

# CAHE JC Critically Appraised Article Summary

## Journal Club Details

---

<b>Date of submission</b>	October 2008
<b>Journal Club location</b>	Southern Therapy Service
<b>JC Facilitator</b>	Jessica Atkinson & Bronwyn Keller

## Clinical Scenario

Is there a difference in the effectiveness of speech therapy delivered continuously versus therapy with regular breaks (blocks of treatment) in improving the communication skills of aphasic stroke patients?

## Review Question/PICO/PACO

- P Adults with aphasia secondary to stroke
- I Speech therapy – Continuous treatment
- C Blocks of treatment
- O Improved communication

## Article/Paper

Bhagal SK, et al. Intensity of Aphasia Therapy, Impact on Recovery \* Aphasia Therapy Works. *Stroke: Journal of the American Heart Association*. 2003; 34: 987-993.

*Please note: due to copyright regulations CAHE will supply details of articles that are available online. Where this is not the case CAHE staff will source author approval and supply the article with the CAHE CAP Summary to CAHE JCs.*

<b>Article Methodology:</b>	Systematic Review
<b>Returned JC on:</b>	21 October 2008
<b>By CAHE staff member:</b>	Zuzana Machotka

Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>The study has a clearly focused question.</p> <p><i>Population:</i> stroke survivors suffering from aphasia after stroke. Patients with traumatic brain injury or any other disorders or illnesses were excluded.</p> <p><i>Intervention:</i> Therapy Studies that provided a drug and/or placebo as an adjunct to therapy were also excluded from the present review</p> <p><i>Comparison:</i> Varying intensities of therapy</p> <p><i>Outcome:</i> Aphasia recovery</p>
2	✓			<p>The review included all controlled studies investigating the effectiveness of speech and language therapy for aphasia after stroke.</p> <p>Is it worth continuing? YES</p>
3	✓			<p>The bibliographic search has included a wide range of electronic databases and the reviewers did a follow-up on the reference lists.</p>
4	✓			<p>The methodological quality of the included articles was assessed using the Physiotherapy Evidence Database (PEDro) scale. The quality rating was performed by two independent assessors who were blinded to each other's results. Any scoring discrepancies were resolved through a third reviewer. The score provided by the third reviewer constituted the final PEDro score.</p>
5	✓			<p>Data was collected in reference to treatment type, length of therapy period in hours and weeks, and mean change in scores for outcome measures. Independent <i>t</i> test was used to determine differences of mean scores and length of treatment between the studies yielding positive and those yielding negative results. Pearson bivariate correlation was used to determine the association between mean change in scores for outcome measures and the intensity of therapy. Results of these were clearly displayed and were similar between studies.</p>
6				<p>Initially a narrative summary is presented for all 10 studies included in the review. Combined results were displayed in table. The initial two tables displayed the overall results of each study as positive (+) or negative (-) in reference to Impact of Aphasia Therapy vs Control and impact of therapy intensity. Positive studies and negative studies were then pooled and combined to calculate standard deviations for therapy and outcome measures used.</p> <p>Association between intensity of therapy and improvement in Porch Index of Communicative Abilities (PICA) and Functional Communication Profile (FCP) scores were calculated for statistical significance.</p> <p><i>Bottom Line:</i> Intense therapy over a short amount of time can improve outcomes of speech and language therapy for stroke patients with aphasia.</p>



University of South Australia

CAHE

Centre for Allied Health Evidence

a collaborating centre of



THE JOANNA BRIGGS INSTITUTE

Ques No.	Yes	Can't Tell	No	Comments
7				Results were presented in p-values to detect statistical significance in terms of length of therapy, hours of therapy per week and total hours of therapy in reference to PICA and Token Test scores. Therefore results are precise.
8	✓			Of the ten studies indentified, 864 individual patients' results were reviewed. Therefore with the higher sample size, results could be applied to the local aphasic population. Intervention results from this study for speech therapy could be applied from an evidence base point of view.
9	✓			Reviewed studies included comparison of intervention application from qualified speech therapists and non-trained volunteers to comparison with natural recovery, in a variety of clinical settings. Outcomes therefore did take into account a variety of professionals and individuals as well as the wider community. A variety of functional outcomes were assessed (PICA, FCP, Token Test).
10	✓			The benefit of intense speech therapy, delivered over a short time in the initial phase of stroke recovery (2 to 3 months) has been shown to bring about a significant change. This is in comparison to therapy delivered at a lower-intensity over a longer time period. This could have a critical impact on maximising aphasia recovery.