

## CAHE JC Critically Appraised Article Summary

## Journal Club Details

Date of submission	May 2009
Journal Club location	Flinders Medical Centre
JC Discipline/s	Occupational Therapy
JC Facilitator	Leah Machera

## Clinical Scenario

What intervention for improving UE function among ataxic stroke clients has evidence for effectiveness?

## Review Question/PICO/PACO

- P** Clients with ataxia following stroke
- I** Any intervention
- C** N/A
- O** Improved upper extremity function

## Article/Paper

Richards L, Senesac C, McGuirk T, et al. Response to Intensive Upper Extremity by Individuals with Ataxia from Stroke. *Top Stroke Rehabil* 2008; 15(3): 262-271.

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<b>Article Methodology:</b>	Multiple case design
<b>Returned JC on:</b>	15 May 2009
<b>By CAHE staff member:</b>	Lucylynn Lizarondo

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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>Was the purpose stated clearly?</p> <p>The study examined whether or not an intense motor practice leads to improved upper extremity motor function of individuals with chronic ataxia following stroke.</p>
2	✓			<p>Was relevant background literature reviewed?</p> <p>The authors have reviewed the literature relating to the effects of intensive motor practice (such as that provided in the constraint-induced movement therapy) in UE motor skill after stroke. There are no studies yet, however, on whether or not this intervention works similarly in patients with ataxia following stroke.</p>
3				<p>Describe the study design</p> <p>Multiple case design (method similar to single case design) – Little is known about this topic and therefore this research design may be considered appropriate for the objective of the study.</p> <p>The most often-cited limitation of this study design is the small sample size which limits the generalisability or applicability of the research results to other subjects.</p>
4	✓		✓	<p>Was the sample described in detail?</p> <p>Specific details about the condition of each stroke participant were explicitly reported.</p> <p>Was sample size justified?</p> <p>The authors did not report any information as to how the participants were recruited and why they chose to have 3 participants.</p> <p>All participants provided written informed consent prior to the conduct of the research.</p>
5		✓		<p>Were the outcome measures reliable? Were the outcome measures valid?</p> <p>The authors did not report if the outcome measures used have good (or at least acceptable) psychometric properties (reliability, validity, sensitivity to detect change).</p>
6			✓	<p>Intervention was described in detail?</p> <p>The intervention was not described in much detail as to allow replication in future studies.</p> <p>Contamination – N/A</p> <p>Co-intervention- N/A</p>

Ques No.	Yes	Can't Tell	No	Comments
7	✓			<p>What were the results?</p> <p>Results were presented using percent change between baseline and post-intervention measurement.</p> <p>Bottom line result: Clients with ataxia following stroke may improve their motor function with intense motor practice.</p> <p>Was the analysis appropriate?</p> <p>As this study involved only a <i>small number of participants</i>, the use of <i>percentage</i> to describe change in motor performance may be considered appropriate. With this form of analysis however, it would not be possible to determine whether the change is important or significant.</p> <p>Clinical importance was reported?</p> <p>Findings from this study are suggestive of the benefits from intensive UE motor practice for ataxic clients. Sample size is very small to generate conclusive findings.</p>
8				<p>Conclusions were appropriate given study methods and results?</p> <p>The conclusion considered both the clinical and research implications of the results. The authors recognised the limitations of the study design and have considered these in their conclusions.</p>

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