PEDro Newsletter 2 May 2022 View this email in your browser

# Physiotherapy Evidence Database

#### A. PEDro update (2 May 2022)

PEDro contains 54,650 records. In the 2 May 2022 update you will find:

- 41,931 reports of randomised controlled trials (41,238 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 12,010 reports of systematic reviews, and
- 709 reports of evidence-based clinical practice guidelines.

For latest guidelines, reviews and trials in physiotherapy visit *Evidence in your inbox*.

#### B. DiTA update (2 May 2022)

DITA contains 54,650 records. In the 2 May 2022 update you will find:

- 41,931 reports of primary studies, and
- 12,010 reports of systematic reviews.

For the latest primary studies and systematic reviews evaluating diagnostic tests in physiotherapy visit *Evidence in your inbox*.

#### C. The #PEDroTacklesBarriers to evidence-based physiotherapy campaign

#### has been launched!



Welcome to the '<u>#PEDroTacklesBarriers</u> to evidence-based physiotherapy' campaign. The campaign will help you to tackle the four biggest barriers to evidence-based physiotherapy.

This campaign was inspired by a <u>recent systematic review by Matteo Paci and</u> <u>colleagues</u> that investigated the barriers to evidence-based physiotherapy. The review included 29 studies reporting the opinions of nearly 10,000 physiotherapists. Lack of time was the most frequently encountered barrier and was reported by 53% of physiotherapists. This was followed by language (36%), lack of access (34%), and lack of statistical skills (31%).

From May 2022 to April 2023, the campaign will delve into each of the four biggest barriers to evidence-based physiotherapy. You will hear from physiotherapists who have encountered these barriers and developed strategies to overcome them. You will also learn more about the methods used to conduct, analyse, report and interpret randomised controlled trials, to help you tackle the barrier of lack of statistical skills.

Each month we will release tips on how to tackle a particular barrier to evidence-based physiotherapy. We encourage physiotherapists from around the globe to work collaboratively to implement the most relevant strategies into your practice.

The campaign will conclude with some real-world examples of how physiotherapists have overcome these barriers and used evidence to make positive changes to their practice and improve the outcomes of their patients.

#PEDroTacklesBarriers is supported by <u>World Physiotherapy</u>, <u>Australian Physiotherapy</u> <u>Association</u>, <u>Società Italiana Fisioterapia</u>, <u>Société Française de Physiothérapie</u>, and <u>Koninklijk Nederlands Genootschap voor Fysiotherapie</u>.

Please join us in the 'PEDroTacklesBarriers to evidence-based physiotherapy' campaign to help tackle the biggest barriers to evidence-based physiotherapy. You can follow the campaign on the <u>PEDro webpage</u>, <u>blog</u>, Twitter (<u>@PEDro\_database</u>) or Facebook (<u>@PhysiotherapyEvidenceDatabase.PEDro</u>).

### D. Infographic for systematic review found that neuromuscular electrical stimulation improves activities of daily living after stroke

Last month we summarised the systematic review by <u>Kristensen MGH et al</u>. The review concluded that neuromuscular electrical stimulation improved activities of daily living but had little impact on functional motor performance after stroke compared to a sham or no electrical stimulation comparators.

Some suggestions for using neuromuscular electrical stimulation with adults following stroke are included in this infographic.



Kristensen MGH et al. Neuromuscular electrical stimulation improves activities of daily living post stroke: a systematic review and meta-analysis. *Arch Rehabil Res Clin Transl* 2022;4:100167

#### Read more on PEDro.

## E. Systematic review found that surgical stabilisation for a first-time anterior shoulder dislocation reduces the risk of recurrent instability and need for a future surgery compared to sling immobilisation

Anterior shoulder dislocations are among the most common shoulder injuries in adolescent athletes and often occur after acute trauma. Despite multiple studies comparing rates of recurrent instability after surgical stabilisation and non-operative sling immobilisation for patients experiencing a first-time anterior shoulder dislocation, there remains uncertainty about the best treatment approach.

This systematic review aimed to estimate the effects of surgical stabilisation for people with a first-time anterior shoulder dislocation on recurrent instability, need for a future stabilisation procedure, range of motion, and function compared to sling immobilisation.

Searches were performed in seven databases (including PubMed, Embase, and Cochrane Library) to identify randomised controlled trials investigating the effects of surgical stabilisation versus sling immobilisation for the treatment of first-time anterior shoulder dislocation on rates of recurrent instability.

The outcomes were recurrent instability, subsequent stabilisation surgery, range of motion, function as assessed by the Western Ontario Shoulder Instability Index, and complications. Only outcomes reported by at least three trials were included. Two independent reviewers selected trials for inclusion. Disagreements were resolved by discussion or by arbitration from a third reviewer. Data were extracted by one reviewer and checked by a second. Trial quality was evaluated using version 1.0 of the Cochrane risk of bias tool. Meta-analysis was used to pool trials and calculate the between-group risk ratio, and the associated 95% confidence interval (CI), for recurrent instability and subsequent stabilisation surgery.

Five trials (259 participants) were included in the review. The average age of participants and percentage of males was 24 years and 87% in the operative group, and 23 years and 89% in the non-operative group. Four trials used similar arthroscopic Bankart procedures, and one used an open Bankart procedure. Participants in all trials underwent surgery between 10 and 28 days after anterior shoulder dislocation and were placed in an internally rotated sling immobiliser for 1-4 weeks post-operatively. The non-operative approach in 4 trials involved placing participants in an internal rotation sling for 1-4 weeks. In 1 trial, participants were placed in an external rotation and abduction immobiliser for 3 weeks. Physiotherapy protocols were identical between the operative and non-operative groups across trials and involved minimal active or passive movement through the immobilisation phase (about 3 weeks), active external rotation and abduction until 6 weeks, unrestricted range of motion after 6-12 weeks, and resistance exercises thereafter. All trials were at high risk of bias due to being unable to blind participants (performance bias) and therapists and/or outcome assessors (detection bias).

Surgical stabilisation reduced the risk of recurrent instability by 83% (95% CI 67% to 92%) and the risk of subsequent stabilisation surgery by 83% (95% CI 59% to 93%) compared to sling immobilisation. Findings were the same when only including trials in which participants in the non-operative group were immobilised in internal rotation. All 3 trials that assessed range of motion found no difference between surgical stabilisation and sling immobilisation. Of the 3 trials that assessed Western Ontario Shoulder Instability Index scores, 1 found higher scores in the operative group and 2 found no difference. Two complications were reported in the operative group and none in the non-operative group.

Surgical stabilisation for a first-time anterior shoulder dislocation reduces the risk of recurrent instability and need for a future stabilisation procedure compared to non-operative management involving sling immobilisation. It is uncertain whether surgical stabilisation is superior to non-operative management for improving shoulder function and range of motion.

Belk JW, et al. Shoulder stabilization versus immobilization for first-time anterior shoulder dislocation: a systematic review and meta-analysis of level 1 randomized controlled trials. *Am J Sports Med* 2022 Feb 11:Epub ahead of print.

Read more on PEDro.

F. Support for PEDro comes from the Australian Physiotherapy Association, Irish Society of Chartered Physiotherapists, Koninklijk Nederlands Genootschap voor Fysiotherapie, Macau Physical Therapists Association, Lietuvos Kineziterapeutų Draugija, Latvijas Fizioterapeitu Asociācija, Axxon Physical Therapy in Belgium, Physioswiss, Physiotherapy New Zealand.

We thank <u>Australian Physiotherapy Association</u>, <u>Irish Society of Chartered</u> Physiotherapists, <u>Koninklijk Nederlands Genootschap voor Fysiotherapie</u>, <u>Macau Physical</u> Therapists Association, <u>Lietuvos Kineziterapeutų Draugija</u>, <u>Latvijas Fizioterapeitu</u> <u>Asociācija</u>, <u>Axxon Physical Therapy in Belgium</u>, <u>Physioswiss</u> and <u>Physiotherapy New</u> <u>Zealand</u> who have just renewed their partnership with PEDro for another year.

#### G. Next PEDro and DiTA updates (June 2022)

The next <u>PEDro</u> and <u>DiTA</u> updates are on Monday 6 June 2022.

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