

Outcomes, experience and attitude of secondary age young people who have had sequential bilateral cochlear implantation at YAIS: A mixed methods service review.



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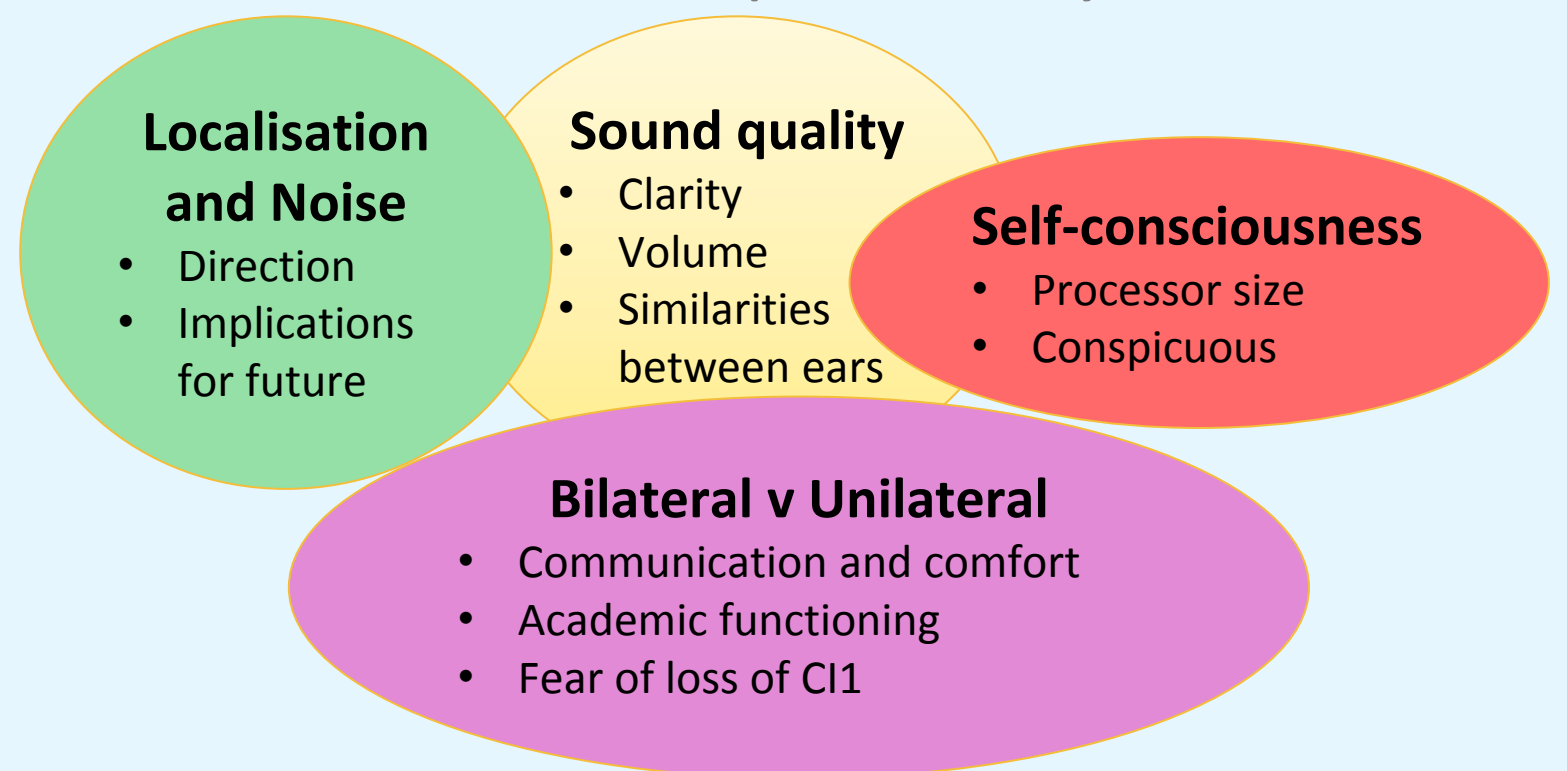
Introduction

Sequential implantation was an option for the unilaterally cochlear implanted children who received their first cochlear implant prior to NICE guidance (Jan 2009). Many of the children who received a second implant (CI2) are now secondary age. This review explored the experiences and attitudes of these young people toward their implants and their self-reported CI2 use.

Methods

- A survey of sequentially implanted young people aged 12 -19 was undertaken using a mixed method approach. This included group and 1:1 audio recorded interviews as well as written feedback in response to specific questions. The responses were transcribed and coded into prevalent themes
- Self-reported CI2 use was categorised using the Meaningful Auditory Information Scale descriptors
- Functional outcomes including speech discrimination, data logging (where available) and spatial listening were collected
- In addition, educational setting, age at CI2, inter-implant interval and hearing aid use prior to implantation of the second ear were documented, and descriptive statistical analysis applied

Themes from qualitative analysis



Results

- Fifty-three young people responded (88% of the target group). Of the respondents, 10% did not use their CI2, 12% reported rare or occasional use and 78% reported that they used their CI2 frequently or always
- Each group was similar in terms of inter-implant interval and age at second implant (see table 1)
- The proportion of children with acquired or progressive losses was smallest amongst the non-users (0% versus 33% and 23% respectively)
- Forty-six per cent of those using their CI2 frequently or always were bimodal users prior to sequential implantation, versus 0% in the other groups
- The majority of the non and rare/occasional users answered 'yes' to questions 9 and 10 (see figure 1)

CI2 Use	Median Age CI2 (months)	Median Interimplant Interval (months)
Never	63	39
Rare/ occasional	77	46
Frequent/ always	75.5	45

Table 1: CI2 use, inter-implant interval and age at second implant

Results: Questionnaire

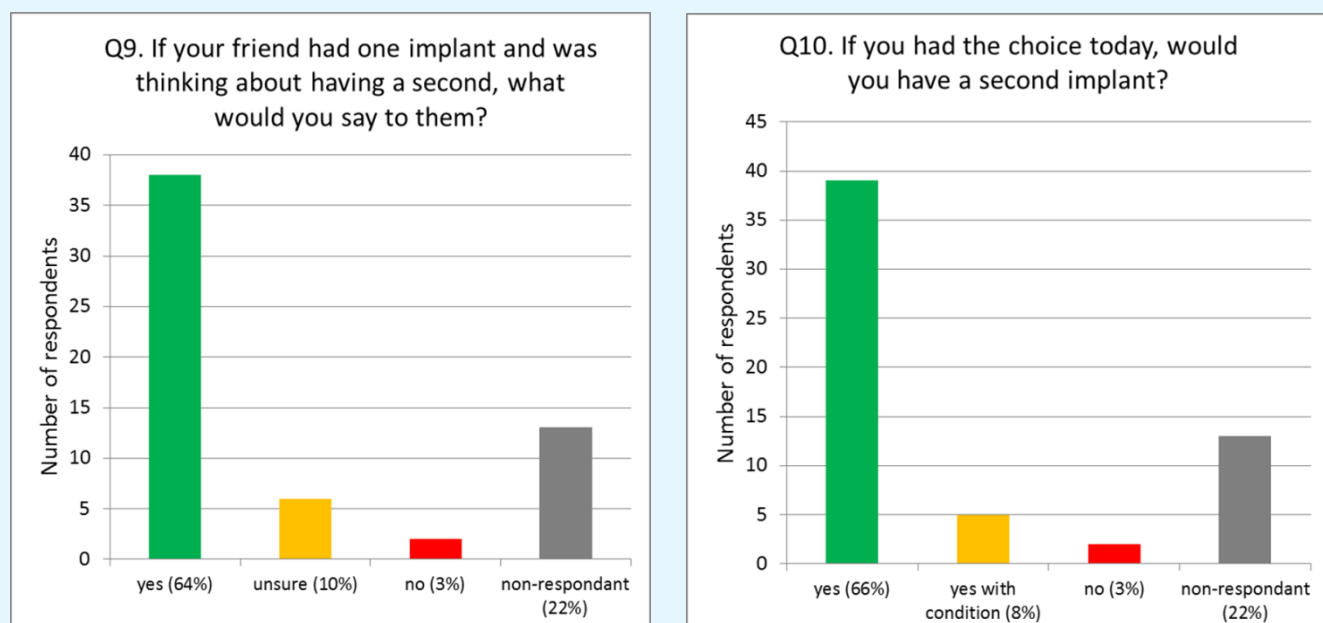


Figure 1: Survey responses to Q9 and Q10

What the young people said



Conclusions

- No clear relationship seen between use and inter-implant interval
- CI2 use strongly linked with the young people's perception of sound quality
- The majority of young people reported that they always or frequently used their CI2
- CI2 use influenced to varying degrees by different issues
- A greater proportion of good CI2 users were born with hearing outside traditional cochlear implant candidacy criteria, and / or had bimodal experience prior to sequential implantation