RESEARCH AND PUBLICATIONS DURING 2022-23

Research projects have been formulated with the goal of enhancing the quality of rehabilitation services by developing service modules and diagnostic tests that can be adopted or replicated by other organizations.

System: In accordance with the Institute's bye-laws, the Academic Committee is established and its members are duly sanctioned by the Executive Council. The Academic Committee plays a pivotal role in reviewing all Institute projects and academic initiatives, including the evaluation of completed project reports.

6.1 ONGOING PROJECTS

i) Development of Accessible E-Content on Basic Concepts in Environmental Science Using Multi-Modal Communication Approach

Principal Investigator	- Dr. Gayatri Ahuja
Co-Investigator	- Dr. Mathew Martin
Duration of the Project	- 13 Months
Date of Sanction	- July, 2022
Budgetary Provision	- Rs. 9,00,000/-

Objectives of the Project –The project aims to create e-learning content that is both accessible and pedagogically suitable. This content is anticipated to enhance the comprehension of environmental concepts among deaf students, with a focus on utilizing a multimodal communication approach.

Progress of the Project –The project has advanced by selecting ten fundamental environmental science concepts from Maharashtra state board Marathi medium textbooks. Pre-tests for each of these concepts have been developed and subsequently approved by experts. Furthermore, Multi-Modal Lessons have been created for these ten concepts and are currently undergoing content validation.

ii) Adaptation of Apraxia Battery for Adults in Hindi and Telugu

Principal Investigator	- Dr. Gauri Shanker Patil
Duration of the Project	- 12 Months
Date of Sanction	- 1st Feb., 2021
Budgetary Provision	- Rs. 4,55,000/-

Objectives of the Project – To develop tool to diagnose apraxia of speech in Hindi and Telugu speakers with brain damage and to determine severity of apraxia of speech using the developed tool.

Progress of the Project – The review of literature is completed. Data Collection is in process in Hindi.

iii) Profiling of Students of AYJNISHD(D)

Principal Investigator	- Dr. Dr. Rajeev Jalvi
Co-investigators	- Dr. Raju Arakh Dr. Gayatri Ahuja
Duration of the Project	- 6 Months

Date of Sanction	- 15th September, 2021
Budgetary Provision	- Rs. 25,000/-

Objectives of the Project – (1) To profile the biographic details of rehabilitation professionals passed out in the last five academic years (2015-2020) from AYJNISHD (2) To profile the employment status of rehabilitation professionals passed out in the last five academic years (2015-2020) from AYJNISHD (3) To profile the professionals activities the rehabilitation professionals are undertaking.

Progress of the Project – : Review of the literature completed, tool validation is done. Students (B.Ed and D.Ed) data related to phone number and email id is Completed. Students (Diploma courses, B.ASLP, M.ASLP) data related to phone number and e-mail id is in process.

iv) Development of a module for parent empowerment for rehabilitation of children with hearing impairment

Principal Investigator	- Dr. Sadhana Relekar
Co-investigators	- Dr. Aparna Nandurkar
	- Mrs. Gouri Telang
Duration of the Project	- 12 Months
Date of Sanction	- 6th March 2020
Budgetary Provision	- Rs. 1,30,000/-

Objectives of the Project – To develop a module for the parents to gain knowledge about - (a) basic concepts to understand type and degree of hearing loss and its effect on their child's speech and language development, education, psychosocial development. Understand the parent's role in overall development of their child with hearing impairment (b) Hearing aids and advances in amplification (c) Government schemes and facilities available for PwHI (d) What is auditory –verbal therapy, how to plan activities for auditory training and speech and language development.

Outcome of the Project – Module is uploaded on the institute website.

6.2 COMPLETED PROJECTS

i) Development of a curricular framework for cross-disability early Identification cum Intervention and preparatory school

Principal Investigator	- Dr. Suni Mathew & Smt. Farida Lambe
Co-investigators	- Mrs. Poonam Mhatre
Duration of the Project	- 6 Months
Date of Sanction	- December, 2021
Budgetary Provision	- Rs. 15,40,000/-

Objectives of the Project – To develop a curricular framework for early intervention practitioners and parents for cross-disability early intervention and school readiness of children below 3 years (PEHEL) and those between 3 to 6 years (NIPUN Inclusive).

Progress of the Project – Handbook on curricular framework for cross-disability early identification cum intervention and preparatory school is ready for use.

ii) Development of module on early listening and communication skills for children with Cochlear implant under ADIP Scheme

Principal Investigator	-	Mrs. Ravli Mathur
Co-investigators	-	Dr. Gayatri Ahuja
Duration of the Project	-	12 Months
Date of Sanction	-	18th October 2020
Budgetary Provision	-	Rs. 5,55,500/-

Objectives of the Project – To develop an auditory verbal therapy module and conduct field testing of developed module to collect feedback on content validity and revise the module based on the feedback

Progress of the Project – The Project came up with an early listening and communication skills module which will be uniformly applied to all the cochlear implant children under ADIP scheme for therapy across the country. This module contains details about the therapy and age specific goal with relevant activities of four different domains i.e. Audition, Speech Language and Cognition. This module will provide uniformity in the therapy of children with cochlear implants and their reports and discussions among the professionals.

iii) Multistage standardization of Beraphone and OAE on Neonates

Principal Investigator	-	Mr. Indranil Chatterjee
Co-investigators	-	Dr. Suman Kumar
		Dr. Sujoy Makar
		Ms. Pamela Samaddar
		Mr. Palash Datta
Duration of the Project	-	June, 2021 to May, 2022
Date of Sanction	-	June, 2021
Budgetary Provision	-	Funded by Maico, Germany

Objectives of the Project –

1. To develop protocol to measure Beraphone (AABR) and OAE on Neonates in well baby nursery in various hospitals from Kolkata
2. To develop protocol to measure Beraphone (AABR) and OAE on Neonates in NICU
3. To compare Parameters of BERAPHONE and OAE on both the groups
4. To establish the outcome of the measures and the effect size

Outcome of the Project –

1. AABR (BERAPHONE) and OAE have good sensitivity and specificity to predict normal hearing and hearing impaired neonates
2. Large effect size of this study contributes to the field of pediatric Audiology and to facilitate early identification arena of measurement
3. It can also detect ANSD neonates and neonates with auditory maturation delay effectively.

6.3 DISSERTATIONS

Each year, students pursuing MSc in Audiology, MASLP, and M.Ed in Special Education (HI) engage in research as a mandatory component of their coursework. They undertake dissertation work in the fields of Audiology, Speech-Language Pathology, and Special Education. In the year covered by this report, a total of 50 dissertations were completed by the students, and below, you will find the titles of these dissertations along with the names of the students and their respective guides.

M.Sc. (Audiology) at AYJNISHD(D), Mumbai

1. Comparison of cervical and ocular vestibular evoked myogenic potential in adults with normal hearing and severe to profound sensorineural hearing loss

Name of the Student : Mr. Abhimanu
Name of the Guide : Dr. S.B. Rathna Kumar

2. A study of the phonological loop of working memory and Event related Potentials (P300) in normal hearing and hearing impaired Adults

Name of the Student : Mr. Archisman Shubhadarshan
Name of the Guide : Mr. Mohammad Shamim Ansari

3. Awareness about hearing loss and hearing health among MBBS and BSc Nursing students

Name of the Student : Mr. Arolkar Aditya
Name of the Guide : Dr. Aparna Nandurkar

4. Communication and language development in children in the age range of 6-10 years who received cochlear implantation at the age between 4-8 years

Name of the Student : Ms. Baxi Suvarna
Name of the Guide : Mr. Mohammad Shamim Ansari

5. Normative data for Vestibular Evoked Myogenic Potential in adults

Name of the Student : Ms. Chandani Prabha
Name of the Guide : Dr. Rajeev Jalvi

6. Knowledge, attitudes and practices of Paediatricians and Gynaecologists regarding Newborn Hearing Screening

Name of the Student : Ms. Dipika Behera
Name of the Guide : Dr. Aparna Nandurkar

7. Adaptation and translation of Paediatric Hearing Impaired Caregivers Experience (PHICE) for comparison of stress levels among mothers of early and late coclear implanted children

Name of the Student : Ms. Dudhbale Komal
Name of the Guide : Dr. S.B. Rathna Kumar

8. P300 measures in persons with normal hearing and hearing loss in the age range of 40-60 years

Name of the Student : Ms. Gaiwale Uneza
Name of the Guide : Mr. Mohammad Shamim Ansari

9. Parental perspective about barriers in aural habilitation of children with hearing impairment in Manipur

Name of the Student : Ms. Gurumayum Soniya Devi
Name of the Guide : Mrs. Ravali Mathur

10. Awareness of Music Induced Hearing loss among professional Disc Jockeys : A survey

Name of the Student : Mr. Kishor Kumar Majhi
Name of the Guide : Dr. Rajeev Jalvi

11. Awareness of Vestibular disorders and its management among different Allied Health Professionals : A survey

Name of the Student : Ms. Lakhitha S.
Name of the Guide : Dr. Rajeev Jalvi

12. Comparison of listening effort in Marathi speaking adolescents with normal hearing and unilateral cochlear implant

Name of the Student : Ms. Prabhu Shivani Mahesh
Name of the Guide : Dr. Aparna Nandurkar

13. Awareness about Noise Induced Hearing Loss and use of Ear protective devices among marble cutting workers

Name of the Student : Mr. Rahul Somwanshi
Name of the Guide : Dr. S.B. Rathna Kumar

M.Sc. (SLP) at RC, Kolkata

1. Impact of Applications of Bhramari Pranayama and Tinnitus Retraining Therapy and both in Patients With Chronic Subjective Tinnitus

Name of the Student : Ms. Srishti Jain
Name of the Guide : Mr. Indranil Chatterjee

2. A Study on The Effect of Hearing Age and Duration of Intervention on ESRT In Children with Cochlear Implant

Name of the Student : Ms. Yashika Tyagi
Name of the Guide : Mr. Indranil Chatterjee

3. Validation of Dizziness Handicap Inventory in Hindi

Name of the Student : Ms. Prerana
Name of the Guide : Mr. Indranil Chatterjee

4. Adaptation of Musicians' Hearing Handicap Index in Hindi

Name of the Student : Ms. Simran
Name of the Guide : Mr. Suman Kumar

5. A Study on Impact of Tinnitus Masking on Psychophysical and Tinnitus Tuning Curve in Participants with Hearing Impairment Suffering from Severe Tinnitus

Name of the Student : Ms. Meghna Hens
Name of the Guide : Mr. Indranil Chatterjee

6. Development of Screening Tool for Adults with Apraxia of Speech

Name of the Student : Ms. Sanghmitra Dey
Name of the Guide : Mr. Suman Kumar

7. Transadaptaion of Boston Diagnostic Aphasia Examination (Auditory Comprehension) in Bangla

Name of the Student : Mr. Krishna Kali Banerjee
Name of the Guide : Mr. Suman Kumar

8. Transadaptaion of Boston Diagnostic Aphasia Examination (Conversational and Expository Speech and Oral Expression)

Name of the Student : Ms. Shalini Saha
Name of the Guide : Mr. Suman Kumar

9. Normative for Motor Speech Profile in Bangla-Speaking Adults

Name of the Student : Mr. Iman Malakar
Name of the Guide : Mr. Suman Kumar

10. A Study on Cervical and Ocular Vestibular Evoked Myogenic Potential Measures in Jugglers

Name of the Student : Mr. Samir Kusali
Name of the Guide : Mr. Indranil Chatterjee

11. A study on Tongue-Jaw Coupling Acoustics in Bangla Speakers

Name of the Student : Mr. Rohit Bor
Name of the Guide : Mr. Suman Kumar

12. Development and Standardization of Word in Noise Test in Hindi

Name of the Student : Ms. Shubhangi Sonam
Name of the Guide : Mr. Indranil Chatterjee

M.Sc. (Audiology) at RC, Secunderabad

1. Trans adaptation and standardization of Tinnitus Handicap Inventory in the Punjabi language

Name of the Student : Mr. Gurupinder Singh
Name of the Guide : Dr. Gouri Shankar Patil

2. Efficacy of sound therapy using Smartphone application in adult tinnitus patients

Name of the Student : Ms. Sakshi Singh Singh
Name of the Guide : Mr. B. Srinivasrao

3. Susceptibility to cochlear damage observed in individuals exposed to loud recreational sounds across different blood groups

Name of the Student : Ms. Ankita More
Name of the Guide : Mr. B. Srinivasrao

4. Assessing Parents Views and Experiences with paediatric cochlear implanted child: A Questionnaire Based Comparative Study

Name of the Student : Ms. Akhilashree Mone
Name of the Guide : Dr Aparna Ravichandran

5. Comparing Gap Detection Threshold in individuals with Cochlear implantation in slim straight and slim modiolar electrode array

Name of the Student : Ms. Ch. Ramya
Name of the Guide : Dr Aparna Ravichandran

6. Trans adaptation and validation of APHAB QUESTIONNAIRE in Telugu Language and comparison among middle age vs older age hearing aid users

Name of the Student : Mr. Gurupinder Singh
Name of the Guide : Dr Aparna Ravichandran

7. Occupational Hearing Loss Among Call Center Operators

Name of the Student : Ms. K. Priyanka
Name of the Guide : Dr. Gouri Shankar Patil

8. Trans adaptation and standardization of Tinnitus Primary Function questionnaire in Telugu

Name of the Student : Ms. K. Neha
Name of the Guide : Dr Aparna Ravichandran

9. Trans adaptation and development of Multiple Activity Scale for Hyperacusis (MASH) in Telugu Language

Name of the Student : Ms. Soumyakrishna M.
Name of the Guide : Dr. Gouri Shankar Patil

10. Knowledge Attitude and Practice of Industrial Workers towards hearing loss

Name of the Student : Mr. Abhijeet Kumar
Name of the Guide : Mr. B. Srinivasrao

11. Auditory working memory in individuals with and without hypertension

Name of the Student : Ms. Aksheya Jeyasri
Name of the Guide : Mr. B. Srinivasrao

12. Assessment of music perception and enjoyment in adult hearing aid users using Murgol questionnaire

Name of the Student : Mr. Aayush Semwal
Name of the Guide : Dr Aparna Ravichandran

M.Ed. (Special Education – Hearing Impairment), AYJNISHD, Mumbai

1. Perspective of parents toward open schooling of children with disabilities at secondary level

Name of the Student : Mr. Abhishek Anand
Name of the Guide : Dr. Suni Mathew

2. Foundational Literacy of grade 1 children with and without hearing impairment studying in special and mainstream schools

Name of the Student : Ms. Deeksha Katyura
Name of the Guide : Dr. Suni Mathew

3. The perception of special educators towards the role of audiologists and speech language pathologists in educational management of children with hearing impairment

Name of the Student : Mr. Dilnisar Shaikh
Name of the Guide : Dr. Rajeev Jalvi

4. Exploring the level of awareness and participation in sports rehabilitation among individuals with hearing impairment in Mumbai

Name of the Student : Ms. Himangi Jogale
Name of the Guide : Dr. Rajeev Jalvi

5. Resilience and coping Mechanism of teachers working in special and mainstream schools

Name of the Student : Ms. Mousumi Raysingh
Name of the Guide : Dr. Gayatri Ahuja

6. Awareness among special educators in handling aids and appliances (hearing aids and cochlear implant) for children attending special/ inclusive school

Name of the Student : Ms. Namrata Kadam
Name of the Guide : Dr. Gayatri Ahuja

7. Professional challenges of special educators in educating divyangjan children in special schools for deaf and hard of hearing

Name of the Student : Mr. Parmar Mayank Kumar
Name of the Guide : Dr. Gayatri Ahuja

8. A survey on the utilization of unique disability identity card for availing concessions and facilities among deaf and hard of hearing

Name of the Student : Mr. Parmjeet
Name of the Guide : Dr. Raju Arakh

9. Study of self concept and self esteem of children with hearing impairment studying at secondary level in inclusive and special school

Name of the Student : Ms. Parul Kumar
Name of the Guide : Mr. Md. Shamim Ansari

10. Attitudes of pre-service and in-service regular school teachers towards inclusion of students with hearing impairment- A comparative study

Name of the Student : Mr. Pathan Tofik Khan
Name of the Guide : Dr. Aparna Nandurkar

11. Autonomy of special and mainstream school teachers for educating children with hearing impairment

Name of the Student : Ms. Rakshanda Thakur
Name of the Guide : Dr. Gayatri Ahuja

12. Achievement of emotional literacy among deaf adults

Name of the Student : Mr. Tinkal Thakor
Name of the Guide : Dr. Gayatri Ahuja

13. Perspective of parents toward bonding of deaf and hard of hearing children with early childhood education centres.

Name of the Student : Mr. Visano Mekro
Name of the Guide : Dr. Suni Mathew

6.4 PUBLICATIONS

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2. Ahuja, G. (2023). Introduction to the Education of Deaf & Hard of Hearing Children. Kanishka Publishers. ISBN 978-93-91450-19-9.
3. Ahuja, G. (2023). Vishesh Vidhyalaya Ki Kaksha Me Adhyan Ki Sugamyata Ke Prati Shravan Baadhit Vidhyarthiyo Ki Ray. International Education and Research Journal, Volume 9(2), E ISSN No- 2454-9916.
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6. Chavati, N., & Patil, G. S. (2022). The Effect of Covid-19 Pandemic on Hearing Aid Users. ISAM Journal, 58-64.
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13. Raveeti, S. (2022). Impact of Covid-19 Pandemic on Audiology Clinical Practice of Students in India. ISAM Journal, 91-101

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