

Physiotherapy interventions evidence table – Patient education

The following table provides a summary of level I or II evidence (according to the NHMRC evidence hierarchy) for physiotherapy-relevant interventions in RA published between January 2012 and June 2015. Interpreting the evidence can be complex. RAP-eL users should consider the following:

- Many studies include patients with mixed pathologies (e.g. OA and RA) so it is difficult to separate the effects of some educational interventions for people the RA as a specific group.
- There are no current studies investigating the effects of patient education on early versus late rheumatoid arthritis.
- Further research is needed into the optimal content, format (individual vs. group), learning styles utilised (e.g. problem based learning), mode of delivery (face to face, internet, phone), duration and frequency of education programmes.
- There is conflicting evidence regarding the longer-term benefits of patient education. Future study designs should also aim to address this question.
- It is important to note that the interventions studied are done so in isolation, so the evidence refers to the effect of the single intervention, and not the effect of a multimodal intervention.

Physiotherapy-related intervention(s)	Sources of evidence (see key below)	Results	Making sense of the evidence								
<p>Patient education</p>	<table border="1"> <tr> <td>RCT</td> <td>SR</td> <td>MA</td> <td>CSR</td> </tr> <tr> <td></td> <td></td> <td></td> <td>✓</td> </tr> </table> <p>Riemsma et al (2003) Patient Education for adults with RA [link]</p>	RCT	SR	MA	CSR				✓	<ul style="list-style-type: none"> • Review of 31 studies • Significant improvements in: disability, joint counts, psychological status and depression (not significant for anxiety) • Trend towards improvements in pain. • No studies found long-term improvements in these outcomes. 	<ul style="list-style-type: none"> - Patient education has good short-term effects on a variety of constructs (disability, psychological status and joint counts). - There is no evidence for efficacy in outcomes measured long term. - Patient education is an important and effective component of an overall management approach for someone with RA and should form an essential component of physiotherapy care.
RCT	SR	MA	CSR								
			✓								

<p>Self-care promoting problem-based learning for rheumatic disease</p>	<table border="1"> <tr> <th>RCT</th> <th>SR</th> <th>MA</th> <th>CSR</th> </tr> <tr> <td>✓</td> <td></td> <td></td> <td></td> </tr> </table>	RCT	SR	MA	CSR	✓				<p>Small group (7-8 patients) problem-based learning about self-care can improve:</p> <ul style="list-style-type: none"> • Empowerment • Sleep • Fatigue • Implementing lifestyle changes <p>These changes are seen at 6 months post completion of a 1-year programme (compared to usual care at a rheumatology department).</p>	<p>- Problem-based learning facilitates empowerment, lifestyle changes, sleep and fatigue in patients with a variety of rheumatologic diseases.</p> <p>- Small group education could be conducted as part of an overall physiotherapy management plan.</p>
RCT	SR	MA	CSR								
✓											
<p>Education and self management (when combined with upper extremity exercise training)</p>	<table border="1"> <tr> <th>RCT</th> <th>SR</th> <th>MA</th> <th>CSR</th> </tr> <tr> <td>✓</td> <td></td> <td></td> <td></td> </tr> </table>	RCT	SR	MA	CSR	✓				<ul style="list-style-type: none"> • Education, self-management and upper extremity exercise was compared to usual care (12 week functional home exercise programme (HEP)) • Significant improvements were seen in the education/upper limb exercise group in pain and self-efficacy, which were maintained at 36 weeks. 	<p>- Including education (and upper limb exercise) to an exercise programme improves pain and self-efficacy in the short and at least medium term.</p> <p>- Refer to the study [link here] for further detail about the content and delivery of self-management education and specific exercise examples.</p>
RCT	SR	MA	CSR								
✓											
<p>Facilitating health behaviour change (i.e. encouraging positive lifestyle changes such as</p>	<table border="1"> <tr> <th>RCT</th> <th>SR</th> <th>MA</th> <th>CSR</th> </tr> <tr> <td></td> <td>✓</td> <td></td> <td></td> </tr> </table>	RCT	SR	MA	CSR		✓			<ul style="list-style-type: none"> • Review was limited to just 3 studies due to poor methodological quality and other studies not meeting inclusion criteria. 	<p>- More research is needed to provide certainty that individualised health education is more beneficial than group education.</p>
RCT	SR	MA	CSR								
	✓										

increased physical activity)					<ul style="list-style-type: none"> • There are indications that individualised (rather than group) interventions could be effective to facilitate health behaviour change • There is a lack of high-quality research in this area. 	- Individualised health education regarding physical activity should be considered on a case-by-case basis if group-based care is not available or if previous group education was ineffective.								
Group and individual education for people with polyarthritis	<table border="1"> <tr><td>RCT</td><td>SR</td><td>MA</td><td>CSR</td></tr> <tr><td>✓</td><td></td><td></td><td></td></tr> </table>	RCT	SR	MA	CSR	✓							<p>Three 3 hour group education sessions followed by a 45 minute individualised education session demonstrated significant improvements in:</p> <ul style="list-style-type: none"> • Self-efficacy • Global well-being <p>- It should be noted that this study included patients with various polyarthritides.</p>	<p>Education for patients with polyarthritis helps improve self-efficacy and general wellbeing. Education for this group of patients should form an essential component of physiotherapy care.</p> <p>Further detail can be downloaded on the content of the education sessions via this link.</p>
RCT	SR	MA	CSR											
✓														
Motivational interviewing	<table border="1"> <tr><td>RCT</td><td>SR</td><td>MA</td><td>CSR</td></tr> <tr><td></td><td>✓</td><td></td><td></td></tr> </table>	RCT	SR	MA	CSR		✓						<ul style="list-style-type: none"> • No RA specific studies were available • No specific conclusions could be made regarding the efficacy of motivational interviewing in musculoskeletal health (either in general or specifically for patients with RA). 	- Although motivational interviewing is thought to facilitate behaviour change and improve outcomes, further research is required to warrant the use of motivational interviewing as standard best practice in RA assessment/treatment.
RCT	SR	MA	CSR											
	✓													

Key To Evidence Sources:

Randomised Controlled Trial (RCT)

Systematic Review (SR)

Meta-Analysis (MA)

Cochrane Systematic Review (CSR)

List of Table Abbreviations:

ADL's – Activities of Daily Living

DAS28 – Disease activity score calculator for Rheumatoid arthritis [[click here for link to PDF](#)]

DASH – “Disabilities of the Arm Shoulder and Hand” outcome measure

HEP – Home Exercise Programme

HRQ – Health Risk Questionnaire

JP – Joint Protection

LBP – Lower Back Pain

OA – Osteoarthritis

OT – Occupational Therapy

QOL – Quality Of Life

RA – Rheumatoid Arthritis

RCT – Randomised Controlled Trial

TENS – Transcutaneous Electrical Nerve Stimulation

US - Ultrasound

1st MTPJ – 1st Metatarsophalangeal Joint