Preliminary results of a randomized-controlled trial of a behavioral parent training intervention for families with deaf or hard of hearing children

Grace Mullikin1; Julie A. Jacobs2, MPH; Laura Belinier2, MPH; Anthony Mahairas3, MA; Jate Bernard1; and Christina R. Studts1, PhD

1Department of Otolaryngology – Head & Neck Surgery – University of Kentucky
2Department of Public Health – University of Kentucky
3College of Medicine – University of Kentucky

College of Public Health
University of Colorado Anschutz Medical Campus

Introduction

• Even after standard of care hearing and speech interventions, deaf and hard of hearing (DHH) children may be twice as likely to exhibit behavioral problems as their typical hearing peers, with up to 50% experiencing significant disruptive behavior problems.
• Despite this increased risk, DHH children are less likely than their typical hearing peers to receive behavioral interventions to address these problems.
• While behavioral parent training (BPT) programs have consistently demonstrated a reduction of behavioral problems in typical hearing children, no prior research has examined the effectiveness of BPT interventions with DHH children.
• The Family Check-Up (FCU) is an evidence-based BPT designed to be delivered in brief, tailored sessions. It focuses on identifying parenting strengths and working with parents to learn and practice effective positive parenting skills.
• After systematically adapting the FCU to make it responsive to the needs and preferences of parents of DHH children, this study tests the effectiveness of the adapted intervention (FCU-DHH) in a randomized controlled trial, and it examines parent satisfaction with FCU-DHH.
• The FCU-DHH program is delivered in up to 6 structured sessions, according to the following model:

Methods

Inclusion Criteria

- Parent or legal guardian is 18 years or older
- Lives in Kentucky
- Able to communicate in English or American Sign Language
- Child is 3-6 years of age (at first contact)
- Child is deaf or hard of hearing
- Child has had a hearing device for at least 6 months
- Child is deaf or hard of hearing

Exclusion Criteria

- Parent has previously accessed behavioral health services for the child
- Parent has a current child protective services case

- After baseline data collection, dyads are randomized (stratified by income/poverty level and hearing device) to the FCU-DHH (n=72) or control group (n=53).

Results

- Families complete research assessments at baseline and every 6 months for up to 3 years, including standardized measures of parenting and child behaviors, parenting sense of competence, parent depression, parent motivation, parent-child interactions, and child language skills. Families receive up to $150 each year for completing research assessments.
- FCU-DHH families receive up to 6 FCU-DHH sessions annually, delivered by a trained and supervised coach who is also the parent of a DHH child of any age. There is no additional payment to families for attending FCU-DHH sessions.
- Preliminary results indicate high satisfaction among parents who attended FCU-DHH sessions. Session attendance was variable.
- Approximately one-third of families attended no sessions or only one session, while another third attended all or nearly all offered sessions.
- The average length of sessions was: 46 minutes for the Initial Interview (session #1); 57 minutes for Structured Feedback (#2); and 48 minutes for Skills Training (#3-6).
- The most frequently requested Skills Training topics were praising positive behavior; making clear and effective requests; identifying incentives and behavior plans (e.g., sticker charts); and setting limits.

Conclusions/Future Directions

- Preliminary results indicate high satisfaction among parents who attended FCU-DHH sessions. Session attendance was variable.
- Post-intervention outcomes will be compared across groups to examine the effect of the FCU-DHH program on positive parenting practices, children’s behavior, children’s consistent use of hearing devices, and improvements in children’s speech and language.
- Recruitment challenges are currently being addressed by expanding eligibility to all US states with active DHH parent referral networks.

Acknowledgements

This project is supported by the National Institute of Deafness and Other Communication Disorders, National Institutes of Health (R01 DC016957, Pi Studies). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.