

Family Dynamics of Cochlear Implanted Children and Auditory Verbal Therapy

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Abstract

Auditory Verbal Therapy is a holistic multi-dimensional therapeutic approach which emphasizes the development of listening and spoken language through play, singing, games, daily routines and all the enthusiasms of family life. A questionnaire based study including 15 number of participants, who were the parents of cochlear implantees attending Auditory Verbal Therapy at the hospital. A questionnaire containing 19 questions were developed in Malayalam. The questions addressed few aspects concerning family dynamics and its relation to child's performance in Auditory Verbal Therapy. The questionnaire included free-response questions, fixed answers and yes/ no questions. The validated questionnaire was given directly to the parents who are accompanying children for therapy. This study demonstrated positive influence of family member's involvement in Auditory Verbal Therapy. These findings will provide assistance during the initial counselling of the families before the enrolment in Auditory Verbal Therapy sessions.

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Introduction

Auditory Verbal Therapy is a holistic multi-dimensional therapeutic approach in which social interactions are crucial for the development of independent cognitive and linguistic functioning. It emphasizes the development of listening and spoken language through play, singing, games, daily routines and all the enthusiasms of family life. Parents are the primary agents of transformation in the lives of their children. Listening becomes the prime force in nurturing the child's personal, social and academic life. Parents help child cultivate confidence in listening, to navigate challenging listening environments and to mend communication breakdowns caused by mishearing. Parents are their child's first and most enduring teachers and the primary agents of change in their child's listening and spoken language environment (Estabrooks, MacLver-Lux, & Rhoades, 2016 ^[1]; Kaiser & Hancock, 2003 ^[2]). AVT is tailor-made to meet specific needs of the child and family. The higher the level of family participation and engagement in any intervention program, the

stronger the child's language and social growth will be (Moeller *et al.*, 2013 ^[3]; Suskind & Leffel, 2013 ^[4]).

The auditory verbal therapist involves in activities with the child and he/she demonstrates approaches that will assist the child's advancement in audition, speech, language, cognition and communication. Parents then rehearse the demonstrated strategies with guidance from the practitioner and then on their own with the child. Gradually, parents learn how to boost their child's listening and language development. The quantity and quality of the language parent use can have a profound impression on the child's linguistic development, educational achievement and cognitive outcomes (Suskind, 2016 ^[5]). A fundamental predictor of a child's linguistic, social-emotional, literacy and academic competencies is the parent's aptitude to make available an environment that's rich in meaningful and complex spoken language experiences (Leffel & Suskind, 2013 ^[5]; Roberts *et al.*, 2019 ^[6]; Suskind, 2016 ^[5]; Walker, Redfern, & Oleson, 2019^[7]). 90% of children's vocabulary is learned through overhearing (Akhtar,

Jipson & Callanan, 2001^[8]). “Listening must become an integral part of the child’s life” (Doreen Pollack, 1970^[9], 1985^[10]). Children’s development of conversation and social expertise are augmented best when they are involved in meaningful, sustained and rich language experiences and when parents are responsive to their child’s listening, spoken language, cognitive (Moeller *et al.*, 2013^[3]), emotional and social needs (Mashburn *et al.*, 2008^[11]). Hence family dynamics may play a significant role in the success of Auditory Verbal Therapy. Different families have varied dynamics and diminutive research is documented concerning the characteristics of the families involved in Auditory Verbal Therapy. Hence, the objectives of our study were to explore the characteristics of families of cochlear implanted children undergoing AVT, which is an intervention approach that heavily relies on care giver involvement.

Materials & Methods

This questionnaire based study included 15 number of participants. The participants were the parents of cochlear implantees who were attending Auditory Verbal Therapy at the hospital. The material development was done in two phases. The first phase included the development of the questionnaire. A questionnaire containing 19 questions were developed in Malayalam. The questions addressed few aspects concerning family dynamics and its relation to child’s performance in Auditory Verbal Therapy. The questionnaire included free-response questions, fixed answers and yes/no questions. In the second phase this questionnaire was given for validation to two speech language pathologists. The validated questionnaire was given directly to the parents who are accompanying children for therapy. An informed consent was gathered from all the participants.

Results & Discussion

The families who were attending Auditory Verbal Therapy were asked 19 questions regarding the family dynamics. Majority of the patients belong to nuclear family. 47% of the families had single child in the family, 33% had 2 children and 20% had 3 children. 3 families have reported of having other family members living with them. 4 families reported to have family members living in the same town. Only two people reported to have both parents working. Figure 1 represents the involvement of the caregivers in extracurricular activities. Majority of the parents were involved in extracurricular activities. 46% of the parents were involved in sports. 38% of them were involved in religious activities. One person was involved in dance and one person spends time in gym. Primarily mothers are taking children for therapy. Figure 2 represents the person who is involved in giving therapy at home. 11 people reported to have major influence of mother in therapy at home. 3 individuals were given home therapy by their father. One child was given therapy by the grandmother as the child’s parents are non-verbal. All of them responded positively for the involvement of both the parents in therapy. 3 people reported to have negative influence of having more than one child at home, due to time constraints. Majority of the individuals reported to have positive impact of having joint family and their involvement in therapy at home, except one person. All the families supported positive influence of having relatives within their home town. 12 families reported of having no influence of working status of parents on Auditory Verbal Therapy. While 3 families reported of having an impact of work status of parents on therapy.

Figure 3 represents impact of extracurricular activities on therapy. 3 individuals reported of having negative impact of extracurricular activities on therapy. 3 people reported to have negative influence of having more than one person involved in therapy at home. Due to household chores, parents reported of having insufficient time in providing therapy at home. 7 parents reported to have positive influence from the family in terms of emotional support and interaction with the child.

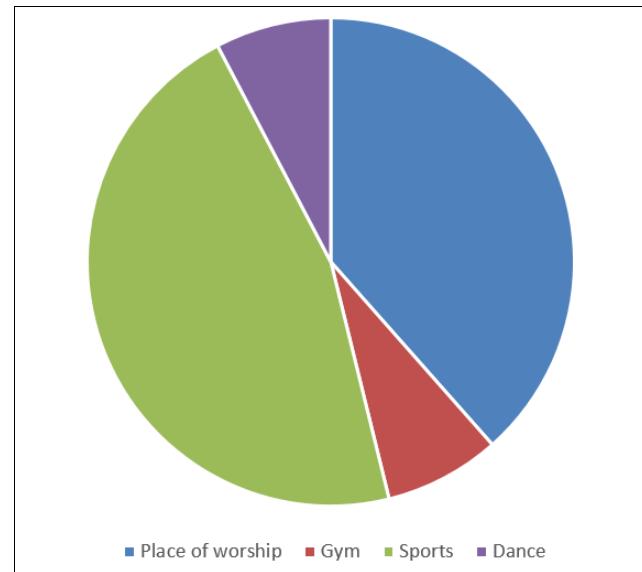


Fig 1: Extracurricular activities

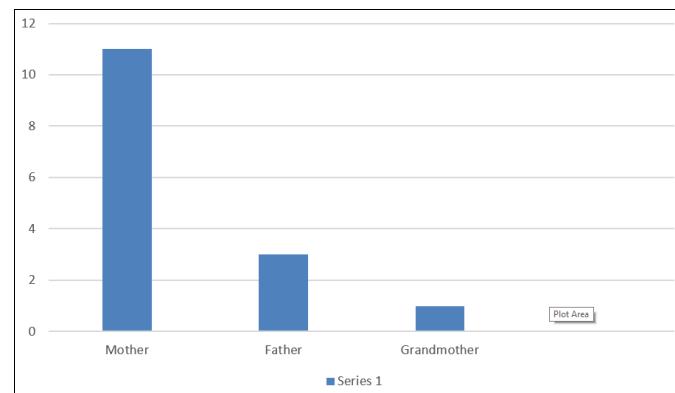


Fig 2: Represents the individual who were involved in therapy at home

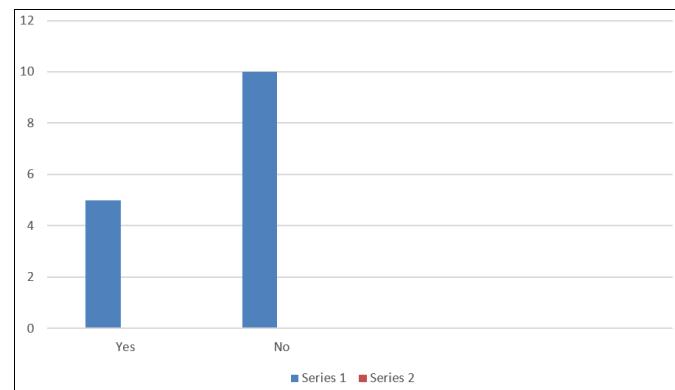


Fig 3: Representing impact of caregiver's extracurricular activities in therapy

Conclusion

This study demonstrated positive influence of family member’s involvement in Auditory Verbal Therapy. Majority of the participants reported that having more than one siblings have favorable effects on the child’s development. All the

families who participated in the study showed some level of involvement in extracurricular activities. Baldwin (2018) [12] reported that family involvement is an important component of AVT. Mostly mothers played a significant role in the development of the child. Working status of the parents does not impair the training. It is impressive to find that families were able to effectively participate in AVT in spite of having financial constraints, multiple children and involvement in extracurricular activities. These findings will provide assistance during the initial counselling of the families before the enrolment in AVT sessions.

References

1. Rhoades EA, Estabrooks W, Lim SR, MacIver-Lux K. Strategies for listening, talking, and thinking in auditory-verbal therapy. In W. Estabrooks, K. MacIver-Lux, & E. A. Rhoades (Eds.), *Auditory-verbal therapy for young children with hearing loss and their families, and the practitioners who guide them*, 2016; 285-326.
2. Kaiser AP, Hancock TB. Teaching Parents New Skills To Support Their Young Children's Development. *Infants and Young Children*. 2003; 16(1):9-21.
3. Moeller MP, Carr G, Seaver L, Stredler-Brown A, Holzinger D. Best practices in family-centered early intervention for children who are deaf or hard of hearing: an international consensus statement. *Journal of Deaf Studies & Deaf Education*. 2013; 18(4):429-445.
4. Suskind D, Lefel K. Parent-directed approaches to enrich the early language environments of children living in poverty. *Seminars in Speech and Language*. 2013; 34(04):267-278.
5. Suskind D. *Thirty million words: Building a child's brain: Tune in, talk more, take turns*. New York, NY: Dutton Books, 2016.
6. Roberts MY, Curtis PR, Sone BJ, Hampton LH. Association of parent training with child language development. *JAMA Pediatrics*. 2019; 173(7):671-680. doi: 10.1001/jamapediatrics.2019.
7. Walker EA, Redfern A, Oleson JJ. Linear mixed-model analysis to examine longitudinal trajectories in vocabulary depth and breadth in children who are hard of hearing. *Journal of Speech, Language, and Hearing Research*. 2019; 62(3):525-542.
8. Akhtar N, Jipson J, Callanan MA. Learning words through overhearing. *Child Development*. Alexander Graham Bell Academy for Listening and Spoken Language. 2001-2017; 72:416-430.
9. Pollack D. *Educational audiology for the limited hearing infant*. Springfield, IL: Charles C. Thomas, 1970.
10. Pollack D. *Educational audiology for the limited hearing infant and preschooler*. Springfield, IL: Charles C. Thomas, 1985.
11. Mashburn AJ, Pianta RC, Hamre BK, Downer JT, Barbarin OA, Bryant D, Howes C. Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development*. 2008; 79(3):732-749.
12. Baldwin C. *Family Dynamics and Auditory Verbal Therapy*. "Undergraduate Thesis". [University of Arkansas], 2018.