Quality of life for youth with hearing loss who use spoken language.

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SCH Social Groups for Children & Teens

• SCH started offering monthly social groups to youths with hearing loss who use spoken English in 2011.

• Goal: To provide a comfortable environment for youths with hearing loss to share similar experiences, reduce feelings of isolation & perceived stigma.

• Goal: To increase self-advocacy skills and self-acceptance.
A Unique Opportunity

• To learn about the impact of hearing loss on QoL in a group of youths who attend social group.

• The impact of hearing loss on the quality of life (QoL) for children and adolescents is not fully understood.
  • Several QoL instruments available (Roland et al. 2016, Lieu et al. 2014)
    • i.e., HEAR-QL (Umansky et al. 2011, Griffin et al. 2018), PQLI-4.0 (Varni et al. 2006, Wang et al. 2019), YQoL-DHH (Patrick et al. 2011).

• Quality of life: a multidimensional concept encompassing the self-perceptions of an individual’s current emotional and social well-being along with the ability to engage in normative social interactions and activities.
Main Goal

• To measure QoL in youths with hearing loss who regularly attend the SCH social groups using a validated instrument specifically designed to evaluate youths with hearing loss based on the youth’s perceptions of their own life.
Hypothesis

• Youths who attended more social groups will have better QoL than those who did not attend as many group sessions. Explore differences based on:
  • 1. Duration of attendance
  • 2. Type of devices used
  • 3. Degree of hearing loss
  • 4. Season when data collected
Methods

• IRB approval obtained

• Included youths aged 11-18 years old with hearing loss.
  • All attended the SCH social group at least one time.
  • English as first language.
  • Test of Silent Reading Efficiency and Comprehension (TOSREC) -- 4th grade reading level.

• Youth Quality of Life Instrument- Deaf and Hard of Hearing (YQoL-DHH) (Patrick et al. 2011)

• Demographic Information Form
YQoL - DHH Instrument

• Long form: 32 questions in written form
• 3 Domains:
  • Participation
    • 10 questions
  • Self-Acceptance/Advocacy
    • 14 questions
  • Perceived Stigma
    • 8 questions
• For all domains, higher score = higher QoL

\[
tscore = \frac{\text{actual raw score} - \text{lowest possible raw score}}{\text{possible raw score range}} \times 100
\]

\[Tscore^* = ((\text{Item raw score}-0)/10)\times100.\]

*The tscres are calculated at the item level
Subject Demographics
N = 20 (males, n=8)

- Grade in school = 5th-12th
- Duration of Social Group Attendance:
  - Less than 5 years=10
  - 5 years or more=10
- Time of year data collected:
  - Spring: N = 11
  - Fall: N = 9
- Hearing devices used:
  - Hearing aid: N = 12
  - Cochlear implant: N = 7
  - No device in use: N = 1
RESULTS
Duration of Social Group Attendance

Longer duration of social group attendance did not show statistically significantly higher YQoL in any of the domains.
RESULTS
Type of Device Used

Across all domains, there was not a statistically significant difference between the scores from participants who use hearing aids and cochlear implants.
RESULTS
Degree of Hearing Loss

No statistically significant differences between the domains with respect to severity of hearing loss.
While youths reported lower median QoL in the Participation domain in Fall compared with Spring (p=0.08), seasonal differences were not statistically significant within any domain.
Results-Domain Scores

The Participation domain scores were significantly lower than:

- Stigma domain scores ($p = 0.021$)
- Self-acceptance/advocacy scores ($p = 0.007$)
Limitations

• Small sample size
• All participants are mid-high SES
• All participants have supportive and involved families
• Self-selected group of subjects
• No control group
Future Directions

• Collect data from youths who are interested in attending social group but have not yet attended.

• Collect data from youths who are not interested or cannot attend social group.
References

- Varni JW, Seid M, Kurtin PS. PedsQL 4.0: reliability and validity of the Pediatric Quality of Life Inventory version 4.0generic core scales in healthy and patient populations. 2001. Med Care 39:800-812.
Thank you for your attention!

Questions? Amy.melick@seattlechildrens.org