



iCAHE JC Critical Appraisal Summary

Journal Club Details

Journal Club location	Hampstead Rehabilitation Centre
JC Facilitator	Michael Snigg
JC Discipline	Brain Injury Rehabilitation Unit (BIRU)

Question

Requested Studies based on previous PICO below:

Review Question/PICO/PACO

P TBI/ABI – subacute/ community

Measure fatigue – (including cognitive, mental and physical)

I Client accurately rate fatigue

C *I have used the BNI fatigue scale or just a non standardised 1-5 scale (1= no fatigue, 2 = some fatigue, 3 = fatigue, 4=quite fatigued and 5 = very fatigued). Because our clients have difficulty sometimes getting their heads around numbers we have this drawn on line with simple happy to unhappy faces.*

O *To have an accurate measure of fatigue that can be used with brain injured clients that may have cognitive and expressive/receptive language difficulties*

Article/Paper

Mollayeva T, Kendzerska T, Mollayeva S, Shapiro C, Colantonio A, Cassidy J, 2014, 'A Systematic Review of Fatigue in Patients with Traumatic Brain Injury: The Course, Predictors and Consequences', Neuroscience and Biobehavioral Reviews, vol. 47, pp. 684-716

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:

Click [here](#) to access critical appraisal tool

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 Allied Health Evidence

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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>Did the review address a clearly focused question?</p> <p>This systematic review was performed with the following goals, all with respect to patients with traumatic brain injury: (1) to determine the prognostic factors associated with fatigue onset; (2) to describe the course of fatigue; and(3) to describe the health consequences of fatigue.</p>
2	✓			<p>Did the authors look for the appropriate sort of papers?</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Peer-reviewed • English language • studies that investigated fatigue in adult patients with a diagnosis of traumatic brain injury • and followed them for any period. <p>Is it worth continuing? YES</p>
3	✓			<p>Do you think the important, relevant studies were included?</p> <p>PsycINFO, MED-LINE, EMBASE and CINAHL, were eligible. Cochrane Database of Systematic Reviews was also searched for studies published between 2005 and early April 2013. Publications identified from bibliographies of identified articles and reviews were considered eligible.</p>
4	✓			<p>Did the review's authors do enough to assess the quality of the included studies?</p> <p>Study quality was independently assessed by two reviewers (TM and TK), using guidelines developed by Hayden et al. (2006) for assessment of prognostic studies. Presence of potential biases was judged "Yes", "Partly", "No", or "Unsure". To summarize the level of evidence, we used a system similar to the Scottish Intercollegiate Guidelines Network (SIGN) methodology (SIGNPG, 2013): (i) "+++" when all or most of the quality criteria proposed by Hayden et al. were fulfilled(i.e. allowing one "Partly" while appraising all potential sources of bias); (ii) "++" when the majority of criteria were fulfilled; (iii) "+"when few criteria were fulfilled (i.e. at least one "Yes").</p>
5	✓			<p>If the results of the review have been combined, was it reasonable to do so?</p> <p>Studies were not combined in a meta-analysis due to study heterogeneity. Instead a best-evidence synthesis approach was applied, synthesising findings from studies with sufficient quality through tabulation and qualitative description.</p>
6				<p>What are the overall results of the reviews?</p> <p>Of 2745 articles identified, 33 were selected for full-text review and 22 were included in the final review. There is limited evidence for certain clinical and psychosocial variables as predictors of fatigue severity at follow-up. Early fatigue severity predicted persistent post-concussive symptoms and Glasgow outcome score at follow-up. Fatigue is present before and immediately following injury, and can persist long term. The variation in findings supports the idea of fatigue in TBI as a nonhomogeneous entity, with different factors influencing the course of new onset or chronic fatigue. To decrease the heterogeneity, we emphasize the need for agreement on a core set of relevant fatigue predictors, definitions and outcome criteria.</p>

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7			✓	<p>How precise are the results? Authors did not combine results. Only standard deviations for individual study results were provided by authors.</p>
8	Journal Club to discuss			<p>Can the results be applied to the local population? CONTEXT ASSESSMENT (please refer to attached document)</p> <ul style="list-style-type: none"> - 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
9				<p>Were all important outcomes considered?</p>
10				<p>Are the benefits worth the harms and costs?</p>
11				<p>What do the study findings mean to practice (i.e. clinical practice, systems or processes)?</p>
12				<p>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.)</p>
13				<p>What is required to implement these next steps?</p>