

## iCAHE JC Critical Appraisal Summary

### Journal Club Details

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<b>Date of submission</b>	Jan 2011
<b>Journal Club location</b>	ACH
<b>JC Facilitator</b>	Megan Geddes
<b>JC Discipline</b>	Multi-D

### Clinical Scenario

Community Occupational Therapists (OTs) see many clients who have Osteoarthritis (OA) affecting hand function, due to pain and limited movement. We are currently not providing evidence based treatment for OA.

### Review Question/PICO/PACO

- P** Older people (60+) living in the community who have OA affecting hand function
- I** Alternating Hot & Cold therapy
- C** Paraffin Wax therapy
- O** Reduced pain and increased range of movement in hands

### Article/Paper

Valdes K & Marik T (2010) A Systematic Review of Conservative Interventions for Osteoarthritis of the Hand, *Journal of Hand Therapy*, 23:334–51.

*Please note: due to copyright regulations CAHE is unable to supply a copy of the critically appraised paper/article. If you are an employee of the South Australian government you can obtain a copy of articles from the [DOHSA librarian](#).*

<b>Article Methodology:</b>	Systematic Review
<b>Returned JC on:</b>	2010
<b>By CAHE staff member:</b>	Olivia Thorpe



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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p><b>Did the review ask a clearly-focused question?</b>                      The study has asked a clearly focused question.                      The review examined the quality of the evidence regarding hand therapy interventions for hand OA.</p>
2	✓			<p><b>Did the review include the right type of study?</b>                      The authors have included articles if they addressed conservative hand therapy interventions as related to hand OA. The search was not restricted to any type of study in order to capture all relevant information.</p> <p><b>Is it worth continuing?</b> YES</p>
3	✓			<p><b>Did the reviewers try to identify all relevant studies?</b>                      The bibliographic search has included a wide range of databases (Medline, Cumulative Index to Nursing and Allied Health Literature, EMB Cochrane Database of Systematic Reviews, EMB Reviews-ACP Journal Club, EMB DARE, ScienceDirect, PubMed, OTseeker, PEDro) along with the authors performing an extended reference search to identify other relevant articles.</p>
4	✓			<p><b>Did the reviewers assess the quality of the included studies?</b>                      Each of the included study was appraised by two primary investigators using the Structured Effectiveness for Quality Evaluation of Study (SEQES) (MacDermid, 2004) and the level of evidence (LOE) (Sackett et al. 2000). Each author was blinded to the other author's scores until scores were compared and consensus was reached. If the authors found disagreement between scores, a written justification of the score was reviewed, and the authors subsequently came to an agreement on the score.</p>
5				<p><b>If the results of the studies have been combined, was it reasonable to do so?</b>                      The results were not pooled and a meta-analysis was not performed.</p>

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6			<p><b>How are the results presented and what is the main result?</b></p> <p>Tables and narrative summaries were used to present the results.</p> <p><i>Bottom line result</i></p> <p>Current evidence on hand OA supports the use of orthotics, hand exercises, application of heat, and joint protection education combined with provision of adaptive equipment to improve grip strength and function.</p>
7			<p><b>How precise are these results?</b></p> <p>Precision of results cannot be determined based on how the results were presented in this systematic review.</p>
8			<p><b>Can the results be applied to the local population?</b></p> <ul style="list-style-type: none"> <li>- Yes, the results are helpful as they provide a guide for us in our practice (i.e. we now have a greater awareness of what interventions are beneficial for hand OA)</li> <li>- Since a range of interventions were discussed in the review, it is likely that at least some of the interventions can be implemented into our work, however no exact techniques were outlined so we would need to find the reviewed articles to determine how to replicate some of the techniques.</li> <li>- Some questions raised were; Are the interventions just as beneficial for people over 60 years (i.e. our client population)? Are the effectiveness of the interventions impacted by multiple conditions (i.e. our client population often have multiple conditions, not just hand OA)? How long are the interventions effective? I.e. can the interventions be used as part of chronic condition self management or do they require regular ‘treatments’.</li> <li>- Overall, we felt better prepared in providing interventions for people with hand OA and are now more aware of what further information needs to be gathered to help us develop guidelines around hand OA in our practice.</li> </ul> <p style="text-align: right;">(answer provided by the Journal Club)</p>

9	✓		<p><b>Were all important outcomes considered?</b></p> <p>The review considered a wide range of outcomes, and did not limit it to a particular outcome measure. The following outcomes were included: pain, swelling, stiffness, presence of nodules/crepitus, pinch/grip strength, range of movement, hand function/ADL, dexterity and satisfaction with treatment.</p>
10			<p><b>Should policy or practice change as a result of the evidence contained in this review?</b></p> <p>The authors comment that it is difficult to make strong conclusions supporting the efficacy of the interventions as there is a lack of current evidence which weakens the strength of the conclusions that can be drawn for the use of the interventions. However, there is support for many interventions that are currently used in clinical practice. The results of this review are not prescriptive but can provide guidance to clinicians when making decisions about interventions for patients with OA.</p>

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