ONLINE LEARNING PREFERENCES OF PHYSIOTHERAPISTS
GUIDING THE DEVELOPMENT OF MULTIMEDIA KNOWLEDGE TRANSLATION INTERVENTIONS

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Why do we have academic journals?

“Impart their knowledge to one another and contribute what they can to the Grand design of improving natural knowledge and perfecting all Philosophical Arts and Sciences.”

– Henry Oldenburg, March 6, 1665 (in the first ever academic journal)
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17 years = 14% implemented

Is this effective???
The ‘Best Practice Guide to Conservative Management of Patellofemoral Pain’: incorporating level 1 evidence with expert clinical reasoning

Christian John Barton, Simon Lack, Steph Hemmings, Saad Tufail, Dyan Morissey

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th>ACTIVE REHABILITATION</th>
<th>PASSIVE INTERVENTIONS</th>
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<tbody>
<tr>
<td>1. Ensure patients understand potential contributing factors to their condition and treatment options</td>
<td>Principles 1. Give preference to CKC exercises to replicate function 2. Consider OKC exercises in early stages of rehabilitation to target specific strength deficits and movements 3. Provide adequate supervision in the early stages to ensure correct exercise techniques, but progress to independence as soon as possible 4. When independent, limit the number of exercises to 3 or 4 to aid compliance 5. Use biofeedback such as mirrors and videos to improve exercise quality</td>
<td>Pain reduction 1. Provide tailored patellar taping to reduce pain in the immediate term 2. Consider PFJ braces where taping is inappropriate (e.g. skin irritation) 3. Consider foot orthoses</td>
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<td>2. Advise about appropriate activity modification</td>
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<td>Optimising biomechanics 1. Consider foot orthoses based on assessment findings (i.e. presence of excessive dynamic pronation) 2. Consider massage and acupuncture/dry needling to improve the flexibility of tight muscle and fasciae structures, particularly laterally 3. Consider PFJ mobilisation but only in the presence of hypo-mobility 4. Consider mobilisation of the ankle and first ray in the presence of sagittal plane joint restriction</td>
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<td>3. Manage patients expectations regarding rehabilitation</td>
<td>Specifications 1. Incorporate quadriceps and gluteal strengthening 2. Target distal and core muscles where deficits exist 3. Consider stretching, particularly of the calf and hamstrings, based on assessment findings 4. Incorporate movement pattern retraining, particularly of the hip</td>
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<td>4. Encourage and emphasise the importance of participation in active rehabilitation</td>
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Foot orthoses knowledge and confidence (10 years on)
Knee exercise therapy

Knowledge

Confidence

Knowledge:
- 90%
- 7%
- 3%

Confidence:
- 76%
- 18%
- 6%
Hip exercise therapy

Knowledge

- 83%
- 15%
- 2%

Confidence

- 65%
- 23%
- 12%
Passive treatments

Ultrasound Knowledge
- 36%
- 26%
- 38%

Mobilisation Knowledge
- 69%
- 6%
- 25%
Knee arthroscopy
Meet Rhys

31 Years of age

PFP since adolescence

8 surgeries to right knee

2 surgeries to left knee
Meet Rhys

31 Years of age

PFP since adolescence

8 surgeries to right knee

2 surgeries to left knee

Rhys needs the right guidance with an EXERCISE PROGRAM
Time to reflect?

10 years
16 studies
10 reviews
1 Best Practice Guide
1 consensus statement

It is time to INNOVATE!
What next?
What next?

New formats – more digestible information
What next?

New formats – more digestible information

Freely available
What next?

New formats – more digestible information

Freely available

Engage patients and clinicians
MOOC – Physical Activity

• Approximately 2000 physios around the world
• 6 week course

Objectives
• Week one - Basic principles in the relation between exercise and health
• Week two - Global issues surrounding physical activity
• Week three - Physical activity in chronic illness
• Week four - Physical activity in specific conditions
• Week five - Integrating physical activity into clinical practice
• Week six - Being a physical activity leader
What resources do physios prefer?

- Podcasts
- Face to face workshops
- Images
- Written summaries
- Original research articles
- Video
- Infographics

1st Preference
2nd Preference
3rd Preference
4th Preference
5th Preference
6th Preference
7th Preference

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- Podcasts
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“How useful do you find the following resources to meet your learning needs?”
“How useful do you find the following resources to meet your learning needs?”

- Multimedia: 73
- Images and graphs: 72
- Videos: 51
- Original articles: 49
- Written summaries: 46
- Book Chapters: 64
- Quizzes: 62
- Literature search activities: 30
- Discussion forums: 42

Passive Interventions

Active Interventions

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“How useful do you find the following resources to meet your learning needs?”

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**Passive Interventions**

**Active Interventions**
Significance to Allied Health

• Diverse learning preferences

• Multifaceted multimedia interventions needed to optimise knowledge translation

• Prioritise visual resources (infographics and video)

• Active learning strategies including quizzes should be provided to optimise user engagement.
How can **WE ALL** improve knowledge translation?

**Research completion**
- Develop question and design
- Complete research (study or review)
- Analyse results
- Address concerns
- Finalise paper and sign over copyright

**Journal publication**
- Write manuscript
- Submit to journal
- Peer review
- Address concerns
- Finalise paper and sign over copyright

**Multimedia creation**
- Blog
- Infographic
- Video
- Podcast

**Social media dissemination**
- Twitter
- Facebook
- Blog mailing list
- Other relevant social media platforms
How can **WE ALL** improve knowledge translation?

**Research completion**
- Develop question and design
- Complete or revise
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- Podcast

**Media dissemination**
- Twitter
- Facebook
- Blog mailing list
- Other relevant social media platforms
- Mainstream

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How can **WE ALL** improve knowledge translation?

But ...........

**KNOWLEDGE TRANSLATION ≠ IMPLEMENTATION**
How can **WE ALL** improve knowledge translation?

**Research completion**
- Develop question and design
- Complete or review
- Analyse
- Address concerns
- Finalise paper and sign over copyright

**Multimedia creation**
- Blog
- Infographic
- Video
- Podcast

**Media dissemination**
- Twitter
- Facebook
- Blogs
- Other relevant social media platforms
- ACADEMIC JOURNALS?

But ...........

**KNOWLEDGE TRANSLATION ≠ IMPLEMENTATION**