Comparison of Receiving Hearing Aids Early Versus Late in Life for Toddlers with Hearing Loss

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Introduction

- 1 to 6 in 1,000 newborns have congenital hearing loss (“The Prevalence,” 2016).
- Hearing loss in newborns is typically noticed during infant hearing screenings, but can be missed until later in life (“Early Hearing,” 2016).
- Some parents are notified of their child’s hearing loss through early screening or testing (“Early Hearing,” 2016).
- Other children may not be diagnosed in time resulting in an undiagnosed hearing loss later in life. This results in concerns from parents who begin to notice delays in speech and language of their child.
- It is unclear to the parents who found out about their child’s hearing loss whether it is important to aid their child now or later.

PICO

- Does aiding toddlers with hearing loss earlier in life compared to later in life, result in better language gains as measured by standardized tests of language?

Using the P (Patient), I (Intervention), C (Comparison), O (Outcome)

by Gillam & Gillam (2008) the following clinical question was developed:

Methodology

- Search Terms: hearing loss toddlers, toddler hearing aids, toddlers hearing aids language.

Appraisal

- Critical Appraisal of Treatment Evidence (CATE) was used for treatment articles to evaluate reliability and clinical significance based off 4 appraisal points (CATE: 7–10: Suggestive: 5–6, Equivocal: 0–3) as used by Gillam & Gillam (2008).
- Critical Appraisal of diagnostic Evidence (CADE) was used for 1 diagnostic article to evaluate reliability and clinical significance based off 13 appraisal points (COMP: 7–13, Suggestive: 5–8, Equivocal: 0–4) as used by Dollaghan (2007).
- 88.75 inter-rater reliability was achieved.
- 4 articles were selected citing direct relevance to this study.

Results

- A study was conducted to compare the effectiveness of early and delayed intervention for children with hearing loss.
- Participants were divided into two groups: ear identified (E1) and late identified (E2).
- The early identified group (E1) had significantly better language outcomes compared to the late identified group (E2).
- Early identification at less than 1 year, n = 55
- Late identification at 6 to 12 months, n = 23

Discussion

- In summary, evidence has shown that children who receive hearing aids early in life have better language outcomes than those who receive aids later in life (Stika et al., 2015).
- There are many different situations (e.g., daily use of hearing aids, severity of hearing loss, speech services, etc.) that can affect the outcome of children’s language when using hearing aids or cochlear implants.
- The family’s concern is about the timing of hearing aid fitting. However, they are also concerned that his delay in language may affect his outcome in life.
- Taking into consideration the family’s concerns regarding the clinical language development, I will recommend hearing aids as soon as possible and administer language therapy every three months to track his progress.
- Clinical Decision: The external evidence shows that children benefit from being identified with hearing loss early in life and receiving hearing aids once recommended.

References