and extend our sincere gratitude for your work. You have the support of the global physiotherapy community.

As this pandemic continues to impact worldwide, physiotherapists have worked collaboratively to provide frontline care, guidance for global physiotherapy practice, education and training, and public health messaging. We will highlight some key initiatives and resources in this post.

A group of international (Australia, Belgium, Canada, United Kingdom) experts in cardiorespiratory physiotherapy have come together to rapidly prepare a consensus guideline for physiotherapy management of COVID-19 in the acute hospital setting. The guideline covers workforce planning and preparation plus the delivery of physiotherapy interventions. There are 17 recommendations for workforce planning, 7 recommendations for screening to determine indications for physiotherapy, 16 for respiratory physiotherapy interventions, 11 for physiotherapy mobilisation, exercise and rehabilitation interventions, and 15 for the use of personal protective equipment. To date the guideline has been endorsed by the Australian Physiotherapy Association, Canadian Physiotherapy Association, Association of Chartered Society of Physiotherapists in Respiratory Care UK, Associazione Riabilitatori dell' Insufficienza Respiratoria, International Confederation of Cardiorespiratory Physical Therapists, and World Confederation of Physical Therapy (WCPT).

The first version of the guideline for physiotherapy management for COVID-19 in the acute hospital setting has been accepted for publication in the Journal of Physiotherapy:

Thomas P, Baldwin C, Bissett B, Boden I, Gosselink R, Granger CL, Hodgson C, Jones AYM, Kho ME, Moses R, Ntoumenopoulos G, Parry SM, Patman S, van der Lee L.

Physiotherapy management for COVID-19 in the acute hospital setting: clinical practice recommendations. *Journal of Physiotherapy* 2020;66(2):in press

The plan is to revise and release new versions of the guideline as more is known about the treatment of COVID-19.

WCPT and Physiopedia are both making important contributions to education and training. WCPT have collated a range of <a href="https://physiotherapy-specific information">https://physiotherapy-specific information</a> and resources. Physiotherapists can <a href="mailto:subscribe">subscribe</a> to the WCPT mailing list to stay informed. Physiopedia are offering a <a href="mailto:free online course on COVID-19">free online course on COVID-19</a> for participants to learn more about the pandemic from a physiotherapy perspective.

Physiotherapists and other healthcare workers have also added significant support to the public health campaign for social distancing. This has been done in many countries, and we link to two great examples from <u>Belfast Health and Social Care Trust in Northern</u>
Ireland and the Australian Broadcasting Corporation's 7:30 program.

Self care is incredibly important during this difficult time. MindSpot has released a list of 10 psychological tips for staying resilient while social distancing, self-isolation and quarantine measures are in place. These include getting the right information from trusted sources; switching off 'noise' like social media or the 24-hour news cycle; getting organised; keeping healthy routines; and staying engaged. Trusted sources of information include the World Health Organization and the Department of Health in your country or state (for example, the Ministry of Health for Singapore).

Staying physically active will help your mental and physical health.

The <u>QuaranTrain</u> initiative provides great suggestions for how to exercise under social distancing, self-isolation and even quarantine conditions. This valuable resource was conceived by a group of physiotherapy students from the HAN University of Applied Sciences in the Netherlands and is available in Dutch and English.

Finally, we leave you with some words from an inspirational leader. <u>Jacinda Ardern</u>, the Prime Minister of New Zealand, reminds us that: "We will get through this together, but only if we stick together. Be strong and be kind."

## D. Evidence to guide telehealth physiotherapy

With many physiotherapists moving to delivery of online services because of the Coronavirus Disease 2019 (COVID-19) pandemic, we thought it would be timely to put together some high-quality clinical research to guide telehealth interventions. Following are a list of systematic reviews published in the last 5 years that evaluate the effects of telephysiotherapy. The Chartered Society of Physiotherapy have produced a guide for the rapid implementation of telehealth consultations that may also be useful.

Title	Method
Telerehabilitation services for stroke (Cochrane review)	systematic review
Alternative models of cardiac rehabilitation: a systematic review	systematic review
<u>Telehealthcare in COPD: a systematic review and meta-analysis on physical outcomes and dyspnea</u>	systematic review

Telehealth interventions versus center-based cardiac rehabilitation of coronary artery disease: a systematic review and meta-analysis	primary study
Telehealth exercise-based cardiac rehabilitation: a systematic review and meta-analysis	systematic review
Interventions to achieve ongoing exercise adherence for adults with chronic health conditions who have completed a supervised exercise program: systematic review and meta-analysis	systematic review
Real-time telerehabilitation for the treatment of musculoskeletal conditions is effective and comparable to standard practice: a systematic review and meta-analysis	systematic review
<u>Telehealth interventions to support self-management of long-term</u> <u>conditions: a systematic metareview of diabetes, heart failure, asthma, chronic obstructive pulmonary disease, and cancer</u>	systematic review
Lifestyle interventions based on the diabetes prevention program delivered via eHealth: a systematic review and meta-analysis	systematic review
The effectiveness of exercise-based telemedicine on pain, physical activity and quality of life in the treatment of chronic pain: a systematic review	systematic review
Exploring effectiveness and effective components of self-management interventions for young people with chronic physical conditions: a systematic review	systematic review
Clinical-effectiveness of self-management interventions in chronic obstructive pulmonary disease: an overview of reviews	systematic review
The use of mobile applications to support self-management for people with asthma: a systematic review of controlled studies to identify features associated with clinical effectiveness and adherence	systematic review
Effectiveness of telephone-based interventions for managing osteoarthritis and spinal pain: a systematic review and meta-analysis	systematic review
The efficacy of telehealth delivered educational approaches for patients with chronic diseases: a systematic review	systematic review
Cost-effectiveness of cardiac rehabilitation: a systematic review	systematic review
eHealth interventions for people with chronic kidney disease (Cochrane review)	systematic review

# E. PEDro World-Wide Journal Club on constraint induced movement therapy after stroke 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 <u>PEDro published a blog</u> that outlined some key features of running a successful journal club. We are going to use this framework to run three or four journal clubs during 2020. 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 is about constraint induced movement therapy for people with neurological conditions (particularly stroke). We will be discussing the **EXCITE trial**. We encourage physiotherapists with an interest in neurology to participate in a five-step process:

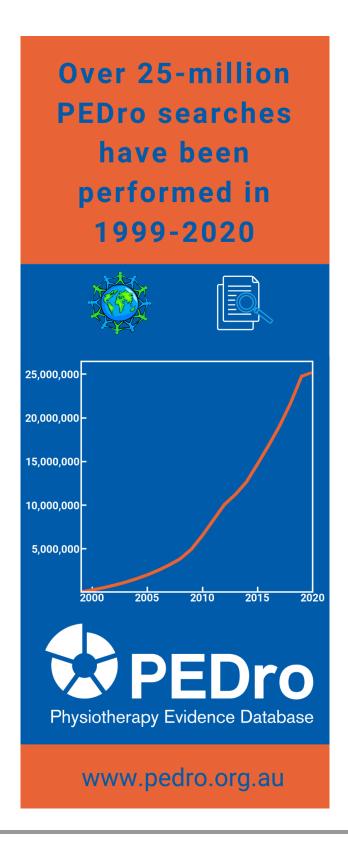
- 1. invite your colleagues to be involved
- 2. read the article
- 3. watch (or listen to) the video summarising the EXCITE trial
- 4. watch (or listen to) the video of the panel discussing the EXCITE trial
- 5. meet with your colleagues to have your own discussion about the EXCITE trial.

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

### F. Over 25-million PEDro searches have been performed in 1999-2020

PEDro celebrates another milestone this month; over 25-million PEDro searches have been performed between inception in October 1999 and February 2020. Physiotherapists, educators and students from around the globe have performed these searches, accessing high-quality clinical research to answer their clinical questions and improve patient care.

We encourage users to access the <u>Advanced Search page</u>. For help with getting the most out of the PEDro Advanced Search, you can watch our '<u>How to perform a PEDro Advanced Search</u>' and '<u>How to optimise PEDro searching</u>' videos.



### G. Videos for PEDro Top 5 Trial in 2014-2019 now available in Spanish

Last year we announced the <u>PEDro Top 5 Trials from 2014-2019</u>. The trials were nominated by PEDro users, and an independent panel of international trialists judged the nominations received. We created <u>short videos</u> to explain each trial.

We are pleased to announce that the videos for the PEDro Top 5 Trials from 2014-2019 are now available in Spanish. PEDro would like to thank María Fernanda Alva Staufert and Elena Lozano Cavero, who translated the videos into Spanish. María translated and recorded the videos during a 10-week internship at the Institute for Musculoskeletal Health in the School of Public Health, The University of Sydney. María is enrolled in a physiotherapy degree at the Universidad Nacional Autónoma de México, Mexico. Elena is from the Universidad Complutense in Madrid, Spain.



Preoperative physiotherapy for the prevention of respiratory complications after upper abdominal surgery: pragmatic, double blinded, multicentre randomised controlled trial

Boden I, Skinner EH, Browning L, Reeve J, Anderson L, Hill C, Robertson IK, Story D, Denehy L

BMJ 2018;360:j5916



Exercises to improve function of the rheumatoid hand (SARAH): a randomised controlled trial

Lamb SE, Williamson EM, Heine PJ,

Adams J, Dosanjh S, Dritsaki M, Glover MJ, Lord J, McConkey C, Nichols V,

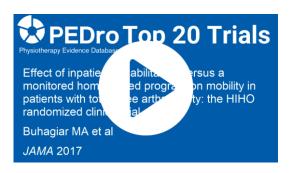
Rahman A, Underwood M, Williams MA, on behalf of the Strengthening and Stretching for Rheumatoid Arthritis of the Hand Trial (SARAH) Trial Team

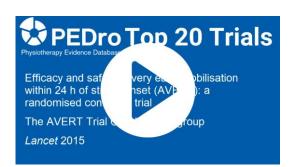
Lancet 2015;385(9966):421-9



Hip arthroscopy versus best conservative care for the treatment of femoroacetabular impingement syndrome (UK FASHION): a multicentre randomised controlled trial Griffin DR, Dickenson EJ, Wall PDH, Achana F, Donovan JL, Griffin J, Hobson R, Hutchinson CE, Jepson M, Parsons NR, Petrou S, Realpe A, Smith J, Foster NE, on behalf of the FASHION Study Group

Lancet 2018;391(10136):2225-35





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, Naylor JM, Harris IA, Xuan W, Kohler F, Wright R, Fortunato R

JAMA 2017;317(10):1037-46

Efficacy and safety of very early mobilisation within 24 h of stroke onset (AVERT): a randomised controlled trial The AVERT Trial Collaboration group Lancet 2015;386(9988):46-55

#### H. How to search DiTA tutorial now available



DiTA (Diagnostic Test Accuracy) is a database indexing studies and reviews that evaluate the accuracy of diagnostic tests used by physiotherapists. We are pleased to announce the release of a video tutorial on how to search DiTA.

You can access the <u>DiTA search page</u> from the home-page. Click the 'SEARCH' link in the header or footer, or on the "SEARCH" wedge in the DiTA icon in the centre of the page. When searching DiTA you can enter search terms using any of 14 different fields or categories. Some of these fields have pull-down lists that you can choose from. These are indicated by the arrow symbol. For example, the body part field lists the different anatomical regions that would be the focus of a diagnostic test. Other fields allow you to type text into search boxes. For example, you can type the name of a clinical test into the 'Name of index test' field.

Using the PICO format to ask your clinical question will help to structure your search. For questions about the accuracy of diagnostic tests:

**P** stands for Population (or Patient or Presentation)

I stands for Issue (or Investigation or Index test)

**C** stands for Comparator (the reference test that will be used to determine the index test's accuracy), and

O stands for Outcome, which means the diagnosis that we would like to confirm (or rule

out) with the index test.

It is important to note that you do not need to enter search terms in EVERY field on the search page or for every element of your PICO question. Usually one or two carefully selected terms will be sufficient.

The 'How to search DiTA' video tutorial illustrates how to ask a PICO question, select search terms, and refine your search until you have a manageable number of search results.

The DiTA 'Search Help' page is another great way to find out more about searching. This can be accessed by clicking 'LEARN' in the header or footer, or on the 'LEARN' wedge in the <u>DiTA icon in the centre of the home-page</u>. There is also a link to 'Search help' on the DiTA search page.

# I. Infographic for systematic review that found exercise during pregnancy improves maternal cardiorespiratory fitness and health

Last month we summarised the <u>Cai et al systematic review</u>. The review concluded that exercise during pregnancy improves maternal cardiorespiratory fitness and health.

Some suggestions for providing exercise programs are in this infographic.



A recent systematic review of 26 randomised controlled trials found that exercise interventions improved cardiorespiratory health and fitness in pregnant women

Low-vigorous intensity, 2-7 days/week for 15-60 minutes/session





Cai C, et al. Prenatal exercise and cardiorespiratory health and fitness: a meta-analysis. *Med Sci Sports Ex* 2020 Jan 17:Epub ahead of print

Physiotherapy Evidence Database

Cai C, et al. Prenatal exercise and cardiorespiratory health and fitness: a metaanalysis. *Med Sci Sports Exerc* 2020 Jan 17:Epub ahead of print

#### Read more on PEDro.

# J. Systematic review found that exercise improves symptoms of depression in people with chronic health conditions

People with non-communicable chronic health conditions such as cardiovascular disease, cancer, respiratory disease and type 2 diabetes have higher rates of symptoms of depression than the general population. Symptoms of depression are also an adverse prognostic factor for these conditions. Aerobic exercise is accepted as an effective treatment option for depression in people without comorbid chronic disease. This systematic review aimed to estimate the effects of aerobic exercise compared to usual care on symptoms of depression in people with chronic diseases.

Sensitive searches of three databases identified (non-)randomised controlled trials that recruited adults with cardiovascular disease, cancer, respiratory disease or type 2 diabetes. Trials had to compare an aerobic exercise intervention (delivered at least twice per week, achieving at least moderate intensity exercise, for a minimum of 4 weeks) to usual care. Trials where usual care involved any type of exercise were excluded. The outcome was depression assessed by clinical assessment or symptoms of depression measured using a validated questionnaire. Two independent reviewers selected trials and extracted the data. Trial quality was evaluated with the Downs and Black checklist and certainty of the evidence with the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) tool. Meta-analyses were reported as standardised mean difference (SMD) and 95% confidence interval (CI). Five subgroup analyses were prespecified and estimated via meta-regression: (1) type of condition; (2) frequency of exercise <=3 vs. >3 sessions/week; (3) duration of sessions <=30 vs. >30 minutes; (4) length of program <12 vs. >=12 weeks.

30 randomised controlled trials and 2 non-randomised trials (4,111 participants) were included in the review, 24 of which reported data suitable for meta-analysis. Interventions were delivered 2 to 5 sessions/week for 20 to 80 minutes/session for 4 to 24 weeks. Eleven studies included people with cardiovascular disease, 10 with cancer, 2 with respiratory disease and 1 with diabetes.

There was low certainty evidence that exercise improved symptoms of depression in people with chronic conditions (SMD 0.5, 95% CI 0.25 to 0.76, 24 trials) compared to usual care. There was moderate certainty evidence that aerobic exercise improved symptoms of depression in cardiovascular disease (SMD 0.67, 95% CI 0.35 to 0.99, 11 trials), and low

certainty in cancer (SMD 0.22, 95% CI 0.07 to 0.37, 10 trials). There was low certainty of no effect in respiratory disease (SMD 0.98, 95% CI -0.01 to 1.96, 2 trials) and diabetes (SMD 0.11, 95% CI -0.43 to 0.65, 1 trial). Meta-regression did not show that session frequency, session duration or program length influenced effect size.

Aerobic exercise has potentially clinically important effects on symptoms of depression in people with chronic non-communicable diseases. Certainty of evidence is strongest in people with cardiovascular disease. The exercise programs investigated targeted the health effects of the chronic conditions and were not specifically designed for symptoms of depression per se. It is also worth noting that this systematic review did not aim to assess the effect of exercise in people with clinical diagnosis of major depressive disorder.

Beland M, et al. Aerobic exercise alleviates depressive symptoms in patients with a major non-communicable chronic disease: a systematic review and meta-analysis. *Brit J Sports Med* 2020;54:272-8

#### Read more on PEDro.

# K. Support for PEDro comes from the Koninklijk Nederlands Genootschap voor Fysiotherapie and Irish Society of Chartered Physiotherapists

We thank <u>Koninklijk Nederlands Genootschap voor Fysiotherapie</u> and <u>Irish Society of Chartered Physiotherapists</u> who have just renewed their partnership with PEDro for another year.

### L. Next PEDro and DiTA updates (May 2020)

The next PEDro and DiTA updates are on Monday 4 May 2020.

## Proudly supported by









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