# iCAHE JC Critical Appraisal Summary

# Journal Club Details

Jou	rnal	Club	location
JC I	Facil	itator	

Women's and Children's Health Network

Lisa Callahan

Audiology

#### Question

**JC Discipline** 

**Review Question/PICO/PACO** 

- P Children/Adolescents/Paediatric Populations
- I Cochlear implantation
- C No cochlear implantation
- O Change in experiences of tinnitus/hearing loss

"Does experiencing tinnitus and hearing loss predict success with cochlear implantation". We are particularly interested in children/adolescents/paediatric populations"

## Article/Paper

Quaranta, N, Wagstaff, S, & Baguley, D, 2003, 'Tinnitus and Cochlear Implantation', *International Journal of Audiology*, vol. 43, no. 5, pp. 245-251

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 <u>DOHSA librarian</u>.

**Article Methodology:** 

**Review** 

Click here to access critical appraisal tool



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#### CONTACTS

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	Ques No.	Yes	Can't Tell	No	Comments	
					Did the review address a clearly focused question?	
	1	~			Yes- the question was aimed at examining the impact of cochlear implants on populations experiencing tinnitus.	
					Did the authors look for the appropriate sort of papers?	
	2		~		Can't tell – only one database was searched for relevant papers with loose search terms and criteria. 'Snowballing' (identifying papers from references in the published literature) was used but there is no mention on the results from this method. Is it worth continuing? Yes	
					Do you think the important, relevant studies were included?	
	3			√	No – Only one database was searched for relevant articles. A loose number of search terms and selection criteria were used. There were no comments regarding why only one database was searched.	
					There is also no mention on the number of authors selecting studies for inclusion and the extraction of data	
					Did the review's authors do enough to assess the quality of the included studies?	
	4			$\checkmark$	No – There is no mention of a quality assessment for any of the included studies.	
					If the results of the review have been combined, was it reasonable to do so?	
	5			~	Results were not combined, and there was no stated reason for this. It could be assumed that they were not combined as a result of lack of homogeneity but there is no way of confirming this.	
					What are the overall results of the reviews?	
99 ia	6				Relevant papers (n = 32) were identified from literature databases. The standard of reporting tinnitus results was inconsistent. Tinnitus is experienced by up to 86% of adult cochlear implant candidates, but is not universal and is only troublesome in a small proportion (reported as 27% in one study). Electrode insertion may induce tinnitus in a small (up to 4%) number of patients, but this is rare. Cochlear implant device use is associated with reduction of tinnitus intensity and awareness in up to 86% of patients, and rarely with exacerbation (up to 9%). There are some indications in the literature that the more complex the simulation strategy, the larger that effect. Specifically, unilateral cochlear implant use was generally associated with reduction of contralateral tinnitus (in up to 67% of individuals) rather than exacerbation	
					How precise are the results?	
	7			~	There is no mention of confidence intervals through any of the results, nor is there any other mention of measures of analysis and precision.	

		Can the results be applied to the local population?	
	Journal Club to discuss	CONTEXT ASSESSMENT (please refer to attached document)	
		– Infrastructure	
		<ul> <li>Available workforce (? Need for substitute workforce?)</li> </ul>	
		<ul> <li>Patient characteristics</li> </ul>	
		– Training and upskilling, accreditation, recognition	
		<ul> <li>Ready access to information sources</li> </ul>	
8		<ul> <li>Legislative, financial &amp; systems support</li> </ul>	
		<ul> <li>Health service system, referral processes and decision- makers</li> </ul>	
		– Communication	
		<ul> <li>Best ways of presenting information to different end-users</li> </ul>	
		<ul> <li>Availability of relevant equipment</li> </ul>	
		<ul> <li>Cultural acceptability of recommendations</li> </ul>	
		– Others	
9		Were all important outcomes considered?	
10		Are the benefits worth the harms and costs? What do the study findings mean to practice (i.e. clinical practice, systems or processes)?	
11			
		What are your next steps?	
		ADOPT, CONTEXTUALISE, ADAPT	
12		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.)	
13		What is required to implement these next steps?	

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