

A. PEDro update (15 October 2021)

PEDro contains 52,561 records. In the 15 October 2021 update you will find:

- 40,499 reports of randomised controlled trials (39,632 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 11,374 reports of systematic reviews, and
- 688 reports of evidence-based clinical practice guidelines.

PEDro was updated on 11 October 2021. For latest guidelines, reviews and trials in physiotherapy visit *Evidence in your inbox*.

B. DiTA update (11 October 2021)

DiTA contains 2,238 records. In the 11 October 2021 update you will find:

- 2,010 reports of primary studies, and
- 228 reports of systematic reviews.

DiTA was updated on 11 October 2021. For the latest primary studies and systematic reviews evaluating diagnostic tests in physiotherapy visit *Evidence in your inbox*.

C. Systematic review found that behaviour change interventions increase physical activity during admission in hospitalised patients

Admission to hospital for treatment of many health conditions is associated with impaired mobility and a period of bed rest that can lead to reduced physical activity. These low levels of physical activity observed during hospital admission predispose patients to the secondary consequences of inactivity, particularly deconditioning and increased risk of adverse events and mortality. Behaviour change interventions (eg, goal setting, self-monitoring, providing feedback on performance, goal review) are used to increase physical activity. Previous reviews have evaluated the impact of behaviour change interventions on physical activity levels in community or outpatient settings and in people with chronic conditions. This systematic review aimed to estimate the effects of behaviour change interventions compared to usual care on physical activity levels in the inpatient setting. A secondary objective was to explore the association between specific behaviour change techniques and increased physical activity in hospitalised patients.

Guided by a prospectively registered protocol, sensitive searches in 6 databases (including Medline and PEDro) and citation tracking were performed to identify randomised controlled trials evaluating behaviour change interventions applied in inpatient settings. The patients were people of any age who were hospitalised for any physical or mental health condition, including acute hospital care, inpatient rehabilitation, and inpatient mental health care. Behaviour change interventions included those described in the 40-item taxonomy of behaviour change techniques. The comparator was usual care (ie, hospitalised patients who did not receive the behaviour change interventions). The primary outcome was any objective measure of physical activity assessed during the admission (eg, daily steps, activity counts). Two reviewers independently selected trials for inclusion, extracted data, classified the behaviour change techniques used in the intervention, and evaluated trial quality (Cochrane risk of bias 2 tool). Any disagreements were resolved by discussion or arbitration by a third reviewer. Certainty of evidence was evaluated using the Grades of Recommendation, Assessment, Development and Evaluation (GRADE) approach. Metaanalysis was used to pool the trials, with the between-group differences reported as standardised mean differences or weighted mean differences and their 95% confidence intervals (CI). One subgroup analysis was planned for setting: acute hospital care vs. inpatient rehabilitation. Meta-regression was used to explore associations between the behaviour change techniques used in more than three trials and the treatment effects.

20 trials (2,568 participants) were included in the review. The average age of participants was 67 years and 56% were women. The most common diagnosis was stroke (4 trials). 14 trials were conducted in acute hospital care (10 surgical, 3 medical, 1 mixed surgical/medical) and 6 in inpatient rehabilitation. 23 behaviour change techniques were used across the included trials, with most trials using more than one technique. The techniques used by more than three trials were goal setting (10 trials), feedback on

performance (8 trials), reviewing behavioural goals (4 trials) and instructing on how to perform a behaviour (4 trials). The interventions were commonly applied by physiotherapists in at least daily, face-to-face sessions with individual patients.

Different outcome measures were used to quantify physical activity, so the standardised mean difference was calculated. On average, participants receiving behaviour change interventions had higher physical activity than those receiving usual care (standardised mean difference 0.34; 95% CI 0.14 to 0.55; 18 trials; 1,730 participants; moderate certainty). This translates to a mean of 429 more steps/day (95% CI 177 to 695), the outcome measure used in the review when physical activity was measured with more than one method, for behaviour change intervention compared to usual care. [Note: the weighted average baseline standard deviation across all groups from the three included trials reporting physical activity in steps/day

(https://dx.doi.org/10.1177/0269215518755841, https://dx.doi.org/10.1016/j.jphys.2019. 08.006, https://dx.doi.org/10.1177/0269215519901153) and guidance from the Cochrane Handbook v6.1 were used to calculate this estimate].

The subgroup analysis suggests that larger effects were observed in acute hospital care (standardised mean difference 0.46; 95% CI 0.16 to 0.75; 12 trials; 1,039 participants) than in inpatient rehabilitation (standardised mean difference 0.16; 95% CI -0.08 to 0.40; 6 trials; 691 participants). Meta-regression found that the behaviour change technique of goal setting (standardised mean difference 0.29; 95% CI 0.05 to 0.53; 10 trials) was independently associated with increasing physical activity compared to usual care, but feedback (standardised mean difference 0.25; 95% CI -0.02 to 0.53; 8 trials), reviewing of behavioural goals (standardised mean difference 0.24; 95% CI -0.12 to 0.61; 4 trials), and providing instruction on how to perform a behaviour (standardised mean difference 0.24; 95% CI -0.12 to 0.59; 4 trials) were not.

Targeted behaviour change interventions were associated with increases in physical activity in hospitalised patients compared to usual care, with the behaviour change technique of goal setting being particularly important.

Taylor NF, et al. Behaviour change interventions to increase physical activity in hospitalised patients: a systematic review, meta-analysis and meta-regression. *Age Ageing* 2021 Jul 24:Epub ahead of print

Read more on PEDro.

D. Infographic for systematic review that found that rehabilitation could enable recovery from COVID-19

Last month we summarised the <u>systematic review by Goodwin et al</u>. The review concluded that rehabilitation could enable recovery from COVID-19. <u>Watch or listen to an interview with Vicki Goodwin</u> about the review.

Some suggestions for providing rehabilitation are included in this infographic.



A rapid systematic review found that rehabilitation could enable recovery from COVID-19

Effective rehabilitation strategies

- Early mobilisation in intensive care
- Exercise + early mobilisation or as part of a multicomponent intervention in intensive care
- Multicomponent intervention in a sub-acute hospital ward
- Home-based exercise for younger people

Goodwin VA, et al. Rehabilitation to enable recovery from COVID-19: a rapid systematic review. *Physiotherapy* 2021;111:4-22



Goodwin VA, et al. Rehabilitation to enable recovery from COVID-19: a rapid systematic review. *Physiotherapy* 2021;111:4-22

Read more on PEDro.

E. Ninth video of PEDro Advanced Search for the "You Ask #PEDroAnswers" campaign

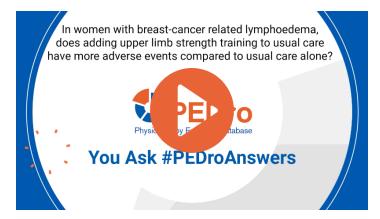
Each month in 2021 we will share short videos illustrating how to use the PEDro Advanced Search to find the best research to answer clinical questions submitted by PEDro users.

The ninth question to be answered is "In women with breast-cancer related lymphoedema, does adding

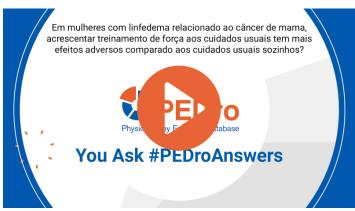
upper limb strength training to usual care have more adverse events compared to usual care alone?"

The Search terms are:

- safe* (Abstract & Title)
- strength training (Therapy)
- oedema (Problem)
- oncology (Subdiscipline).



English



Portuguese

PEDro acknowledges the contribution of Mariana Leite from Universidade Cidade de São Paulo (UNICID), Brazil who translated and recorded the Portuguese version.

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

F. "You Ask #PEDroAnswers" search tip #9 - Screen titles first, then look at abstracts

Throughout 2021 we will be sharing some tips on how to use the PEDro Advanced Search. The ninth tip is "Screen titles first, then look at abstracts".

After you've run a search, it's time to screen the articles listed on the "Search Results" page to find the article that best answers your clinical question.

The "Search Results" page displays the list of articles identified by your search. The results are displayed in a table which lists the title, the research method, and for randomised controlled trials, the total PEDro score (/10) for each article that fulfils your search criteria.

The "Search Results" are organised so that articles that use more rigorous methods appear closer to the top of the table. The articles are sorted by research method, with practice guidelines appearing before systematic reviews and then randomised controlled trials. Cochrane reviews are listed before systematic reviews published in other journals. Clinical trials are sorted by the total PEDro score, from the highest (10/10) to the lowest (0/10) score. Articles are also sorted by year of publication, from most to least recent, within each category.

As you read down the list of articles, from practice guidelines, systematic reviews, and higher-quality trials, pay close attention to the title as your first point of reference. Screening the titles first before looking at the abstracts can help save time by ignoring articles that don't answer your question. This is because the title should generally provide enough information to inform you whether the article is related to your clinical question or not.

Once you identify a title which looks promising, clicking on the title hyperlink will take you to the "Detailed Search Results" page. This page provides more detailed information about the article, including the citation, abstract (when available), links to full text and, for randomised controlled trials, a breakdown of the PEDro score.

Reading the abstract will help to confirm whether the article answers your clinical question, if the methods used were rigorous and if there is clear reporting of the results. Some tips on how to quickly appraise the quality of evidence-based <u>clinical practice guidelines</u>, <u>systematic reviews</u> and <u>randomised controlled</u> <u>trials</u> are available in previous PEDro blogs.

When you decide on the best article to read, you can access a full text copy of the article (sometimes free) using the links under the abstract on the "Detailed Search Results" page.

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

G. Call for questions from physiotherapists working in paediatrics or cerebral palsy for "You Ask #PEDroAnswers" campaign

October 6 marked World Cerebral Palsy Day, a day where people come together (in-person or virtually) to celebrate, support and raise awareness about people living with cerebral palsy. This month we invite physiotherapists to submit their clinical questions related to paediatrics and cerebral palsy to the "You Ask #PEDroAnswers" campaign.

You can submit a question by:

- using a form on the PEDro web-site
- tagging us in a Tweet (<u>@PEDro_database</u>) and using the hashtag #PEDroAnswers
- commenting on a "You Ask #PEDroAnswers" post on <u>Facebook</u> or by sending us your question via Messenger

To keep up to date with the latest evidence, subscribe to the PEDro <u>Evidence in your inbox</u> feeds for paediatrics or cerebral palsy.

H. Support for PEDro comes from the Physiotherapy New Zealand, Canadian Physiotherapy Association, Polish Chamber of Physiotherapists, Association Luxembourgeoise Des Kinésithérapeutes, and Lietuvos Kineziterapeutų Draugija

We thank <u>Physiotherapy New Zealand</u>, <u>Canadian Physiotherapy Association</u>, <u>Polish Chamber of Physiotherapists</u>, <u>Association Luxembourgeoise Des Kinésithérapeutes</u>, and <u>Lietuvos Kineziterapeutu</u> <u>Draugija</u> who have just renewed their partnership with PEDro for another year.

I. Next PEDro and DiTA updates (November 2021)

The next <u>PEDro</u> and <u>DiTA</u> updates are on Monday 1 November 2021. This is a week later than usual because of a public holiday in Australia.



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