*i*CAHE JC Critical Appraisal Summary

International Centre for Allied Health Evidence

Journal Club Details

Journal Club location	Hampstead Rehabilitation Centre
JC Facilitator	Rylee Bos
JC Discipline	Speech Pathologist

Background

N/A

Clinical Scenario

We are currently collating information regarding current practices in the acute and sub-acute setting for clients in a state of Post-Traumatic Amnesia (PTA), comparing it to best practice and reviewing and updating our current procedures for assessment and management of clients who are admitted to BIRU in a state of PTA to ensure a consistent and effective approach to their care. We are hoping to see whether there is any evidence out there for management that facilitates quicker emergence from PTA, allowing assessment and intervention to occur sooner and to reduce overall length of hospital stay.

Review Question/PICO/PACO

P: Adults with traumatic brain injury
I: Management for Post-Traumatic Amnesia (e.g.- Environmental reorientation program)
C: Usual care
O: Quicker emergence from Post-Traumatic Amnesia

Article/Paper

Steel, J, Ferguson, A, Spencer, E, Togher, L 2017, 'Language and cognitive communication disorder during post-traumatic amnesia: Profiles of recovery after TBI from three cases', Brain Injury, vol. 31, no. 13-14, pp. 1889-1902.

Article Methodology: **Multiple Case Study**

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Ques No.	Yes	Can't Tell	No	Comments
1		✓		**Were patient's demographic characteristics clearly described?** Information regarding demographics was stated however was not clearly described. *"Information was extracted from medical files for each participant on demographics and social history, injury description, SLP management and PTA status"*
2			✓	**Was the patient's history clearly described and presented as a timeline?** Reported briefly for the CD case, but no real timeline or in-depth patient history was provided for any of the cases: *"CD had a tertiary-level education and had previously been self-employed in a role requiring highly advanced language skills"*
3	✓			**Was the current clinical condition of the patient on presentation clearly described?** Participant AB was a 50-year-old woman who sustained a severe **TBI** in a fall. - *"She presented as easily distracted, with poor topic maintenance and reduced awareness of communication partner"* CD was a 32-year-old woman injured in a horse riding accident, transferred to inpatient rehabilitation 15 days post injury **(TBI).** - *"She reported continuing difficulties with her vision and some mild cognitive difficulties"* EF was a 47-year-old man injured in a transport accident, who was transferred from the acute setting to inpatient rehabilitation five weeks after his **TBI**. - *"He presented initially with fluent severe aphasic-type language disorder, including a high level of jargon and disorganised conversation"*
4	✓			**Were diagnostic tests or assessment methods and the results clearly described?** Limited detail of assessment methods is provided; however, they are still adequately stated:

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				"This study documents the language and CC recovery profiles of three patients during PTA (as measured by the Westmead PTA Scale (WPTAS)) and at 3 months after PTA resolution. The three cases outlined were selected purposively from a cohort who had participated in research on CC recovery during and after PTA (see 39). Of the larger group of six, one participant had English as a second language, one did not emerge from PTA and one had a PTA duration of 24 hours. Therefore, the three cases presented in this study were selected as providing the most detailed results and being most illustrative of the aims of the current study" Assessment results are clearly described: *"Assessment results are presented for two of the participants (AB and CD) for three test occasions: (i) while in PTA; (ii) around PTA emergence; and (iii) at follow-up approximately 3 months after PTA emergence. The third participant (EF) described in this study had a more complex CC presentation and longer PTA duration, and results are shown from nine test occasions during PTA and once at follow-up."* Results of the study: All participants demonstrated a profile of language and cognitive communication strengths and weaknesses during PTA and the post-acute period, also evident at follow-up. Improvement occurred gradually throughout PTA, although with individual fluctuation across test occasions. There was no marked change in communication function immediately before and after PTA emergence, indicating that cognitive communication ability and those functions measured on the Westmead PTA Scale (memory and orientation) did not recover at the same rate.
5	✓			**Was the intervention(s) or treatment procedure(s) clearly described?** Clearly described overall and for each case. *"The assessment protocol involved using repeated measures up to three times a week while the patient was in PTA, and then at approximately 3 months after PTA emergence. Assessment sessions took between 10 and 40 minutes, depending on the patient's function. Sessions were recorded on an Olympus WS-832 digital recorder and were orthographically transcribed following sessions. Alternative versions of test components were used for repeated testing to avoid the effects of overfamiliarity with the material, with comparable stimulus tasks alternated over test occasions during PTA"*

6	✓			**Was the post-intervention clinical condition clearly described?** These authors found that neuropsychological test results had value in directing the clinical decision-making process during early rehabilitation admission, even when testing was conducted at the point of PTA emergence Since formal cognitive assessment was not undertaken, inferences made about underlying cognitive processes of language dysfunction in this study, while from an informed clinical perspective, must be considered speculative. It would be of interest in future research to determine the cognitive correlates of language and CC performance and recovery during PTA.
7			✓	**Were adverse events (harms) or unanticipated events identified and described?** Not mentioned, nor described within the text.
8		✓		**Reliability of information** **Is the author of the information identified?** Only the main author is identified within the article. The co-authors names are listed within the citation, however no further information is provided regarding their qualifications or relevant experience in the subject matter. **Does the author of the information have the qualifications or experience to write on this topic?** Only presents information regarding the main authors faculty, which is the School of social science. It is not stated the backgrounds of the other co -authors. Having said this, if they also lacked a relevant clinical background the reliability of this study would be shifted. **Does the information come from an 'authoritative source'?** Can't tell.
9	**Accuracy of information** **How is the information presented?** Information is presented well, utilising appropriate statistical representation of data. **If the information is presented as fact, can it be checked?**			

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	"Since formal cognitive assessment was not undertaken, inferences made about underlying cognitive processes of language dysfunction in this study, while from an informed clinical perspective, must be considered speculative" **Is the information biased?** No, both standardised and non-standardised methods were used. Having said this, small sample size was recognised preventing the generalisation of results
10	**Timeliness of information (how recent is the information)** Recent 2017

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11	Journal Club to discuss	**Does the case report provide takeaway lessons?**
12		**Can the results be applied to the local population?** **CONTEXT ASSESSMENT (please refer to attached document)** – *Infrastructure* – *Available workforce (? Need for substitute workforce?)* – *Patient characteristics* – *Training and upskilling, accreditation, recognition* – *Ready access to information sources* – *Legislative, financial & systems support* – *Health service system, referral processes and decision-makers* – *Communication* – *Best ways of presenting information to different end-users* – *Availability of relevant equipment* – *Cultural acceptability of recommendations* – *Others*
13		**Were all important outcomes considered?**
14		**Are the benefits worth the harms and costs?**
15		**What do the study findings mean to practice (i.e. clinical practice, systems or processes)?**
16		**What are your next steps?** ***ADOPT, CONTEXTUALISE, ADAPT*** **And then (e.g. evaluate clinical practice against evidence-based recommendations; organise the next four journal club meetings around this topic to build the evidence base; organize training for staff, etc.)**
17		**What is required to implement these next steps?**

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