Træning til knæ artrose – kan træningens interventionerne repliceres?

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Baggrund

“Patients with hip and knee OA should be encouraged to undertake, and continue to undertake, regular aerobic, muscle strengthening and range of motion exercises”

OARSI 2008
“There is good evidence to support GPs recommending land based exercise for people with OA of the hip and knee”

RACGP 2009 (Australien)
“The Ottawa Panel concluded that aerobic walking combined with stretching and strengthening exercises, education, and/or behaviour programs are recommended to improve pain relief, functional status, and QOL of adult individuals with OA.”

Ottawa panel 2012 (Canada)
“…the Guideline Development Committee recommends the use of exercise therapy to alleviate pain and improve physical performance.”

KNGF 2010 (Holland)
“(Supervised) Exercise therapy aimed at reducing pain and improving physical functioning should be applied during the physiotherapy treatment of hkoa patients”

KNGF 2011 (Holland)
“We strongly recommend that patients with knee OA should do the following: Participate in cardiovascular (aerobic) and/or resistance land-based exercise Participate in aquatic exercise”

ACR 2012 (USA)
“All people with knee/hip OA should receive an individualised management plan (a package of care) that includes the core non-pharmacological approaches, specifically: …addressing a regular individualised exercise regimen…”

EULAR 2013 (europa)
“We recommend that patients with symptomatic osteoarthritis of the knee participate in ..., strengthening, low-impact aerobic exercises, and neuromuscular education;...”.

AAOS 2013 (USA)
“Appropriate treatment modalities for all individuals with knee OA included … exercise (land-based and water-based), …, strength training, ….”

OARSI 2014 (global)
“Advise people with osteoarthritis to exercise as a core treatment, irrespective of age, comorbidity, pain severity or disability. Exercise should include:

• local muscle strengthening and

• general aerobic fitness.”

NICE 2014 (UK)
Cochrane review, 2015
Exercise for osteoarthritis of the knee
M. Fransen

Konklusion:

Det er ikke nødvendigt at lave flere træningsstudier på effekten af træning til knæ artrose, da vi ved det virker
Men

Det sikre ikke nødvendigvis at det bliver implementeret i den kliniske hverdag

Vi har brug for at vide basis ting som:
Dosis, intensitet, antal gange om ugen o.l.
Rapportering af trænings interventionerne er derfor vigtige

TIDieR
• Template for Intervention Description and Replication

CERT
• Consensus on Exercise Reporting Tempalte
Formål

Undersøge hvor godt trænings interventionerne der ligger til grund for de kliniske retningslinjer omkring træning til knæ artrose er beskrevet og om rapporterings standarden er relateret til effekten på selvrapporteret smerte og funktion
Søgning

Bispebjerg og Frederiksberg Hospital

Excluded title/abstract screening
- 9 not clinical guideline
- 7 not relevant for exercise
- 5 another language (Turkish, Dutch, Finnish, Croatian)
- 1 not knee osteoarthritis

Excluded full text
- 5 not clinical guideline
- 4 summary of a guideline
- 2 not relevant for exercise
- 1 no reference list
- 1 summary of guidelines

Guidelines included
N = 10

Reviews found in guidelines
N = 14

Articles found in reviews (after de-duplication)
N = 73

Reviews found in reviews
N = 14

Articles found in reviews (after de-duplication)
N = 37

Articles referred (after de-duplication) and included in SR
N = 100 (133 exercise interventions)

Articles excluded from the meta-analysis
- 1 article reported the same in two trials
- 3 studies had two exercise interventions but reported combined results

Articles included in MA
N = 99 trials (130 exercise interventions)
**Data ekstraktion**

Baseret på TIDieR og CERT trak vi følgende data ud:

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Beskrivelse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Navn på interventionen</td>
</tr>
<tr>
<td>2</td>
<td>Hvorfor</td>
</tr>
<tr>
<td>3</td>
<td>Materiale brugt</td>
</tr>
<tr>
<td>4</td>
<td>Hvordan var proceduren</td>
</tr>
<tr>
<td>5</td>
<td>Hvem instruerede</td>
</tr>
<tr>
<td>6</td>
<td>Hvordan</td>
</tr>
<tr>
<td></td>
<td>(individuelt/gruppe, supervisoret, adherence, progression)</td>
</tr>
<tr>
<td>7</td>
<td>Hvor</td>
</tr>
<tr>
<td>8</td>
<td>Dosis (intensitet, gentagelser, total tid)</td>
</tr>
<tr>
<td>9</td>
<td>Individuel tilpasning</td>
</tr>
<tr>
<td>10</td>
<td>Modifikationer</td>
</tr>
<tr>
<td>11</td>
<td>Fulgte interventionen planen</td>
</tr>
<tr>
<td>12</td>
<td>Blev træningen gennemført</td>
</tr>
</tbody>
</table>
Data ekstraktion

Nummer to excel ark:

Generel info:

antal deltagere, outcomes (selvrapporteret smerte og funktion), køn, alder, publicering år
Resultater

• 10 guidelines
• 100 artikler
• 133 interventioner

Meta-analyse

• 99 artikler
• 130 interventioner
Proportion of interventions (n=133) with complete reporting of each of the TIDieR/CERT items

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brief Name</td>
<td>98%</td>
</tr>
<tr>
<td>2. Rationale</td>
<td>99%</td>
</tr>
<tr>
<td>3. What: Materials</td>
<td>8%</td>
</tr>
<tr>
<td>4. What: General procedures</td>
<td>80%</td>
</tr>
<tr>
<td>5. Who: Provider</td>
<td>26%</td>
</tr>
<tr>
<td>6. How: Mode of delivery</td>
<td>3%</td>
</tr>
<tr>
<td>7. Where: Location/setting</td>
<td>25%</td>
</tr>
<tr>
<td>8. When and how much (dose)</td>
<td>16%</td>
</tr>
<tr>
<td>9. Tailoring/Progression</td>
<td>35%</td>
</tr>
<tr>
<td>10. Modifications</td>
<td>12%</td>
</tr>
<tr>
<td>11. How well delivered: Planned strategies</td>
<td>20%</td>
</tr>
<tr>
<td>12. How well delivered: Actual</td>
<td>40%</td>
</tr>
</tbody>
</table>
A Proportion of interventions (n=133) with complete reporting of TIDieR/CERT item 6 sub-components (How: Mode of delivery)

- 6a: Individually or group 48%
- 6b: Supervised or unsupervised 75%
- 6c: Adherence measure/reported 47%
- 6d: Rules for progressing 44%
- 6e: Each exercise described 26%
- 6f: Any home program described 53%
- Item 6a - 6f combined 3%

B Proportion of interventions (n=133) with complete reporting of TIDieR/CERT item 8 sub-components (When and how much (dose))

- 8a. Intensity 30%
- 8b. Frequency 92%
- 8c. Session time 54%
- 8d. Overall duration 100%
- Item 8a - 8d combined 16%
1. Brief Name
2. Why
3. What: Materials
4. What: Procedures
5. Provider
6. How
   6a. Individually or group
   6b. Supervised or unsupervised
   6c. Adherence measure/reported
   6d. Rules for progressing
   6e. Each exercise described
   6f. Any home program described
7. Where
8. When and how much
   8a. Intensity
   8b. Frequency
   8c. Session time
   8d. Overall duration
9. Tailoring
10. Modifications
11. How well: Planned
12. How well: Actual

Pain

Disability

Favours compl.  Favours incompl.
Konklusion

• Relevant information såsom dosis og intensitet manglede i ca. 80% af interventioner

• Guidelines er altså baseret på dårligt beskrevet interventioner hvilket minsker brugbarheden af guidelines

• Fremtidig interventioner bør prioriteres at holde sig til en minimum standard for rapportering (TIDieR el. CERT) hvis forskningen skal kunne bruges af andre
Bispebjerg og Frederiksberg Hospitaler
Parker Institutte og fysio- og ergoterapi afdelingen

Tak for jeres opmærksomhed!

Spørgsmål?

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