

iCAHE JC Critical Appraisal Summary

Journal Club Details

Journal Club	Royal Hobart Hospital
JC Facilitator	Kristine Fulton and Sarah Florisson
JC Discipline	Speech Pathology

Clinical Scenario

What role does a speech pathologist play in communication therapy of adults with Huntington's disease?

Review Question/PICO/PECO

- P adults with Huntington's disease
- I speech therapy
- C n/a
- O improvement in communication or articulatory function

Article/Paper

Giddens CL, Coleman AE, Adams CE (2010) A home program of speech therapy in Huntington's Disease. *Journal of Medical Speech-Language Pathology*; 18(2): 1-9.

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](#).

Article Methodology: Pre-post study (pilot)

Journal club meeting on: 5 May 2011



CONTACTS

www.unisa.edu.au/cahe
 karen.grimmer-somers
 @unisa.edu.au
 Telephone (08) 8302 2769
 Facsimile (08) 8302 2766

University of South Australia
 GPO Box 2471
 Adelaide SA 5001
 Australia

CRICOS Provider Number
 001218



University of
 South Australia

iCAHE
 International Centre for
 Allied Health Evidence

A member of the Sansom Institute

Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>Was the purpose stated clearly?</p> <p>Yes it was.</p> <p><i>Aim of the study:</i> To determine whether exercise could aid in restoring muscle control in individuals with Huntington's disease (HD)-induced chorea; and test whether a daily home program could aid in maintaining or improving function</p>
2	✓			<p>Was relevant background literature reviewed?</p> <p>The authors have reviewed studies undertaken on animal subjects, which support the possible role of speech therapy in improving the signs and symptoms of HD. They have also sourced previous studies which showed improved function after training (e.g. lingual resistance training), but this was reported for other motor conditions. The scarcity of literature on the potential benefits of speech therapy on HD justified the need for the current study.</p>
3				<p>Describe the study design. Was the design appropriate for the study question?</p> <p>This pilot study used a pre-post design, which can be considered appropriate given the aims of the study. However, a randomised controlled trial would have been the best study design to use as it has the least opportunity for bias.</p> <p>A pilot study is a small experimental study designed to gather information prior to a large scale study, in order to improve its quality. Because a pilot study is small, it can only generate limited information on the sources and magnitude of variation of outcome measures. It is unlikely that it can provide adequate data to support or refute the effectiveness of an intervention. Hence, results should be interpreted with caution.</p>
4	✓		✓	<p>Was the sample described in detail?</p> <p>The authors did not provide information regarding the characteristics of the subjects.</p> <p>Was the sample size justified?</p> <p>Sample size is not an issue in a pilot study, as there is no magic number for this. However, the small sample size would have implications on how the results are interpreted.</p> <p>Was informed consent obtained?</p> <p>All participants signed a consent form prior to their participation in the study.</p>

5		✓	<p>Were the outcome measures valid? Were the outcome measures reliable?</p> <p>There was no information about the validity and reliability of the instrument used to measure outcomes.</p>
6	✓		<p>Intervention was described in detail?</p> <p>The authors have provided a detailed description of the home program in the appendix section.</p>
7	✓	✓	<p>Results were presented in terms of statistical significance? Were the analysis methods appropriate?</p> <p>Means, standard deviations, and p-values were reported.</p> <p>Clinical importance was reported?</p> <p>The findings of this study suggest that oral motor, respiratory and vocal exercise can be beneficial in individuals with mild to moderate symptoms of HD, especially those who are motivated and those with attentive caregivers.</p>
8	✓		<p>Drop-outs were reported?</p> <p>Of the seven who were recruited to participate, only five completed the study. Two non-compliant subjects were excluded in the analysis.</p>
9	✓		<p>Conclusions were appropriate given study methods and results?</p> <p>Bottom line result</p> <p>Cranial nerve assessment scores significantly improved after 30 days of speech therapy home program (which include respiratory, phonatory and oral-motor exercises).</p>
<p><u>Summary of search strategy</u></p> <p>Key words Concept 1: 'Huntington's disease' Concept 2: 'speech therap*' OR 'speech pathology*'</p> <p>Databases Medline, EMBASE, CINAHL, Academic Search Premiere, PubMed, SpeechBITE, Ageline, Allied and Complementary medicine, BioMed Central Gateway, ProQuest family health, Health and Medical Complete and Google.</p> <p>Limiters English articles only</p>			

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