



IMPACT ASSESSMENT REPORT

Funding of Projects for Fitment of Cochlear
Implants of 200 children with Hearing Impairments
- Kanpur

SUBMITTED BY
TATA INSTITUTE OF SOCIAL SCIENCES
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Introduction

“People with disabilities are vulnerable because of the many barriers that we face: attitudinal, physical and financial. Addressing these barriers are within our reach and we have a moral duty to do so.... But most important, addressing these barriers will unlock the potential of so many people with so much to contribute to the world.”

Stephen Hawking

As per Census 2011, in India, out of the 121 Cr population, about 2.68 Cr persons are ‘disabled’ which is 2.21% of the total population. Out of these 2.68 Cr, 19 % of the population are hearing impaired.

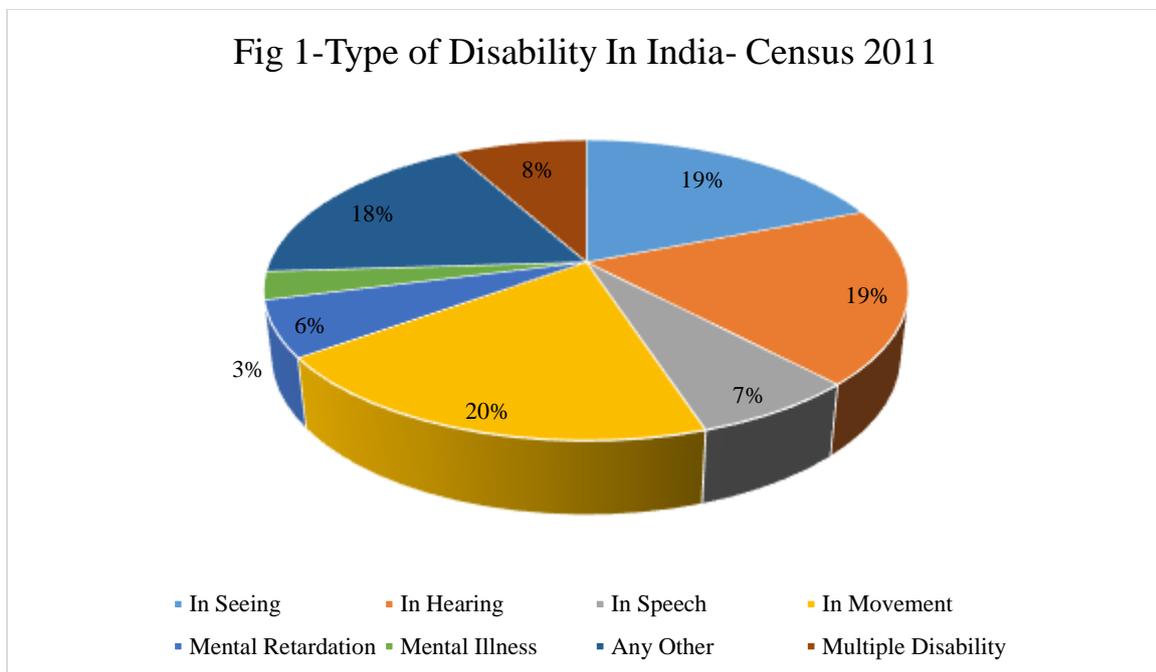


Fig 1- Type of Disability in India

Amongst the hearing impaired, over 35,000 youngsters require Cochlear Implant. Cochlear Implant is a Prosthetic Device, surgically implanted inside the Cochlea. It is beneficial for children and adult with severe to profound hearing loss.



Fig 2: Showing a Cochlear Implant Device



In order to support this section of the population, Ministry of Social Justice and Empowerment, Government of India (GoI) started ADIP (Assistance to Disabled Persons for Purchase/Fitting of Aids/Appliances) Scheme with the main objective to assist the needy disabled persons in procuring durable, sophisticated and scientifically manufactured, modern, standard aids and appliances that can promote their social, psychological rehabilitation by reducing the effects of disabilities and enhance their economic potential.¹ The scheme is implemented through implementing agencies which is given financial assistance for purchase, fabrication and distribution of such standard aids and appliances that are in conformity with the objectives of the scheme.

About the Project

For the hearing impaired specifically, the Government of India has made provision to sponsor 500 people under the ADIP Scheme, which is insignificant in contrast to the actual need. Hence ALIMCO made a proposal to Public Sector Undertakings and Corporate sectors requesting them to sponsor Cochlear Implant surgeries for children with profound hearing loss under their CSR project implemented by ALIMCO. ALIMCO contacted Airport Authority of India (AAI), Delhi with proposal requesting them to fund the surgery and implant for the children registered on the website of AYJNISHD. AAI and ALIMCO signed MoU in 2017 at Rajiv Gandhi Bhawan, New Delhi for conducting Cochlear Implant surgeries on PAN India under the CSR initiative of Airport Authority of India. Cochlear Implant surgeries were done through Ali Yavar Jang National Institute of Speech and Language Disabilities (Divyangjan), Mumbai under Department of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment, Government of India.



Image 1: ALIMCO premises

¹ <https://disabilityaffairs.gov.in/content/page/adip.php>

The Project objective was to assist the children in totally overcoming their hearing impairment, allowing them to hear and talk coherently and becoming fully independent to lead a normal and productive life.

Tata Institute of Social Sciences (TISS) has conducted the Impact Assessment of this project in October'23.

Study Objectives

The specific objectives of the Impact Assessment Study of the aforementioned project are as follows:

1. Conduct an Impact Assessment study to evaluate the impact of CSR Programmes
2. Suggest measures for effective implementation of CSR activities in the area under focus.

Scope of the Study

This study's scope includes assessing the impact of the aforementioned CSR Project implemented in the financial year 2018-19.

The scope of study has been organized in the following tasks

Task 1: Project Coordination

Task 2: Data collection by physically visiting the project locations and collecting data through interviews, FGDs of all the stakeholders along with Observation of all the infrastructures and activities. This data collection was done for the financial year 2018-19.

Task 3- Data Analysis the method of Content Analysis for Qualitative Data where coding was done manually.

Task 4- Report Writing

Methodology

Qualitative research method was used in the study.

Tools for Data Collection

1. **Face-to-Face Interviews:** Researchers conducted one-on-one interviews with different stakeholders- ALIMCO Senior Management, ENT Surgeon, other staff of Hospital and

Parents of beneficiaries (children who underwent cochlear implant). These interviews involved a structured questionnaire to gather specific information from all the stakeholders.



Image 2: TISS team during their interaction with Beneficiaries

2. **Physical Observation:** Non-Participant Observational Research was conducted to observe the attitude of stakeholders towards projects in addition to observation of infrastructure/activities. Researchers took detailed field notes during their observations and interactions. These notes captured contextual information, non-verbal cues, and other qualitative insights.

Study Limitations

As the Impact Assessment happened 2-3 years after completion of the surgeries, most of the beneficiaries were out of touch as they had changed their contact numbers. So, TISS team could just interact with parents of 5 beneficiaries.

Study Findings

1. Selection of Beneficiaries through online application

Ali Yavar Jung National Institute for the Speech & Hearing Disabilities (AYJNISHD), Mumbai, was the nodal agency for providing assistance in the matter. The Institute invited

application by issuing advertisements in newspapers (all India editions) and also through their website: www.adipcochlearimplant.in. Applicants had to apply based on advertisement/details on website to AYJNISHD, Mumbai. Cochlear Implant was procured by Artificial Limbs Manufacturing Corporation of India (ALIMCO), Kanpur and provided at the nominated hospitals. Surgery was done at the empanelled hospitals. A total of 219 hospitals are approved by the Government for conducting cochlear implant surgery.

2. Speech Therapy for three years done post-surgery

Post-surgery speech therapy helps in developing clear communication of children. Initially it was done for 2 years but now it has increased to 3 years. As per the surgeon, during this session, government gives the family INR 200 to attend the session completely and also travel cost expenses is taken care by the hospital and also by government.

3. All the surgeries were successful

As per ALIMCO and Hospital staff, surgeries of all the 200 children were successful.



Image 3: Showing Cochlear Implant Device of a Beneficiary

4. 4 out of 5 beneficiaries could hear completely

Four out of 5 beneficiaries mentioned that their children could hear clearly, while one mentioned that the hearing is partially clear. 2 of the parents mentioned that their children's speech was not clear because they couldn't complete all speech therapy sessions. One out of these two beneficiaries mentioned that staying at Kanpur for 3 years only for the speech therapy was difficult as they were not from that place.

Recommendation

1. [Completion of Speech Therapy can only lead to this project being impactful](#)
Successful completion of Implant Surgery is a very important indicator of the outcome of such projects. However, the project can only be considered successful if the children completes speech therapy and is able to communicate clearly. In order to make sure that all the project resources utilized leads to an impactful end, engaging with speech therapists at different locations across India might be considered so that parents can get their children's therapy done at a place that is near their hometown which is convenient for all the stakeholders.

2. [Increasing the target beneficiaries](#)

As per ALIMCO report, around 10,000 children need Cochlear Implants annually which is minuscule as compared to the provision of 500 numbers made under ADIP Scheme. Thus increasing the target beneficiaries can increase the number of children leading to a better life.

3. [Awareness on mandatory hearing test of new born for early detection](#)

In most of the cases, hearing impairment is identified only when the child reaches a speaking age. If there is an increased awareness on new-born hearing screening, such impairment can be identified at an early age and accordingly treatment may be provided earlier.

4. [Engagement with Cochlear Implant's battery or other accessories provider for poor children](#)

As mentioned by all the parents, implant machine warranty was for three years. After the warranty expires, if the processor goes wrong, it can be purchased for around INR 50,000 to 60,000 which is a very big amount for poor families. Also, after three years they have to pay for mapping, consultation charges. If an engagement can be done with the Implant provider where at least partial funding can be sponsored by the funders, it can prove to be very beneficial for children.

[Appendix](#)

Funding of Projects for Fitment of Cochlear Implants of 200 children with Hearing Impairments (ALIMCO)



For Senior Management from Artificial Limbs Manufacturing Corporation of India
Name- Mr Pankaj, GM and S Sengupta
Designation- Assistant Manager Logistics, GM, Manager Logistics Contact-
Location- Kanpur
Date- 12 Oct 2023
<p>1. Brief history of the project? (<i>When and how did it start? Did AAI contact ALIMCO or vice versa?</i>)</p> <p>This project is based on ADBI scheme. https://disabilityaffairs.gov.in/content/upload/uploadfiles/files/ContinuationofADIPScheme2017.pdf</p> <ul style="list-style-type: none"> • Major Player in facilitating this scheme is ALIMCO. • Coming under Ministry of Social Justice and Empowerment • Refer this doc for more info: https://disabilityaffairs.gov.in/upload/uploadfiles/files/S_No_%2011%20Brief%20on%20Cochler%20Implant.pdf <p>According to census estimates, over 35,000 youngsters in India require Cochlear Implants each year. The Government of India has made provision to sponsor 500 people under the ADIP Scheme, which is insignificant in contrast to the actual need. Hence ALIMCO made a proposal to Public Sector Undertakings and Corporate sectors requesting them to sponsor Cochlear Implant surgeries for children with profound hearing loss under their CSR project implemented by ALIMCO. ALIMCO contacted the AAI, Delhi with proposal requesting them to fund the surgery and implant for the children registered on the website of AYJNISHD. AAI and ALIMCO signed MoU in 2017 at Rajiv Gandhi Bhawan, New Delhi for conducting Cochlear Implant surgeries on PAN India under the CSR initiative of Airport Authority of India. Cochlear Implant surgeries are done through Ali Yavar Jang National Institute of Speech and Language Disabilities (Divyangjan), Mumbai under Department of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment, Government of India.</p>
<p>2. What is the objective/s of the project?</p> <ul style="list-style-type: none"> • To assist the children in totally overcoming their hearing impairment, allowing them to hear and talk coherently and becoming fully independent to lead a normal and productive life. • Project is for implanting Cochlear Implant for 200 children.
<p>3. Who are the Target Beneficiary? What is the number of target beneficiary?</p>

<p>a. Yes b. No</p>
<p>13. Out of 200, how many children are able to hear after few months of Implant? a. Completely b. Partially c. Not at all</p>
<p>14. Positives and Limitations of the project Positive is: children starts hearing Negative is: the number of children is very high and the surgeries has to conduct more..Funding is thre problem. And the maintenance of the machine by poor families is a challenge.</p>
<p>15. Any scope for further improvement of the project Increase the number of targeted group and social stigma and aversion towards surgery.</p>
<p>16. Do you have any suggestion to ensure sustainability of this project? <i>(Please probe if some engagements/resources can be arranged for maintenance of the implant as well as hearing therapies after the surgery)</i> No point of sustainability...since most of the beneficiaries are from BPL.</p>
<p>For Doctor/Surgeon</p>
<p>Name- DR. Rohit Mehrotra</p>
<p>Designation- Surgeon Contact-</p>
<p>Hospital/Location- Mehrotra ENT Hospital</p>
<p>Date- 12-10-2023</p>
<p>1. How did you identify the beneficiary of this project? Hospital conducts the medical camps in few states including UP, Bihar, Uttarakhand, Chhattisgarh in partnership with the various state government and disability department. And also, ALIMCO provides a number of beneficiary details. And accordingly the surgeries are conducted.</p>
<p>2. If ALIMCO provided you the beneficiary, did you get a hearing test again or was it based on the test reports that the patient already had? Yes. The hospital will undergo all the test before surgery.</p>
<p>3. If the hearing test was done again from your end, what test was done? a. BERA (Brain Stem Evoked Response Audiometry)</p>

b. OAE (Otoacoustic Emissions)

c. Any other

4. Did all the 200 beneficiaries have bilateral hearing loss or were there cases of unilateral hearing loss too?

In this hospital around 60-70 only done.

5. Outcome-In how many children the implant surgery was done?

Boys-

Girls-

(They are yet to give this details)

6. In which Hospital was the Implant done?

Same hospital

7. Were all the Implant Surgery Successful?

a. Yes

b. No

If no, please explain

8. Do you or your hospital have any role after the implant surgery? Like counselling or hearing therapy?

a. Yes

b. No

If yes, please explain your role. If no, how are the parents/children supposed to take counselling or hearing therapy?

Post surgery speech therapy. Initially it was for 2 years and now it is 3 years. During this session government will give the family Rs. 200 each to attend the session completely.. and the travel cost is also taken care by the hospital and also by government.

9. Out of 200, are you aware, how many children are able to hear after few months of Implant?

a. Completely

b. Partially

c. Not at all

All surgeries done in this hospital was successful.

Please explain.

14. Any scope for further improvement of the project Provide funding for the post warranty period also.
15. Do you have any suggestion to ensure sustainability of this project? <i>(Please probe if some engagements/resources can be arranged for maintenance of the implant as well as hearing therapies after the surgery)</i> Yeah continuous funding. Because there are children who uses the device only while studying because they cannot afford to buy the batteries. Also, if at all the processor is not working, cost of new processor is 50-60k which they cannot afford. Implant warranty is for 10 years but for processors only 3 years.

Funding of Projects for Fitment of Cochlear Implants of 200 children with Hearing Impairments (ALIMCO)



For Parents of beneficiaries (Can be physical or digital interview)
1. Date-12 th October 2023
2. Name- Taramati Maurya
3. Relationship with child- Mother
4. Location- Mau
5. Contact Number- 9721675488
6. Child's Name- Aditya Maurya
7. Child's gender- Male
8. Child's Age (In Years at present)- 7 years (6/6/2016)
9. Family Income (Per Annum in INR)- 50,001-1,20,000
10. Total number of family members – 10
11. Father's Occupation- Painter
12. Mother's Occupation- Homemaker
13. Father's Education (Completed)- Inter
14. Mother's Education (Completed)- Graduation
15. Religion- Hindu
16. Caste – Maurya
17. When was Cochlear Implant done? (Date)- 2016
18. Age of your child (In years) during the implant- 3-4 years
19. In which Hospital was the Implant done? Mehrotra ENT Hospital
20. How and when did you get to know that your child is hearing impaired? When he was 5 months old. No response from his side to any sound.
21. How did you come to know about the Implant?- Anganwadi Camp
22. Were you aware of the type of Implant that was to be provided to the child?- Yes, Cochlear brand. Doctor informed us about the same
23. Was Hearing Therapy session provided to your child after the Implant? Speech Therapy was provided for free of cost.
24. Can your child hear after the Implant?- Completely
25. Does your child lead a normal life after the implant?- Yes completely.

26. Are you satisfied with the Implant? Yes
27. Did you pay for the treatment? No
28. If the answer to above query is a or b, then How did you manage the remaining payment? - NA
29. Any limitations/challenges in getting the implantation done? No, Doctor and staff were helpful. Explained the procedure to us perfectly.
30. Any suggestion for further improvement of this project. Post Care support for long term is required. Battery is costly.
31. Any further expectations from AAI (Funding Agency)? Post Care support for long term is required.

Funding of Projects for Fitment of Cochlear Implants of 200 children with Hearing Impairments (ALIMCO)



For Parents of beneficiaries (Can be physical or digital interview)
1. Date-12 th October 2023
2. Name- Sangeeta
3. Relationship with child- Mother
4. Location- Kanpur
5. Contact Number- 8840797862
6. Child's Name- Anushka
7. Child's gender- Female
8. Child's Age (In Years at present)- 6 years (19/11/2017)
9. Family Income (Per Annum in INR)- Below 50,000
10. Total number of family members – 5
11. Father's Occupation- Driver
12. Mother's Occupation- Homemaker
13. Father's Education (Completed)- Higher Secondary Education
14. Mother's Education (Completed)- Senior Secondary Education
15. Religion- Hindu
16. Caste – Does not wish to specify
17. When was Cochlear Implant done? (Date)- 26th September 2020
18. Age of your child (In years) during the implant- 3-4 years
19. In which Hospital was the Implant done? Mehrotra ENT Hospital
20. How and when did you get to know that your child is hearing impaired? When she was 6 months old. No response from her side to any sound.
21. How did you come to know about the Implant? - Anganwadi Camp
22. Were you aware of the type of Implant that was to be provided to the child? - Yes, Cochlear brand. Doctor informed us about the same
23. Was Hearing Therapy session provided to your child after the Implant? Speech Therapy was provided for free of cost for weekly trice
24. Can your child hear after the Implant? - Completely
25. Does your child lead a normal life after the implant? - Yes completely.
26. Are you satisfied with the Implant? Yes
27. Did you pay for the treatment? No
28. If the answer to above query is a or b, then How did you manage the remaining payment? - NA
29. Any limitations/challenges in getting the implantation done?

No, Doctor and staff were helpful. Explained the procedure to us perfectly.
30. Any suggestion for further improvement of this project. Machine warranty is only for three years, after three years we will have to pay for mapping, consultation charges and also the battery of the machine is very costly. If post warranty period support or long term support will be of great help. If post warranty period support or long term support is provided it will be of great help.
31. Any further expectations from AAI (Funding Agency)? Post Care support for long term is required.

Funding of Projects for Fitment of Cochlear Implants of 200 children with Hearing Impairments (ALIMCO)



For Parents of beneficiaries (Can be physical or digital interview)
1. Date-12 th October 2023
2. Name-Gaurav Verma
3. Relationship with child-Father
4. Location- Farukhabad
5. Contact Number-9707224506
6. Child's Name-Dev Varma
7. Child's gender- Male
8. Child's Age (In Years at present)- 11 years
9. Family Income (Per Annum in INR)- Below 50,000
10. Total number of family members – 6
11. Father's Occupation- Daily wage earner
12. Mother's Occupation-Homemaker
13. Father's Education (Completed)- Higher Secondary Education
14. Mother's Education (Completed)- Illiterate
15. Religion- Hindu
16. Caste – Verma
17. When was Cochlear Implant done? (Date)- 31/1/2020
18. Age of your child (In years) during the implant- 5-6 years
19. In which Hospital was the Implant done? Mehrotra ENT Hospital
20. How and when did you get to know that your child is hearing impaired? When he was 3 years old and was unable to respond to sound or speak anything. After testing we found he cannot hear. We did his admission in the school for differently abled. There the school staff informed us about this hospital so we came here
21. How did you come to know about the Implant?- Others(through school)
22. Were you aware of the type of Implant that was to be provided to the child?-No But the doctor here explained the procedure and how the implant will work. But we were not aware of the brand of the implant.
23. Was Hearing Therapy session provided to your child after the Implant? Speech Therapy was provided to us after the implant which was free of cost for two years.
24. Can your child hear after the Implant?-Partially. He can hear only when we speak loudly.
25. Does your child lead a normal life after the implant?-Partially. He is unable to speak properly also cant hear properly. The one reason because we could not complete the speech therapy. Travelling from Farukhabad was difficult for us.

Staying here was the option which we did but only for two years. We were not able to afford that also.
26. Are you satisfied with the Implant? Yes, atleast he can hear us now
27. Did you pay for the treatment? No
28. If the answer to above query is a or b, then How did you manage the remaining payment? - NA
29. Any limitations/challenges in getting the implantation done? No, Doctor and staff were helpful. Explained the procedure to us perfectly.
30. Any suggestion for further improvement of this project. They should extend the therapy. Battery cost is also high. We use it only while studying and not all the times.
31. Any further expectations from AAI (Funding Agency)? Post three years care should also be taken care of. Because we are unable to afford the expenses of the battery. Post warranty how we will be able to manage other things.

Funding of Projects for Fitment of Cochlear Implants of 200 children with Hearing Impairments (ALIMCO)



For Parents of beneficiaries (Can be physical or digital interview)
1. Date-12 th October 2023
2. Name- Manju Devi
3. Relationship with child- Mother
4. Location- Mouhar
5. Contact Number-
6. Child's Name- Priyanka
7. Child's gender- Female
8. Child's Age (In Years at present)- 11 years (26/6/2015)
9. Family Income (Per Annum in INR)- Below 50,000
10. Total number of family members – 22
11. Father's Occupation- Works in Salon
12. Mother's Occupation- Homemaker
13. Father's Education (Completed)- Higher Secondary Education
14. Mother's Education (Completed)- Senior Secondary Education
15. Religion- Hindu
16. Caste – Verma
17. When was Cochlear Implant done? (Date)- 31/1/2020
18. Age of your child (In years) during the implant- 4-5 years
19. In which Hospital was the Implant done? Mehrotra ENT Hospital
20. How and when did you get to know that your child is hearing impaired? When she was 4 years old we got her tested at Gopalganj hospital that time we understood she is having hearing issue.
21. How did you come to know about the Implant? - Others(through Gopalganj hospital)
22. Were you aware of the type of Implant that was to be provided to the child? - No
23. Was Hearing Therapy session provided to your child after the Implant? Speech Therapy was provided to us after the implant which was free of cost for two years.
24. Can your child hear after the Implant? - Completely
25. Does your child lead a normal life after the implant? - Yes completely

26. Are you satisfied with the Implant? Yes, atleast he can hear us now
27. Did you pay for the treatment? No
28. If the answer to above query is a or b, then How did you manage the remaining payment? - NA
29. Any limitations/challenges in getting the implantation done? No, Doctor and staff were helpful. Explained the procedure to us perfectly.
30. Any suggestion for further improvement of this project. They should provide speech therapy for atleast 3-4 years.
31. Any further expectations from AAI (Funding Agency)? Post three years care should also be taken care of. Because we are unable to afford the expenses of the battery. Post warranty how we will be able to manage other things.

Funding of Projects for Fitment of Cochlear Implants of 200 children with Hearing Impairments (ALIMCO)



For Parents of beneficiaries (Can be physical or digital interview)
1. Date-12 th October 2023
2. Name- Pinki
3. Relationship with child- Mother
4. Location- Raniya
5. Contact Number- 9076622615
6. Child's Name- Satyam
7. Child's gender- Male
8. Child's Age (In Years at present)- 7 years
9. Family Income (Per Annum in INR)- Below 50,000
10. Total number of family members – 5
11. Father's Occupation- Labourer
12. Mother's Occupation- Homemaker
13. Father's Education (Completed)- Senior Secondary Education
14. Mother's Education (Completed)- Primary Education
15. Religion- Hindu
16. Caste – Did not wish to specify
17. When was Cochlear Implant done? (Date)- 2019
18. Age of your child (In years) during the implant- 3-4 years
19. In which Hospital was the Implant done? Mehrotra ENT Hospital
20. How and when did you get to know that your child is hearing impaired? When at the age child starts to respond to different sounds, he could not. I saw children of his age who were responding to the sounds. That's when I understood something is not right. So I shared the same with my brother. He asked me to visit this hospital and get is checked. He also told me about the implants that is provided here for free of cost.
21. How did you come to know about the Implant? - Others(through her brother)
22. Were you aware of the type of Implant that was to be provided to the child? - No But the doctor here explained the procedure and how the implant will work. But we are not aware of the brand of the implant.
23. Was Hearing Therapy session provided to your child after the Implant? Speech Therapy was provided to us after the implant which was free of cost.
24. Can your child hear after the Implant? - Completely

25. Does your child lead a normal life after the implant? - Partially. He is unable to speak properly. But that is because we could not complete his speech therapy.
26. Are you satisfied with the Implant? No, the battery is costly and discharges in three days
27. Did you pay for the treatment? We did not pay for the surgery and the implant machine. However we paid for the scanning and tests.
28. If the answer to above query is a or b, then How did you manage the remaining payment? - For scanning and test we paid from our savings and also doctor helped us and agreed to take the payments in instalment
29. Any limitations/challenges in getting the implantation done? No, Doctor and staff were helpful. Explained the procedure to us perfectly.
30. Any suggestion for further improvement of this project. Speech therapy should be provided for more than three years. Machine warranty is only for three years, after three years we will have to pay for mapping, consultation charges and also the battery of the machine is very costly. If post warranty period support or long term support is also required.
31. Any further expectations from AAI (Funding Agency)? Post three years care should also be taken care of. Because we are unable to afford the expenses of the battery. He puts machine while going to school or while studying and then we remove it to save the battery.