

# PARENTAL RESPONSE TO INTERVENTION ON POST- OPERATIVE REHABILITATION SERVICES FOR CHILDREN WITH COCHLEAR IMPLANT

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## Abstract

AYJNISHD (D) Mumbai is a nodal agency of the ADIP Scheme. The aim of the ADIP scheme is to support the disadvantaged individuals with disability in procuring durable, sophisticated, and scientifically manufactured, standard aids, and appliances that can uphold their physical, social and psychological rehabilitation, by reducing the effects of disabilities and enhance their economic potential. The current research aimed to study the level of satisfaction among the parents of children with cochlear implant availing post-operative rehabilitation services under ADIP and CSR Scheme. There were three objectives of the research namely; a] to study the level of satisfaction in services among the parents of children with cochlear implant availing post-operative rehabilitation services under ADIP and CSR Scheme b] to study the level of satisfaction in care and maintenance services among the parents of children with cochlear implant availing post-operative rehabilitation services under ADIP and CSR Scheme and c] to compare the level of satisfaction in services and care and maintenance among the parents of children with cochlear implant availing post-operative rehabilitation services under ADIP and CSR Scheme. A descriptive survey method was followed for studying the parental response to intervention. The participants were selected using purposive method of sampling for the study. For the current study, the researchers selected the parents of children with a cochlear implant as sample using the purposive sampling method. The sample size was 60. In satisfaction in services domain, 25 participants gave the rating as high whereas for satisfaction of care and maintenance 26 participants rated high. It is found that there is no significant difference between both groups (ADIP and CSR) on challenges in services at 0.05 levels. The parental outlook presented in this study succors to develop a better understanding of parental needs and therefore gives ideas for improving services and support during the different stages of post-operative rehabilitation.

**Key words:** Satisfaction Level, ADIP, Cochlear Implant, CSR

## Introduction

Assistance to Disabled persons for purchasing / fitting of aids / appliances (ADIP) scheme is to assist the needy disabled persons in procuring durable, sophisticated and scientifically manufactured, modern, standard aids and appliances that can promote their physical, social and psychological rehabilitation, by reducing

the effects of disabilities and enhance their economic potential. The aids and appliances supplied under the Scheme shall conform to Bureau of Indian Standards (BIS) specifications to the extent possible. The scheme is implemented through implementing agencies such as the NGOs, National Institutes under this Ministry and ALIMCO.

In most developed nations, the rate of paediatric cochlear implantation (henceforth, CI) has increased to the point where it is now the predominant response to profound and, increasingly, severe childhood deafness. In India, approximately 63 million people, i.e. 6.3% of population have significant hearing loss (Viswambhar, 2015). According to the census of India, 2011 disability due to hearing loss accounts for 18.9% of the disable population. Hearing loss causes difficulties in the ability of understanding speech sounds and, hence, result in social and family withdrawal, low self-esteem isolation, loneliness, depression and irritability. All these factors affect the quality of life (QoL), for they impaired socialization and individual's participation in the group the person belong to sever and or bilateral profound sensorineural hearing loss has been long regarded as a change that does not allow the individual communicate or even identify environmental sounds such as alarms and siren, which limits their social activities. Currently, electrical inputs that stimulate the remaining nerve fibers of the cochlea.

The cochlear implant in children is becoming increasingly well established, particularly in terms of auditory and speech perception outcomes (Nikolopoulos et al.,1990; Allen et al.,1997), and speech production (Kelsay and Tyler 1996; Robbins et al.,1994). Success of paediatric cochlear implants also been documented in terms of language skills (Hasensteb and Toby,1991; Robbins et al.1994) and educational achievement (Selmi,1985). Cochlear implant is the most advanced and successful neural prosthesis developed to date. Cochlear implants can provide hearing in patients with damage to the sensory hair cells in their cochlea. . Given the need to integrate and assimilate so much information at a time when they are likely to be experiencing

heightened emotions, making decisions about cochlear implantation is often difficult and stressful for parents.

### **Need for the Study**

As technology and procedure in this field change rapidly, there is need for all implant programmes to monitor and audit their services, and revise policies and procedures as necessary. In the current study, we aim to assess directly parents'/carers' satisfaction with various aspects of our cochlear Implant programme, using both closed, forced choice questions and open questions to elicit individual opinion. One of the primary aims of the survey will be to assess whether the parents of the children feel they, and their child, are provided with enough information throughout the course of the programme, which is appropriate to their needs at different times.

For CIs to result in positive outcomes, parents' involvement and perception of the CI process is important, if not critical. However, there is relatively little known about parents' perceptions of habitation activities and satisfaction with the service delivery from professionals.

### **Explanation of Key Terms**

**Satisfaction Level-** For the present study, satisfaction level refers to the score obtained by parents of children with cochlear implant in researcher made tool in the domain of services and care and maintenance.

**ADIP Scheme-** Assistance to Disabled Persons for Purchase / Fitting of Aids and Appliances (ADIP) is a scheme initiated by the Ministry of Social Justice and Empowerment, Government of India. This scheme has been launched to provide assistance to disabled persons in obtaining standard aids and appliances in order to enhance their economic conditions.

**Cochlear Implant-** A cochlear implant is a small, complex electronic device that can help to provide a sense of sound to a person who is profoundly deaf or severely hard-of-hearing. It is use a sound processor that fits behind the ear. The processor captures sound signals and sends them to a receiver implanted under the skin behind the ear. The receiver sends the signals to electrodes implanted in the snail-shaped inner ear (cochlea).

**CSR Scheme-** CSR in India has gone beyond merely ‘Charity and Donations’. Corporate Social Responsibility (CSR) acknowledges the corporation’s duty that the corporation owes to the community within which it operates. It is a self-regulating business model that helps a company be socially accountable to itself, its stakeholders, Scheduled VII there is provision of aids and appliances to Divyangjan under ‘Promoting Health and Care including preventive health care’.

## **Aim of Study**

The purpose is to study the satisfaction level\_of parents availing post operative rehabilitation services under ADIP and CSR Scheme.

## **Objective:**

To study the level of satisfaction in services among the parents of children with cochlear implant availing post-operative rehabilitation services under ADIP and CSR Scheme.

## **Research Question**

What is the level of (h/m/l) satisfaction among parents of children with cochlear implant availing post-operative rehabilitation services under ADIP and CSR Scheme?

## **Review of Literature**

The choice to implant is also life altering and must be made without consulting the child. All parents want to do right by their child and would love to be assured that

their child will appreciate the decision to implant when she reaches adulthood. Of course, this assurance can never be given, and parents feel that they are flying blind when confronted with having to make such an important decision so early in the child's life. This also holds true for many of the other decisions facing parents regarding communication methodology and educational placement. The militancy of some segments of the deaf community against the cochlear implant and the passionate advocacy by the auralists do not make these decisions easier. Parents are often bombarded with competing advice as to how to proceed, and often feel as though the opinion of the last person they consulted is the right one (Luterman, 2003).

The philosophy of family-centered early intervention emphasizes families' strengths, the empowerment of parents to support their children's current and future learning and development, and the enhancement of parent-professional collaborative relationships (Bruder, 2000; Dunst, Trivette, Boyd, & Brookfield, 1994). If these are desired outcomes of early intervention programs, then, adopting an agentic perspective in practice and research is warranted. As illustrated in this study, action theory provides insight into the daily actions and processes of parents and children that foster the enactment of agency. Our view is that parents, in concert with important others (their children, family members, and professionals) take an active stance toward their parenting practices and the promotion of their children's outcomes following cochlear implantation. This understanding allows professionals working with families to consider parent promotion of child outcomes and related projects as intentional, goal-directed, and hierarchically organized system process. From the perspective of promoting families' strengths, parental projects can be viewed through a positive frame, by asking what allows parents to be motivated in their projects and to find meaningfulness in their actions (Young & Valach, in press).

Accounts by parents of children with cochlear implant have been of interest for some time. Yet previous studies examining parents' views and satisfaction regarding their children's outcomes following cochlear implantation (Archbold, Lutman,

Gergory, O’neill, and Nikolopoulos,2002, Campisi, James, Hayward, Blaser, and Papsin,2004; Incesulu et al.,2003; Nunes, Pretzlik, and Ilicak,2005; O’Neill, Lutman, Archbold, Gregory, Nikolopoulos,2004). These evaluations, generally using closed-format questionnaires, pertained to issue like children’s satisfaction with the implant’s outcomes for their child (Nikolopoulos, Lloud, Archbold, and O’Donoghue,2001; Richter et al.,2000; Zaidman-Zait and Most,2005)

## Methodology

The purpose of this research is to review the satisfaction level of parents of cochlear implant children under the scheme of ADIP-CSR. The method of study was a descriptive survey using a researcher-made tool having a three-point rating scale. The sample consists of 30 parents of cochlear implant children under ADIP-CSR scheme. Five experts working in the field of Deafness were asked to list out the major areas and sub-areas under challenges of cochlear Implant. As the list received from the experts, researchers developed tool accordingly in each area and sub-area with the parents’ consent, the researcher administered the tool, and data was collected using a survey method in Mumbai. The data gathered was analyzed in terms of qualitative analysis. Descriptive and Inferential statistics were used to analyze the data in the study. Means and standard deviations were used to analyze the distribution of the values of each item. t-test and one-way analysis of variance (ANOVA) along with post-hoc test was used to draw the inferences on stated hypotheses.

## Result and Discussions

**Table No. 1.1: Data with regard to ADIP Satisfaction in Services**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ADIP SatisInServ	30	.00	8.00	2.2000	2.29542

From the table No 1.1 it is clear that number of participants (N) was 30 Mean obtained is 2.2000 and Standard Deviation is 2.29542

**Table No. 1.2 : Data with regard to ADIP Satisfaction in Care and Maintenance**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ADIPSatisIn CM	30	.00	6.00	2.6000	1.61031

From the table No 1.2 it is clear that number of participants (N) was 30 Mean obtained is 2.6000 and Standard Deviation is 1.61031

**Table No. 2.1 : Data with regard to CSR Satisfaction in Services**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CSR SatisInServ	30	.00	6.00	2.5000	1.81469

From the table No 2.1 it can be stated that number of participants (N) was 30 Mean obtained is 2.5000 and Standard Deviation is 1.81469

**Table No. 2.2 : Data with regard to CSR Satisfaction in Care and Maintenance**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CSR SatisInCM	30	.00	6.00	3.6000	1.67332

From the table No 2.2 it can be stated that number of participants (N) was 30 Mean obtained is 3.6000 and Standard Deviation is 1.67332

## **Recommendations:**

### **For Government Agencies**

#### **Early Intervention-**

- Parents and advocacy groups suggested that the identification process needed to begin as early as possible in the child's life and certainly before school entry.
- Schools aware that as the identification and assessment process is often protracted, slippage could occur in the provision of appropriate supports for the individual child.

#### **Support services-**

- Regarding the range and level of supports available for children with special needs especially children with cochlear implant, participants raised a number of important issues.

### **For Researchers**

- Long-term studies are needed to assess health-related quality-of-life outcomes (both generic and disease-specific) in subjects with bilateral cochlear implantation.
- Long-term studies are needed to assess the complications and risks of bilateral cochlear implantation.
- Future research is needed to identify a time period needed for the sound localization, improved speech perception, and improved health-related quality-of-life after bilateral implantation.

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