

AIISH

ANNUAL REPORT 2004-2005



**All India Institute of Speech and Hearing
Manasagangothri, Mysore - 570 006**

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DIRECTOR'S REPORT

“..... We must realize that we are all different in the way we perceive the world and use this understanding as a guide to our communication”

Anthony Robbins

Knowledge about communication disorders affecting human beings is a key to help our coming generations to enter the world of efficient communication. AIISH is one of the institutes around the globe striving to realize this goal. The mission of AIISH is to provide highest quality training in generating manpower in the area of speech and hearing science/allied specialties, and to advocate the cause of people with communication disorders. Some of the defined targets of AIISH are:

- a) Generation of manpower in the field of speech-language and hearing,
- b) Highest quality therapeutic services to the clinical population,
- c) Scientific, clinical and academic research on communication disorders,
- d) Speech and hearing screening services for all the age groups, in an effort to prevent, and if prevention is not possible, then to identify such individuals with speech and hearing problems and provide early intervention service, and
- e) Development of infrastructure for easy accessibility to speech and hearing care for every one.

Looking back at the achievements of the institute in the year 2004-05, AIISH is proud to announce that it spread its wings broader under which a significant chunk of population with communication disorders found comfort.

Executive Council

The Executive Council of the institute met on 21.3.2005 under the Chairmanship of Dr. Anbumani Ramadoss, the Hon'ble Union Minister for Health and Family Welfare. The following are some of the important decisions of the Executive Council.

New members of the Executive Council

Sri R. Guru, Chairman, Rangsons Group, Mysore

Prof. N. Karunanidhi, Former Director & Professor, Chennai

Dr. K.K. Ramalingam, Chairman, KKR ENT Hospital and Research Institute, Chennai

- a) Introduction of M.S.Ed course in the area of Hearing Impairment
- b) Introduction of a Certificate Course for Mothers
- c) Giving independent status of a department to the therapy clinic and
- d) Establishment of a new Department of Special Education

UGC Expert Committee

A 5 - member expert committee of UGC visited the institute to inspect facilities to grant autonomy to the institute. The committee, led by Mr. M.V. Krishnaswamy, Joint Secretary, UGC, included Dr. K. S. Chellam, Director, Academic Staff College, Visakhapatnam, Prof. Kashiram, Principal, Nizam College, Hyderabad, Dr. C.M. Verghese, Principal, Sacred Hearts College, Tirupattur and Dr. Shanti Pramodh, Principal, N.K.D National College of Education for Women, Chennai. The UGC team was pleased with the academic achievement of the institute, scientific temperament of staff and students, and the infrastructure. The

committee recommended autonomy to the institute. Based on the recommendation of the expert committee, the University Grants Commission conferred autonomy status to the institute.

Establishment of the Department of Material Development

A new Department of Material Development was established in the report year. The major responsibility of the department is to produce resource material on communication disorders in print and electronic media. Resource material is required for teaching, public education, training of clinical population, and home-training of parents - caregivers. The department consists of a faculty member as coordinator, a production manager, a graphic designer, a copy writer and a photographer cum artist.

ACADEMICS

The academic activities not only doubled, but increased in their complexity. Academic activities continued to be the focus of the institute during the year. The bifurcated master's program leading to M.Sc (Speech-language Pathology) and M.Sc (Audiology) received wide attention in the country. It is very satisfying to note that the students are clear about their career options and choose the course of their choice. B.Sc (Speech and Hearing), B.S.Ed (Hearing Impairment) and Diploma in Hearing Aids and Earmold Technology are the other programs conducted at the institute. The University of Mysore to which the institute is affiliated for the award of these degrees approved separate Ph. D programs in Speech -Language Pathology and Audiology.

Entrance Examination

Admission to B.Sc (Speech and Hearing) program was on the basis of the results of a National Entrance Examination in Physics, Chemistry, Mathematics and Biology. The entrance

examinations, conducted for the first time, were held at New Delhi, Kolkata, Mumbai, Chennai and Mysore. The evaluation and declaration of results are completely computerized enabling declaration of results within 48 hours after the examinations. All India Institute of Speech and Hearing is the first speech and hearing institution in the country to base its admission for B.Sc on entrance examination.

Clinical Internship

After approval from various authorities, one year clinical internship was finally implemented for the final year B. Sc students. The aim of the clinical internship program is to provide a chance to students to work in different environments - school, community, hospital, private practice set ups - and provide them a chance to work with clinical population to which they may not have been exposed at the institute. Under this scheme, the students completed 10 months supervised training at 18 institutions in the states of Andhra Pradesh, Tamil Nadu, Maharashtra, and Karnataka. The program would be extended to cover institutions in other parts of the country in the coming years.

Doctoral Program

Five students were awarded Junior Research Fellowship to pursue their Ph. D program at the institute in the reporting year. It is very satisfactory to note that the Ph. D program at the institute has strengthened and is keenly sought after by the young post-graduates. Figure 1 gives some important statistics relating to Ph.D. program.

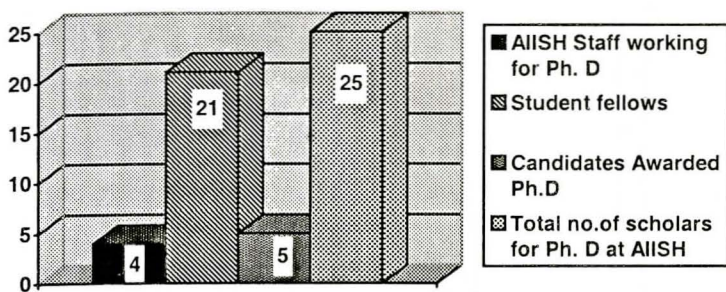


Fig.1 : Some important statistics relating to Ph. D. program

Short-term training programs which are designed to meet the individual requirements of the professionals seeking such services continued to attract professionals in speech and hearing and allied areas from all over the country.

- Mr. P.K. Mallik from Nepal underwent training on "Earmolds and Hearing aids" on a WHO fellowship.
- The Department of Electronics, at the institute, continued to be a centre for pursuing project work for students of B.E (Electronics) and B.E (Computer Science) from Engineering colleges of many Universities.

Orientation / Sensitization Programs

In the report year, a total of 40 orientation programs were conducted at the institute for training skilled and semiskilled professionals in other areas. Of these 40 programs, 28 were conducted as a part of the project on Prevention of Communication Disorders, 3 under the professional voice care program and 9 programs under the project on Prevention of Deafness. Figure 2 gives the number of beneficiaries in different target groups trained under this program.

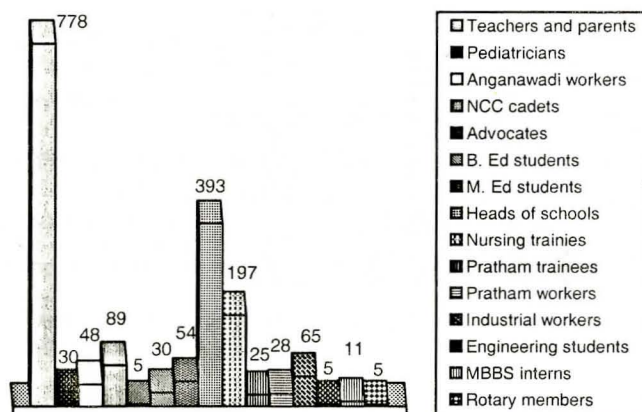


Fig. 2 : Some important statistics relating to orientation programs

CLINICAL SERVICES

The therapy clinic is the heart and soul of the institute. The institute continued to attract clients from all over the country although a majority of them were from South Indian states. The clinical clientele which visit the institute receive speech-language therapy or services of early identification and intervention or aids and appliances or intensive training at the preschool training centre or certificate of disability or a combination of these. Table 1 gives some important statistics pertaining to clinical services.

Total number of	
New clients evaluated at AIISH	13344
Clients for follow-up evaluation	18621
Infants screened	13458
Children screened in schools	9240
Clients screened at camps	3948
Industrial workers screened	95
Total	58706

Table 1 : Summary of the number of clients evaluated

Cochlear Implant Program

A highlight of clinical service program of the year was the introduction of cochlear implant program. Two children were provided cochlear implants. The surgical aspect of implantation was carried out at one of the corporate hospitals in the city of Mysore with whom the institute has an informal arrangement particularly in respect of getting medical/surgical costs on the lower side for the benefit of patients. The institute also established an Auditory Verbal Listening Therapy Unit which is a must in the rehabilitation of the cochlear implantees. The All India Institute of Speech and Hearing is the second or the third in the country, under the government, to have established the cochlear implant program.

Cochlear Implant program launched

Two children, Kumari Sai Shakthi and Master Abhilash were fitted with cochlear implants at BGS Apollo Hospital on 19th November 2004 in partnership with AIISH. The device fitted was a 24-channel Nucleus. Dr. Asha Yatiraj and Ms. P. Manjula did the pre-implantation evaluation and post-surgical tuning with assistance of Mr. Saji from PIKA, Bangalore (an AIISH Alumnus). It is a red letter day in the annals of AIISH and we all wish Sai Shakthi and Abhilash all the best.

Therapeutic Services

Therapeutic services are one of the core activities of the institute, connecting it with the people with speech-language and hearing disabilities. It can be seen that a total of 2212 clients received 37042 sessions of therapy, each session lasting for 45-60 minutes. Table 2 gives the particulars of therapy sessions conducted at the institute in the reporting year.

Particulars	No. of Sessions	No. of clients
Individual therapy sessions for speech-language	25076	1480
Group therapy sessions conducted	711	258
Listening training therapy sessions	9406	142
Physiotherapy sessions	353	168
Occupational therapy sessions	264	142
Sessions for AAC	1232	22
Total	37042	2212

Table 2 : Some important statistics relating to therapy sessions

Special Clinical Services

Specialized and focused care is available from special clinics like Professional Voice Care Unit, Augmentative and Alternative Communication, Auditory Verbal Training, and Preschool Training Centre.

● Pre-School Training Program

The institute started a preschool training program in the year 2002 for children with communication disorders. The program is keenly sought after by clients to such an extent that we could not entertain many children in the program. The objective of the preschool training program is to bring in children with communication disorders initiate intensive early intervention procedures and prepare them for later inclusion into mainstream schools. Different programs are organized for children with mental retardation, cerebral palsy and children with hearing impairment, of different ages and skill levels. Table 3 gives the number of

beneficiaries under the preschool training program.

Number of children enrolled	80
Number of preschool groups	14
Number of sessions held	3114*
Number of children discharged to mainstream schools	18

Table 3 : Number of beneficiaries of the preschool training program

* Each session is of 4 hours duration

Special clinical Services

- **Preschool Training Centre**
- **Auditory Verbal Training Unit**
- **Augmentative and Alternative Communication unit**
- **Professional Voice Care Unit**
- **Hearing Aids and Earmolds**

● **Listening Training Unit**

The purpose of the listening training unit is to train individuals with hearing impairment to make best use of their residual hearing. A total of 142 clients, of whom 6 were cochlear implanted children, received a total of 9406 sessions of listening training in the report year. The major target clinical population of this unit is hearing impaired children.

● **AAC Unit**

The Augmentative and Alternative Communication unit is involved in the evaluation and management of clients who require nonvocal means to communicate. Necessarily, the programs developed here are individual-specific and problem - specific.

Clinical training of our graduate and postgraduate students was a part of this program. 22 clients received 1232 sessions of training at this unit in the report year.

● Professional Voice Care Unit

Professional voice users are those who depend on their voice for earning their livelihood. As these individuals have to use their voice excessively, in their work they are more susceptible to developing voice problems. Professional voice centre focuses on such groups like politicians, singers, teachers, theatre artists, lawyers, among others. A total of 61 persons received special training in this unit. Educating professional groups, who are susceptible to voice problems, on vocal hygiene and practice is one of the major activities undertaken in this program.

● Hearing Aids and Earmolds

The institute offered audiological services to 20164 individuals in the report year. Table 4 lists some of the other services provided to this population with hearing problems. Hearing aids issued were under the ADIP scheme of the Ministry of Social Justice and Empowerment, Government of India.

Service	No.
Clients prescribed hearing aids	2867
Free hearing aids issued in camps	2801
Ear molds prepared	2822
Ear molds made in camps	510
Hearing aid repair and service	940
Equipment repair and service	276
Certificates of disability issued	2351

Table 4: Statistics of other services provided for hearing impaired

Extension Services

Extension services such as screening programs and speech and hearing camps continued to be a major activity of the institute. Screening of school going children and infants in hospitals, and speech and hearing camps were the major extension programs of the year. Table 5 gives some statistics pertaining to extension programs.

Particulars	No.
No. of camps conducted	16
No. of cases screened	7458
No. of cases identified to have problem	1604
No. of cases referred to AIISH	127
No. of hearing aids issued	313
No. earmoulds made	464
No. of certificates issued	135

Table 5 : Some statistics pertaining to extension programs

A somewhat different extension program from the usual was a 6-day speech and hearing camp organized at H.D. Kote from the NSS unit of the institute. The objective of this camp was not only screening and identification of speech and hearing problems in the populace living in 11 villages, but also to provide an opportunity to the students to understand disability-related issues in a rural environment. The students visited houses in these villages and gathered data on a specially formulated questionnaire on the problems faced by the disabled in their living environment.

RESEARCH

The institute continued its effort to develop a very strong research base, in the Indian context, in the report year. A major achievement during the year was the award of a research grant of Rs. 70 lakhs to the Department of Speech Pathology from the Department of Science and Technology, Government of India under "Funds for Improvement of Science and Technology"- Infrastructure in Universities and Higher Educational Institutions (FIST) Level 1 program. The project team includes Dr. R. Manjula, Head of the Department of Speech Pathology and Dr. M. Jayaram, Director. The funds are specially marked for development of a laboratory for conducting research on kinesiology of speech musculature. A major equipment by name Articulograph 500 will be procured under the project.

Prevention of Deafness / Prevention of Communication Disorders

The institute continued with its project on Prevention of Deafness (POD) and Prevention of Communication Disorders (POCD) in the report year also.

Population	Screened	Referred
Infant	6851	339
School	5012	1910
Camps*	1034	376
Pre-school	106	7
Total	13003	2632

Table 6 : Number of clients who benefited from the
POD/POCD projects

* This figure pertains to only those camps conducted
under POD project

The project focuses on the following 4 major aspects of prevention and early identification:

- a) Infant screening program
- b) Screening of school-going children
- c) Orientation and sensitization of professionals and grassroot level workers in allied areas, and
- d) Distribution of hearing aids under ADIP scheme.

Several projects were completed and new projects were initiated both under the AIISH Research Fund and external agencies. These projects are in addition to the significant number of projects done as part of the master's dissertation.

Projects Completed

- Evaluation battery for CAPD in school going children - Dr. K. Rajalakshmi
- Late latency responses in children with learning disability - Dr. C.S. Vanaja
- Language acquisition in multilingual children - Dr. K.S. Prema and Dr. Y.V. Geetha
- Speech and language tests of AIISH - Dr. K.S. Prema, Dr. M. Jayaram and Dr. S.R. Savithri
- Performance of hearing aids with artificial intelligence - Dr. M. Jayaram and Mr. Srikanth Kumar Mishra: The project was on the evaluation of a digital hearing aid with artificial intelligence. The work was done as a part of the M.Sc dissertation by Mr. Srikanth Kumar Mishra. Oticon AS, Denmark gave 2 hearing aids (costing Rs. 1,40,000/-), and an international conference grant to Mr. Srikanth Kumar

Mishra (around Rs. 1 lakh) under the project. William Demant Foundation, Demark financed US \$ 1500 for the project.

Projects under Progress

- Test for auditory memory and auditory sequencing of normal children - Dr. Asha Yathiraj
- Effect of specific auditory skill training on listening development in the hearing impaired - Dr. Asha Yathiraj and Ms. P. Manjula
- Analysis of difficulties experienced by children with hearing impairment while doing mathematics - Dr. I. P. Gowramma
- Anthological study of traditional games and play activities useful in training children with disabilities - Dr. G. Malar
- Rate of speech/reading in Dravidian languages - Dr. S. R. Savithri and Dr. M. Jayaram
- Differential diagnosis of laryngeal disorders - Ms. H. Rohini and Dr. M. Jayaram
- Evolution of voice in species - Dr. S.R. Savithri and Dr. M. Jayaram
- Development of phonological processes in Kannada - Dr. N. Sridevi and Dr. M. Jayaram
- Aging and pathological correlates of voice disorders - Ms. M. Pushpavathi, Dr. S. Venkatesan and Dr. M. Jayaram
- Personality correlates of voice disorders - Dr. S. Venkatesan, Ms. M. Pushpavathi and Dr. M. Jayaram

- Development and standardization of computer assisted software on behavioral assessment and learning activities for kids with communication disorders (BALAK-CD)
- Comparative efficiency of BTEs over body-worn hearing aids in the development of speech-language in the hearing impaired: Funded by S & T Mission Mode, Ministry of Social Justice and Empowerment, Government of India - Dr. M. Jayaram and Ms. P. Manjula
- Differential diagnosis between stuttering and normal nonfluency funded by the Indian Council of Medical Research, New Delhi - Dr. S.R. Savithri and Ms. K. Yeshoda
- FIST program under DST funded by the Department of Science and Technology, Ministry of Science and Technology, Government of India - Dr. R. Manjula and Dr. M. Jayaram
- Development of frequency modulated hearing aids funded by S&T Mission Mode, Ministry of Social Justice and Empowerment, Government of India - Dr. M. Jayaram and Mr. Ajish K Abraham
- The etiology of conductive hearing loss project funded by WHO - Dr. M. Jayaram and Dr. G. Rajeshwari
- Development of resource material for the training of teachers under the Sarva Shiksha Abhiyan Scheme funded by SSA, Bangalore - Dr. M. Jayaram

OTHERS

Awards and Honors

The students and staff of the institute continued to get awards

and honors of various scientific organizations, and at various conferences in the country.

Oration

Dr. M. Jayaram, Director was awarded Prof. Rais Ahmed Oration and a cash award of the Acoustical Society of India. The award was given to him at the National Symposium on Acoustics held at SJCE, Mysore : November 2004

Best Paper Awards

- Mr. U. Ajith Kumar, Mr. M. Sandeep, and Dr. M. Jayaram : Best paper award in Speech Communication at the National Symposium of Acoustics, Mysore : 25-27 November 2004
- Dr. M. Jayaram and Ms. P.S. Kalaiselvi were awarded Dr. B.M. Abrol award for best paper in voice at the 37th Conference of the Indian Speech and Hearing Association held at Indore: 16-18, January 2005
- Mr. U. Ajith Kumar and Dr. M. Jayaram were awarded the best poster in Audiology at the 37th Conference of the Indian Speech and Hearing Association held at Indore: 16-18, January 2005
- Ms. Namita S Kale : Best student paper award in Music Acoustics at the National symposium of Acoustics, Mysore : 25-27 November 2004
- Ms. Amy Kunnathur, Mr. Srikanth Kumar Mishra, Dr. C.S. Vanaja, and Ms. P. Manjula were awarded the Late Dr. N.R. Chaudhari Memorial award for best paper in Pediatric Audiology at the 37th Conference of the Indian Speech and Hearing Association held at Indore: 16-18, January 2005

- Ms. Aditee A Khaladkar, Mr. N. Kartik, and Dr. C. S. Vanaja were awarded Dayalan Samuel award for best paper in Audiology at the 37th Conference of the Indian Speech and Hearing Association held at Indore: 16-18, January 2005
- Ms. V. P. Vandana and Dr. R. Manjula were awarded Mukthesh award for best paper in Speech Pathology at the 37th Conference of the Indian Speech and Hearing Association held at Indore: 16-18, January 2005

- **The staff and students of AIISH, Mysore won 8 of the 10 awards presented at the 37th conference of the Indian Speech and Hearing Association held at Indore.**
- **Prof. Rais Ahmed Oration Award to Dr. M. Jayaram.**

- Mr. Vishwakarma Chandrakant, Manuj Agarwal, Ankit Mathur, U. Ajith Kumar, and M Sandeep were given Young Scientist Award in Audiology at the 37th Conference of the Indian Speech and Hearing Association held at Indore: 16-18, January 2005
- Ms. C. Geetha, Ms. Ashly George, and Dr. Asha Yathiraj were awarded Mukthesh award for best paper in Audiology at the 37th Conference of the Indian Speech and Hearing Association held at Indore: 16-18, January 2005
- Ms. Rajani Sebastian, MS. B. Bhuvaneswari, and Dr. K.S. Prema were awarded Sheila Vora award for best paper in learning disability at the 37th Conference of the Indian Speech and Hearing Association held at Indore: 16-18, January 2005

Mysore University Awards

- Mr. Verghese Peter was awarded the Arathi Venkataraman Gold Medal for First Rank in Final M. Sc.
- Ms. Tanuja Jawale was awarded the Manohar Gold Medal for First Rank in Final B. Sc.

Institute Awards

- Ms. N. Banumathi of final year M.Sc was given the Abhilash award for the "Best Clinician of the year".
- Mr. Yatin Mahajan was awarded Sri Venkateshamurthy medal for first rank in final B.Sc.
- Mr. Verghese Peter was awarded Smt. Jayalakshami medal for the topper in final M.Sc.
- Ms. Deepashree Agarwal, Mr. Arun Kumar and Mr. K. Sumesh were given the "Best Presentation in Clinical Conference" award.
- Ms. Amy Kunnatur and Ms. Meenakshi Verma were given "Best Presentation in Journal Club" award.

Papers Presented at Seminar/Conferences Abroad

- Mr. Gouri Shanker Patil (JRF) presented a paper on 'Declination of FO in the Speech of Broca's Aphasics - Reflection into Linguistic Planning' at the 34th Annual Clinical Aphasiology Conference, Utah, USA : 25-29 May 2004
- Dr. I. P. Gowramma presented a paper on 'Analysis of the difficulties and errors in number concept among children with dyscalculia, normal children and children with visual impairment at the 5th World Congress on Dyslexia, University of Macedonia : 21-27 August 2004
- Mr. Srikanth Kumar Mishra and presented their papers at 'International Hearing Aid Conference' (IHCON) at California, USA - 25-29 August 2004. Mr. Srikanth Kumar

Mishra was awarded a student scholarship to attend this conference

- Mr. N. Kartik presented their papers at 'International Hearing Aid Conference' (IHCON) at California, USA - 25-29 August 2004. Mr. N. Kartik was awarded a student scholarship
- Mr. Srikanth Kumar Mishra attended the annual meeting of the American Auditory Society at Arizona, USA - 18 -25 March 2005.

National Workshops/Seminars/symposia organized

A total of 29 scientific programs - national and regional in scope - were conducted during the year. The following are the national programs conducted.

- **National seminar on "Cochlear implants"**
The objectives of the seminar were to educate the participants on the use of cochlear implant, its components, surgical procedures, benefits that can be extended, and suitability for cochlear implants. Practical training was given by bringing hearing impaired children for audiological evaluation to find out their suitability to undergo cochlear implantation : 30th June 2004.
- **National seminar on "Genetics of Hearing Loss"**
Gene mutations that are responsible for hearing loss in the Indian population and methods for gene analysis were discussed. Several research issues were identified : 22-23 July 2004
- **National workshop on "Phonological Process Analysis - A Practical Orientation"**
The purpose of the workshop was to provide practical training in phonological process analysis in Indian languages. Current status of research in the area and research projects for future

inter-institutional collaboration were discussed and identified : 20-21 September 2004.

- **National seminar on "Current Perspectives on the Nature and Treatment of Fluency Disorders"**

The seminar provided a forum for professionals in the field to discuss the current status of research in the area of fluency (nature and management). Several projects for future research were also identified : 20-21 October 2005.

- **National workshop on "Speech Processing"**

The objectives of the workshop were to disseminate information on the topic, provide hands-on experience on speech processing to allied professionals, expose them to research needs in the area, enlighten them on the use of such expertise in the management of disability, and to identify specific projects to be taken up in the next five years : 4-5 November 2004.

- **RCI-CRE program on "Professional Voice Care"**

The objectives of the program were to educate speech pathologists and ENT professionals on prevention, assessment and management of voice disorders in professional voice users, and to provide hands-on experience in professional voice care : 31st January to 4th February 2005.

- **Advanced workshop on "Cochlear Implant"**

The objectives of this workshop were to update the knowledge of the participants on several issues relating to cochlear implants - outcome of cochlear implants, changes in the technology of cochlear implants, selection criteria, and radiological considerations in deciding candidacy, programming, design considerations and neural response telemetry. Hands-on-training was provided by testing some children for their suitability for cochlear implantation : 10th February 2005

Infrastructure

The institute focused on the development of infrastructure - buildings, laboratories and equipment, and manpower - to meet the needs of the growing number of activities at the institute. The following are some of the major initiatives undertaken as part of the infrastructure development.

- The AIISH Preschool Center building was inaugurated by Sri. S. Siddaramaiah, Hon'ble Deputy Chief Minister of Karnataka on 16th October 2004. Prof. K. Sudha Rao, Vice-Chancellor of Karnataka Open University, Mysore, was present on the occasion.
- All the AIISH activities are being computerized. A prototype clinical module is implemented. Academic and payroll packages are fully functional.
- Direct Reception Set for satellite downlink facilities was installed in the institute. This work was done under a project of RCI in collaboration with IGNOU, Delhi.
- Construction of the new ladies hostel block, academic block and the administration block were initiated in the report year.

Programs celebrated at AIISH every year are:

- AIISH Durbar
- Open Day
- Institute Day
- World Disabled Day
- National Science Day
- International Stuttering Day

Institute Day

10th October 1966 was the day the institute was registered as an autonomous organization under the Ministry of Health & Family Welfare, Government of India. The 38th anniversary of the institute was celebrated on 16.10.2004. Sri. S. Siddaramaiah, Deputy Chief Minister of Government of Karnataka was the Chief Guest, while Prof. K. Sudha Rao, Vice-Chancellor of Karnataka State Open University was the Guest of Honor. Sri. Siddaramaiah responding to the request made by the institute to reserve a certain number of teachers for students completing Bachelor of Special Education (Hearing Impairment) degree of this institute promised all help in this direction. He also promised that his government will respond in a positive manner to the initiatives taken by this institute in the area of disability management by deputing staff of the Government of Karnataka for training whenever required. The students of Diploma in Hearing Aid and Earmold Technology were awarded their Diploma Certificates and other meritorious students were honored on the occasion. Dr. G. Ravindra, Principal, Regional Institute of Education was the Chief Guest at the cultural event held in the evening.

Library and Information Center

The Library and Information Center has been upgraded to Category III based on the recommendations made by the committee constituted for the purpose of categorization of the libraries from the Ministry of Health & Family Welfare. The new Access Control System installed enables only those who have the access card to enter the library. Table 7 gives details of books/journals at the AIISH Library.

No. of volumes as on 31.3.2005	13584
No. of volumes added	321
No. of journals subscribed	57
No. of journals available online	27
No. of books/journals issued and consulted	106817
No. of outside members enrolled	71

Table 7 : Particulars of AIISH library

Official Language Implementation

Work on a glossary of technical terms related to the field of speech and hearing in multilingual form (English, Hindi and Kannada) was initiated. It was decided that all the public education material developed at the institute would be translated to Hindi as well. Annual report, audited statement of accounts, performance budget, public education material, slogans etc. were all rendered into Hindi along with English. Circulars, general office memos, forms etc. were issued in bilingual form. Competitions were conducted in Hindi during 'Hindi week'. Library of Hindi books was kept open for use. 'Leap Office' multilingual software was used at the institute. Schemes to provide incentives to successful candidates in Hindi exams / Hindi typing competitions were continued.

Open Day

The institute was thrown open to the general public on 9 August 2004 on the occasion of 'Open Day'. Prof. J. Shashidhar Prasad, Vice Chancellor, University of Mysore and Mr. H.S. Shankaralinge Gowda, - MLA were the Chief Guests on the occasion. As a part of the program, drawing and quiz competitions were held for school children. Funfair and exhibitions on speech and hearing were organized for the benefit of the visiting public.

Vigilance Awareness Week

Two orientation programs were organized at the institute as part of the Vigilance Awareness Week.

- a) Parent education program was organized for parent of children attending therapy at the institute. 50 participants were given orientation in Kannada and Malayalam on the rights and privileges as consumers of clinical services at the institute.
- b) Consumer Education program: A lecture on fighting corruption was arranged for the clientele of the institute. Ways to fight corruption, spreading awareness and the harmful effects of corruption were the topics of discussion. A discourse with the customers was held regarding their problems/complaints regarding the institute. 15 customers attended the program.

AIISH in SSA Project

AIISH is now entrusted to handle a component of 'Sarva Shiksha Abhiyan' (SSA). The project is sponsored by the Government of India. AIISH has been given the responsibility of developing training material and sensitizing the school teachers in order to cater to the needs of the students with communication disorders and implementation of the required infrastructure for the school in Karnataka in this regard.

Public Education and Information

The year 2004-05 found the institute getting ready for an intensive public campaign. The new AIISH website www.aiishmysore.com was launched. The speech and hearing students and professionals at AIISH geared up to educate the public regarding communication disorders through effective means.

Other Programs

- International Stuttering Day (20 October 2004): The International Stuttering Day was observed at the Therapy Clinic by conducting quiz, writing essays, pick and speak competitions for 15 stutters. Orientation lectures and exhibition were also organized for adults with stuttering and parent of children with stuttering.

- **AIISH website www.aiishmysore.com launched**
- **AIISH street play 'Vani' was presented to the public**
- **Vigilance Awareness Week: AIISH clientele educated**
- **AIISH involved in the Sarva Shiksha Abhiyan project**
- **AIISH Open Day : 9th August 2004**

- World Disabled Day (9 December 2004): More than 80 children participated in the program along with their parents and siblings. Prizes were distributed to the winners of various sports and games competitions held for children attending Preschool and Therapy Clinic. A cultural program by children was held on this occasion.
- Special Olympics (28-30 January 2005): Children attending the Preschool and Therapy Clinic participated in the Zonal Special Olympics held by Rotary Midtown, Mysore and Special Olympics, Bharath-Karnataka. Nine of the participants from AIISH received 11 medals.
- Midday Meal program of the Government of Karnataka: AIISH collaborated with the Mysore Agenda Task Force

(MATF) through POD and POCD projects for the screening of 1500 school children in four schools in Mysore city. The objective of the screening program is to evaluate the impact of the midday meal program on speech, language, hearing and learning skills. Screening checklists to identify school children with communication disorders have been developed in Kannada and English. Training programs were conducted for teachers and nurses involved in this project to identify school children with communication disorders using the checklist. Administration of the screening checklist to identify children with communication disorders will begin in the academic year 2005-06.

Visitors

- His Excellency Shri. T.N. Chaturvedi, Hon'ble Governor of Karnataka laid the foundation stone for the Ladies hostel and Administrative Block.
- Sri. S. Siddaramaiah, Hon'ble Deputy Chief Minister of Government of Karnataka, inaugurated the Pre-school Centre.
- Mr. H.S. Shankaralinge Gowda, MLA, Mysore was the Chief Guest on the occasion of the Institute Open Day.
- Prof. J. Shashidhar Prasad, Vice Chancellor, University of Mysore was the Chief Guest on the occasion of the Institute Open Day.
- Prof. K. Sudha Rao, Vice Chancellor, Karnataka Open University was the Guest of Honor on the Institute day.
- Prof. D. Nagaraja, Vice-Chancellor inaugurated the National Seminar on Fluency Disorders.
- Prof. M.N. Hegde, Professor of Speech Pathology, California State University, Fresno, California, USA.

AIISH Gymkhana

The following programs were conducted by AIISH Gymkhana in the report year:

- Vidya Vikas program: which reflects the positive spirit of the staff and students of the institute towards promotion of education. In this program, the children of staff members are given educational materials (school bags, notebooks etc.). In the initial year, the program was restricted to children studying up to 7th standard. A total of 40 children received the benefits.
- AIISH Durbar 2005: an inter-collegiate cultural festival conducted by AIISH every year is a platform for college students to showcase their cultural talents. The competitions conducted from 18-20 February 2005 included variety entertainment program, pencil shading, face painting, skit, group dance, pick & speak, quiz and fashion show. Students from 33 colleges participated in the festival. More than 4000 people attended the event. AIISH, the host institute bagged the overall championship for the first time.
- National Science Day was conducted on 28 February 2005. Programs such as quiz in physics, guest lectures, and film/slide shows on scientific matters were held for the staff and students.
- A Blood Donation Camp was organized on 5 March 2005. 53 staff and students donated blood, which was dispensed to K.R. Hospital, Mysore.
- Inter-institutional Sports Tournament for Central

Government employees was organized in March 2005. A total of 200 sports persons, representing 45 different central government organizations located in Mysore participated in the event. Competitions were conducted in 5 events - badminton, chess, carom, table tennis and volleyball.

A Noble Gesture

The staff members of AIISH contributed their one day's salary for the rehabilitation of the Tsunami victims.

NSS Activities at AIISH

The objectives of NSS were tailored to rhyme with the objectives and responsibilities of the institute without violating the primary motto of NSS. In the report year, many useful programs were carried out. Shramadan activities, cultural activities, educational activities, blood donation camps, charity work, health awareness programs and adventure activities were conducted. A special speech and hearing camp was organized by NSS in H.D. Kote in association with Shri M.P. Venkatesh, MLA, H.D. Kote and MYRADA. 663 people with speech and hearing problems were identified and assisted. Besides, this camp was specially designed to help the students to understand many issues related to disability in a community set-up.

AIISH in Media

The media, both print and electronic, gave excellent coverage of the programs and activities of the institute (inter-institutional sports tournament, hearing aid repair, orientation programs workshops, seminars etc.,) and also extensively covered the visit of VIPS to the institute.

The mass communication media of the country gave excellent coverage to the activities and programs of the institute:

- Doordarshan telecasted a live interview with the Director in Phone-in-Program on 10 April, 2004.
- "The Hindu" national daily published an article on academic program of AIISH.
- "Vijaya Karnataka", a leading Kannada daily, published an article on the 38th Anniversary of AIISH (16 October 2004).
- "Taranga" Kannada weekly published a lead article on the infrastructure of the institute on 14 October 2004.
- "Deccan Herald" published a lead article in its Thursday supplement on "Academic Programs" on 10th February 2005.

Fiscal Matters

Particulars	2003-04	2004-05
ADIP	18	50
Plan	700	700
Non-Plan	200	282
Internal Revenue	97.06	107.96
Project grants	-	7.09

Table 8 : Fiscal matters (in lakhs)

Publications

- AIISH News letter "Cuhoo Cuhoo"
- 25 golden rules for parents of children with hearing impairment (Kannada, English and Hindi)
- Break the barrier of silence - cochlear implant

Overall, the year 2004-05 was fruitful in terms of manpower training and academic progress achievements, clinical services and facilities, public education and research. The institute will be having independent academic block in the forthcoming year which is fully equipped to house all kinds of academic activities including a mini auditorium. The new administrative block will facilitate the efficient management of the institute by the administrative staff. The new ladies hostel building will be a unique example in regard to its amenities and the studious environs. On the concluding note, we would like to say that AIISH is en route a new horizon wherein the life of people with communication disorders is made better day by day.

Prof. M. Jayaram
Director

DEPARTMENT OF AUDIOLOGY

In the academic year 2004-05, the Department of Audiology continued its venture by carrying out activities related to normal and atypical aspects of hearing. The department focused on individuals from all walks of life, in all age groups, right from newborns to geriatrics. As the major department of the institute, the department

- a) Trained undergraduate and postgraduate students in Audiology, special education (hearing impairment) and diploma students in earmold technology.
- a) Provided hearing evaluation, hearing aid trial and ear molds for population with hearing handicap.
- b) Provided listening training to the hearing impaired.
- c) Carried out research in the areas of hearing disorders which throw more light on the evaluation and management of hearing-impaired.
- d) Conducted seminars, workshops, short-term training programs, public education programs and to develop resource material.
- e) Provided extension services in collaboration with other agencies. Clinical services were extended to old age homes, hospitals, immunization centers and schools.

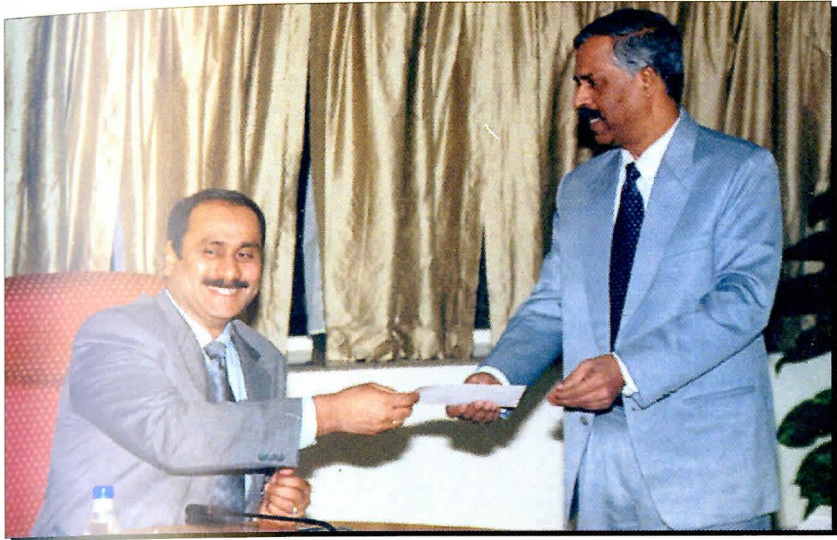
The above targets of the department contributed to the betterment of those with hearing impairment.

Cochlear implant program was initiated. Neural Response Telemetry was performed by the faculty of the department as part of cochlear implant program.

ACADEMIC PROGRAM

Training of speech and hearing professionals, audiologists, special educators and earmold technicians was undertaken. Forty candidates were enrolled for B.Sc (Speech and Hearing), 16 for Masters in Audiology, 9 for B.S.Ed (HI) and 15 for Diploma in Hearing Aid and Earmold Technology.

The diploma, undergraduate and post-graduate students were given theoretical and practical training in Audiology. Thirty-eight theoretical courses were conducted besides guiding the masters' students to carry out dissertations. The practical training involved taking case history, evaluation and diagnosis of various hearing disorders. In addition, students were trained to carry out special tests for differential diagnosis of neurological and psychological disorders of hearing. They were also imparted practical training in hearing aid selection, prescription, making of ear molds offering guidance and counseling to the needy. With the launching of the cochlear implant program in the department, the students undergoing training in Audiology received practical training in this area, for the first time in the institute. In the listening unit, students were trained to impart auditory skills training to the hearing impaired. The B.S.Ed (HI) student trainees underwent teaching practice in special schools besides being given theoretical training at the institute.



Dr. Anbumani Ramadoss, Hon'ble Minister for Health & Family Welfare, Government of India and the Chairman, Executive Council of AIISH conducting the EC meeting. Here, Dr. M. Jayaram, Director, AIISH is presenting a DD for the Prime Minister's Welfare Fund in aid of the Tsunami victims.



Dr. Anbumani Ramadoss, Hon'ble Minister for Health & Family Welfare, Government of India and Chairman, Executive Council, AIISH with some of the members of the Executive Council.



Sri K. Siddaramaiah, Hon'ble Deputy Chief Minister of Karnataka inaugurating the AIISH Preschool Center building. Also seen are Prof. Sudha Rao, Vice Chancellor, Karnataka Open University and Prof. M. Jayaram, Director, AIISH.



Prof. Sudha Rao, Vice Chancellor, Karnataka Open University inaugurating the Preschool training program by lighting the auspicious lamp. Sri K. Siddaramaiah, Hon'ble Deputy Chief Minister of Karnataka and Prof. M. Jayaram, Director, AIISH are seen.

Ph. D Program

The following scholars are pursuing Ph.D at the department:

Animesh Barman : Psychoacoustical profile in normal individuals and individuals with auditory dys-synchrony.

Guide: Asha Yathiraj

Divya Menon : Speech evoked mismatch negativity: an objective measure of auditory perceptual deficits.

Guide: Asha Yathiraj

K.J.Ramadevi Sreenivas : Phonological profile in Kannada: A study on hearing impaired.

Guide: C. Ramachandra

M. P. Ravanan : Computerized training modules in Kannada for children with CAPD.

Guide: K. Rajalakshmi

M. Sandeep : Auditory processing in children with early onset otitis media.

Guide: M. Jayaram

P. Manjula : Hearing aid selection using speech intelligibility index.

Guide: Asha Yathiraj

S. N. Vinay : Effect of selective amplification on speech intelligibility in sensori-neural hearing-impaired subjects with and without dead regions.

Guide: C. S. Vanaja

Shivaprakash : Auditory steady state responses in subjects with auditory dys-synchrony.
Guide: C S Vanaja

Smeeta Behera : Development and standardization of speech perception tests in Oriya for adults.
Guide: Asha Yathiraj

Thenmozhi : AC and BC ASSR in individuals with normal hearing and hearing impairment.
Guide: Animesh Barman

Verghese Peter : Effect of age and age-related hearing loss on auditory processing.
Guide: C S Vanaja

Dissertations in Progress

A. K. Aditee : Speech evoked ABR in children with learning problems.
Guide: C S Vanaja

Amit Sehgal : A Comparative study of hearing aid fitting algorithms for non-linear hearing aids.
Guide: P Manjula

Amy Kunnathur : Audiological findings in infants and toddlers with risk factors.
Guide: Animesh Barman

- Ashly George : Earplug attenuation - A comparison of real ear attenuation at threshold (REAT) & insertion loss (IL).
Guide: P Manjula
- C. Geetha : The effect of time constants of compression on speech recognition in hearing impaired.
Guide: P Manjula
- D. Venkat Kotaiah Swami : Correlation between real ear insertion gain and aided auditory steady state responses.
Guide: P Manjula
- Meenakshi Verma : Audiological findings in infants and toddlers with hyperbilirubinemia and physiological jaundice.
Guide: Animesh Barman
- N. Devi : Manual on auditory learning for Kannada speaking infants.
Guide: Asha Yathiraj
- N. Karthik : Acoustic change complex: normative measures and comparison across age groups
Guide: C S Vanaja
- P. Hari Prakash : Evaluation of hearing aid benefit using MMN in children.
Guide: C S Vanaja

- Sandeep Kumar : Perception of VOT in hearing impaired as a function of duration manipulation.
Guide: Asha Yathiraj
- Saugat Roy : Speech perception in noise (SPIN) with high frequency words: Normative data.
Guide: Asha Yathiraj
- Sonia Narang : Assessment of AM & FM depth threshold using ASSR & its correlation with speech perception.
Guide: C S Vanaja
- Srikanta Kumar Misra : Performance of hearing aids with artificial intelligence.
Guide: M. Jayaram
- Sujita Nair : Time altered speech perception test in English for children.
Guide: Asha Yathiraj
- T. Lakshmi Sailaja : Evaluation of some aspects of auditory temporal processing deficits in subjects with conducting hearing loss.
Guide: Animesh Barman

Short-term Training Programs

The following short-term training programs were conducted at the department for speech and hearing and allied professionals.

1. ABR and OAE
2. Ear mold training

In addition, orientation lectures on prevention, identification and management of hearing impairment were given to different groups as shown in Figure 1.

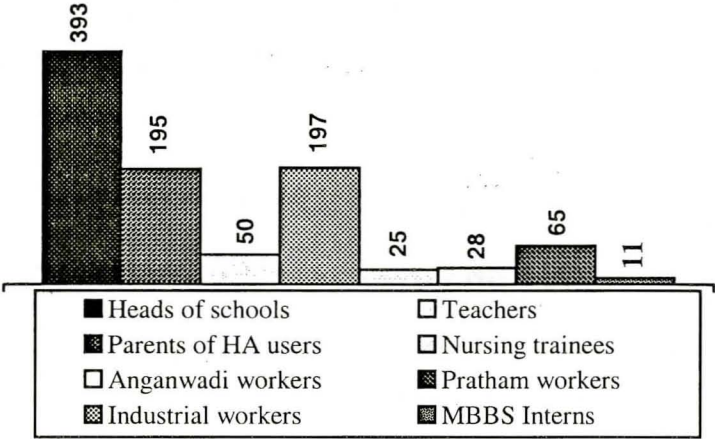


Fig.1: Details of the orientation program groups

CLINICAL SERVICES

Hearing Evaluation

The clinical services have been provided to individuals from all walks of life; from the first citizen of the Karnataka state to individuals who could barely afford to pay for the clinical services. The services have been extended to clients as far as the United Kingdom. With the services of the department being displayed in the web, clients from different countries have sought the expertise available in the department. A total of 20,164 individuals were evaluated/screened for their hearing problems. 7,267 cases were evaluated at AIISH and 12,897 evaluated/screened in outreach programs. Figure 2 summarizes the information on the number of individuals evaluated at AIISH and at outreach centers.

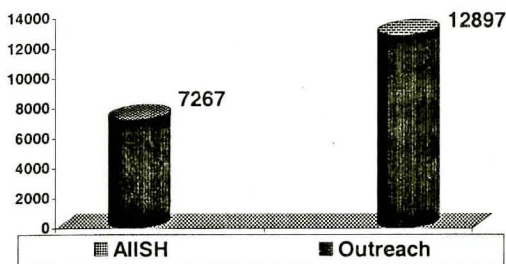


Fig. 2 : Clients screened/evaluated at AIISH/outreach centers

Detailed evaluation was carried out on all the patients registered at the institute with a complaint of hearing loss and/or symptoms associated with hearing loss. Routine audiological evaluation included pure tone audiometry, speech audiometry and immittance evaluation. Measurement of auditory evoked potentials and otoacoustic emissions was carried out whenever indicated. Accuracy of diagnosis/differential diagnosis of hearing loss was enhanced with the development of software based tests and state-of-the-art equipment. These tests included speech evoked, auditory evoked potentials, tinnitus evaluation and auditory processing tests.

Baseline and monitoring audiograms were obtained from employees of various industries/organizations. Of the 95 employees evaluated, 11 were identified to have hearing loss. Detailed evaluation was also carried out on 6 medico-legal patients for whom the required certificates/reports were issued. The staff of the department served as expert witness in the court of law.

The orientation programs conducted for professionals who deal with infants have resulted in a larger number of neonates being tested. Paediatricians have referred a large number of high risk neonates. The outreach activities and the orientation programs conducted as a part of the "Prevention of Deafness and Hearing Impairment" project have led to a larger number of clients being referred to the department.

Hearing Aids

Rehabilitation of the hearing impaired by providing amplification devices is one of the major activities of the department. 4,255 individuals were put on trial. Of them, 2,867 were prescribed hearing aids. A large number of patients requested for digital hearing aids, which is a trend that has been observed since the last few years. Also, there was a general downward trend in people wanting assistive listening devices (ALDs). This was probably due to the improved, quality of hearing aids available at affordable costs. This enabled the clients to use hearing aids even in situations where ALDs had to be used earlier.

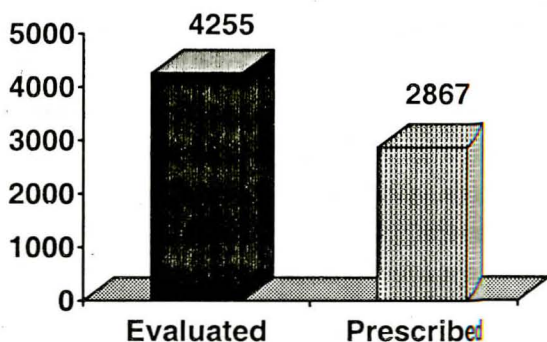


Figure 3: Clients evaluated / prescribed hearing aids.

The procurement of new equipment such as the Nucleus portable programming system has brought a new dimension in the management of hearing-impaired who have undergone cochlear implantation. The department launched its cochlear implant program in collaboration with BGS Apollo Hospital, Mysore, on 17th November 2004. The first two cochlear implant clients were operated on this day and a team of audiologists from the department conducted Neural Response Telemetry for the first time in the history of the Institute.

Counseling and Guidance

Counseling and hearing aid demonstration were carried out for the patients who were issued or procured hearing aids. The use of communication strategies and speech reading for individuals with speech identification problems was recommended.

Earmolds

During the year, 2,822 earmolds were made for 1,591 patients. In addition, 12 pairs of earplugs were made to be used as "swimmers plugs" or as ear protective devices. The latter was used by industrial workers.

As a part of the "Central Prosthetic Lab", ear mold impressions were taken in camps as well as special schools. The number of molds that were prepared in the outreach centers was 500. All molds were processed at the institute and distributed to the clients. Table 1 gives the detailed statistics:

No. of clients	1591
No. of impression taken	2752
No. of earmolds completed:	2822
a. Custom made	2398
b. Special molds	424
No. of earmolds issued:	2410
a. 50% payment	1713
b. 100% payment	697

Table 1: No. of ear molds made.

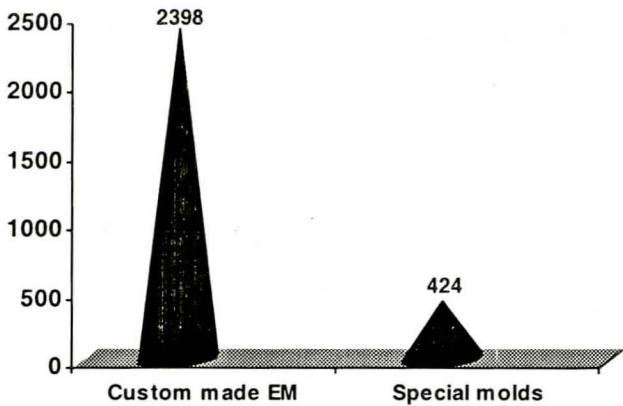


Fig.4: Details of the earmolds made at AIISH.

Listening Training Unit

In this unit, an average of 142 clients were provided listening training per month. Of these 135 were hearing-impaired individuals using amplification devices, 6 were using cochlear implants while one client had an auditory processing problem. These clients received an average of 864 sessions of therapy per month. This training enabled the individuals to make better use of their hearing abilities. While the majority of clients received individual therapy, a few were given training in small groups. Apart from individual counseling sessions for the parents which were given regularly, five group sessions were conducted to educate parents regarding auditory listening training.

RESEARCH

Projects Completed

Evaluation Battery for CAPD in School Going Children

Cost: Rs. 0.80 lakhs

Duration: 8 months

Investigator: K. Rajalakshmi
Sponsor: AIISH Research Fund

The investigation aimed at (1) developing a screening checklist to detect APD in school going children, (2) using the checklist to screen and identify the children who are at risk of APD and, (3) subjecting the identified children to various tests both behavioral and electrophysiological for the confirmation of APD. Four common central auditory tests were administered on 27 children selected with auditory processing problems. The results of the test battery were analyzed to know the sensitivity of the entire test battery. The Dichotic digit test successfully detected more subjects with perceptual difficulty. The next more sensitive test was Gap detection test, Pitch pattern test and ABR was found to have least sensitivity. Though test batteries have been improved, accurate detection of children with perceptual problems remain difficult.

Late Latency Responses in Children with Learning Disability

Cost: Rs. 0.70 lakhs
Duration: 8 months
Investigator: C. S. Vanaja
Sponsor: AIISH Research Fund

The research aimed at studying the cortical auditory evoked potentials in children with learning disability and the effect of auditory learning on these potentials. Data was collected from fifteen children with learning disability and thirty age and gender matched normal children. Cortical potentials, late latency responses (LLR) and mismatch negativity (MMN) were recorded for speech and tonal stimuli. The deviant stimuli differed in terms of place of articulation, manner of articulation or voicing. Results showed that a subgroup of children with learning disability had abnormal LLR and MMN indicating the presence of an underlying auditory

processing disorder. The abnormal processing was seen for both speech and tonal stimuli. However, children showing abnormal speech processing were more in number. It was observed that a majority of children had difficulty in processing of place of articulation cues followed by voicing. Perception of manner of articulation was not affected.

To investigate the effect of auditory learning on these potentials; two of the fifteen experimental children were hierarchically trained on different auditory skills in quiet and in the presence of noise. A post-training recording of the cortical potentials was done on both the children for the same stimuli. A pre-post training comparison of the potentials revealed a reduction in the latency of LLR and MMN with auditory learning program. Thus, it can be concluded that, LLR and MMN can be effective tools for the early identification of sub clinical auditory processing disorder in children with Learning disability. They also are effective in monitoring the change in neural plasticity that can occur with auditory learning.

Projects in Progress

Test for Auditory Memory and Auditory Sequencing of Normal Children

Cost : Rs. 1.30 lakhs

Duration: 10 months

Project Coordinator: Asha Yathiraj

Sponsor: AIISH Research Fund

The research project was taken up with an aim to develop a test to evaluate auditory memory and auditory sequencing of normal children. Auditory memory is one of the parameters required for the perception of acoustic signals. Deviance in auditory memory skills affects communication, which will in turn, affect a child's

pedagogic performance. Auditory memory is weak in children with learning disabilities as well in children with lower mental abilities. Students with auditory memory weakness often absorb and make only little sense of what is said by the teacher. Later, they are able to recall little or none of what was said to them. They also experience difficulty in processing and recalling information that they have read to themselves. There are a high percentage of children with auditory memory problems who drop out of school, not being able to cope with the situation. In order to enable such children to make maximum use of their auditory capabilities, it is necessary to have appropriate materials. In order to develop material for test meaningful bisyllabic Kannada words were taken. Four different lists were developed having inter stimulus intervals varied from 250 msec to 1000 msec. Norms were obtained from 210 normal children in the age range 5 to 12 years having 30 in each group. They were tested using all the four lists. Currently the testing is being done on children with learning disability. Statistical analysis of the data and the report writing is under progress.

Effect of Specific Auditory Skill Training on Listening Development in the Hearing Impaired"

Cost: Rs.1.35 lakhs.

Duration: 10 months

Investigating team: Asha Yathiraj and P. Manjula

Sponsor: AIISH Research Fund

Hearing impaired clients require intensive, systematic training in order to make maximum use of their hearing devices. There is a need to know the impact of systematic, intensive training in the development of listening skills by the hearing impaired. There is also a need to know the impact of different devices in the development of listening skills. With this in mind the project titled "Effect of specific auditory skill training on listening development in the hearing impaired" has been initiated. The outcome of the

study would help make decisions regarding the communication outcome that would be possible with different types of devices. Based on the outcome of the study, modifications can be made in listening training being provided to the hearing impaired. The therapy program would be of immense use in the management of the children with cochlear implants and / or hearing aids. The project was initiated in February 2005.

Analysis of Difficulties Experienced by Children with Hearing Impairment while doing Mathematics

Cost: Rs. 0.85 lakhs

Duration: 8 months

Investigator: I. P. Gowramma

Sponsor: AIISH Research Fund

Purpose of the study is to find out the type and extent of errors committed by hearing impaired children in basic number concept, fundamental operation and mathematical reasoning. The study also aims at comparing the performance of hearing impaired children with normal children. Data is collected from four special schools and one normal school of Mysore City. Both qualitative and quantitative analyses were carried out.

Anthological Study of Traditional Games and Play Activities Useful in Training Children with Disabilities

Cost: Rs.1.25 lakhs

Duration: 10 months

Investigator: G. Malar

Sponsor: AIISH Research Fund

This study endeavors to compile an annotated directory of traditional games and play activities that could be used in training children with disabilities in various skill areas. In the past two

months extensive review of related literature had resulted in documenting nearly 100 relevant games and play activities that cater to various developmental needs of young children. Currently an interview schedule is being prepared to collect and verify information from the field, i.e., rural areas.

Prevention of Deafness and Hearing Impairment

Cost: Rs. 55 lakhs

Sponsor: Plan Funds, AIISH

This project aims at carrying out research as well as provide clinical services to prevent hearing impairment and communication disorders, mainly through extension activities. The prevention is done at the primary, secondary and tertiary levels. Primary prevention of hearing impairment aims at the elimination or inhibition of the onset and development of the problem. Education of the general public regarding various causes of hearing impairment and communication disorders aiming to prevent the occurrence of a problem is carried out in primary prevention.

Individuals with hearing problems need to be identified (secondary prevention) and rehabilitated (tertiary) early, in order to enable them to acquire speech and language or communicate adequately. Early identification and rehabilitation is also required for those hearing impaired individuals who have already acquired speech, since hearing is necessary for monitoring speech. Hence, to prevent the adverse effects of hearing impairments, secondary prevention, followed by tertiary prevention of the problem/s, were undertaken.

Through the project, different procedures are being tried out to determine the most effective method/s in the prevention of hearing impairment and communication disorders. Techniques that are appropriate for different setups are being evaluated in order to

determine the most cost effective, sensitive and time effective method/s.

Effect of Digital Hearing Aids on Auditory Learning

Duration: 2 years

Investigating team: Asha Yathiraj and P. Manjula

Sponsor: Widex India Pvt. Ltd

The aim of this multi-centric project is to determine the effect of digital technology in the development of speech and language skills in hearing impaired children. Seven children, whose hearing loss has been identified early and whose aided audiogram falls within the speech spectrum will be chosen for the project. They would be given intensive auditory listening skill training for a period of two years, to determine the progress made by them. Their development will be compared with that of hearing impaired children wearing analogue hearing aids, to determine the effect of digital hearing aids.

Comparative Efficiency of BTEs Over Body Worn Hearing Aids in the Development of Speech-Language in the Hearing Impaired

Cost: Rs. 6.07 lakhs

Duration: 12 months

Investigating team: M. Jayaram and P. Manjula

Sponsor: S & T Mission Mode, Ministry of Social Justice and Empowerment, Govt. of India.

This study aims at evaluating the benefit of BTEs and binaural BTEs over body worn hearing aids in the development of speech and language. 30 hearing impaired children will be distributed BTE hearing aids appropriate to their requirement. Following this, they will be given speech and language training for a duration of ten



K. Siddaramaiah, Hon'ble Deputy Chief Minister of Karnataka lighting the lamp to inaugurate AIISH Annual Day celebrations. Prof. Sudha Rao, Vice Chancellor, Karnataka Open University, Prof. M. Jayaram, Director, AIISH and Dr K. C. Shyamala, Vice-President, AIISH Gymkhana are watching.



Sri K. Siddaramaiah, Hon'ble Deputy Chief Minister of Karnataka addressing the gathering on the occasion of AIISH Annual Day.



Members of the UGC Expert Committee, led by Dr. M. V. Krishnaswamy, going around AIISH.



Members of the UGC Expert Committee in conference with AIISH Director Prof. M. Jayaram.

months. Improvement in listening, speech and language skills will be evaluated. Extension services were carried out to screen/evaluate the hearing of infants and school children. The following table indicates the number of individuals who were screened/evaluated, referred for detailed evaluation and rehabilitated under the project:

Activity	No. Screened/ Tested	No. referred to AIISH	Certificates issued
Infant screening	6851	339	NA
School screening	5012	1910	NA
Camps	1034	168	79
Total	12897	2417	79

Table 2 : Project data

The data obtained in the project is being analyzed to note the most appropriate test protocol for evaluating individuals of various age groups. The prevalence of different types of hearing impairment in infants and school going children is being investigated.

EXTENSION SERVICES

Extension activities were carried out by the department of Audiology with the aim of early identification and rehabilitation of the hearing impaired. These extension activities were mainly conducted in immunization centers and primary schools. In addition, several camps were conducted. This has enabled a larger number of individuals to benefit from the services of the department at their doorstep. Infants and children have benefited maximally from the extension activities. The extension activities were carried out for individuals of all ages, starting with the infants extending to the senior citizens.

Using a high-risk checklist, hand-held hearing screeners and calibrated noise-makers, 6851 infants were screened in immunization centers. Of them, 339 infants were referred for further evaluation. Screening programs were also conducted in rural areas. Visits were made to schools to identify children with speech and hearing problems. Of the 5012 school children screened for hearing problems, 1910 were referred for detailed evaluation at the institute. These screening programs spread awareness among the public regarding the need to identify hearing problems early. The staff of the department also participated in camps organized by different Government and non-Government organizations. Figure 5 depicts the number of infants, school children screened and referred for further evaluation.

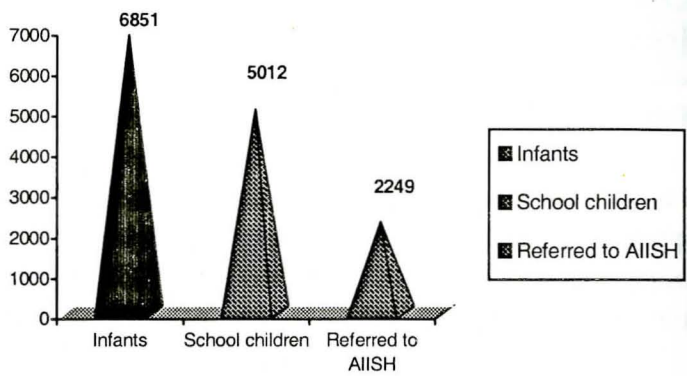


Fig.5: No. of infants and school children screened, no. referred to AIISH

Free Hearing Check-up Camps

The staff of the department of Audiology participated in sixteen speech and hearing camps which were conducted in the following places:

Place of camp.	No. of beneficiaries
Belagola	21
Blind School, Mysore	14
Madikeri	27
Kollegala	45
Gundlupet	16
H. D. Kote	85
Koppala	70
Siddapura	21
Kanakapura	62
T. Narasipura	26
Nagamangala	24
Devalapura	19
Bidiganvile	8
Kanakapura	51
Bagalakote	23
Chamarajanagara	26
Total	538

Table 3: Details of free hearing check-up camps

OTHERS

Workshops/Symposium Organized

The following workshops/seminars/CRE programs were conducted by the department:

1) Prevention, Identification and Management of Hearing Impaired

Workshop on Prevention, Identification and Management of Hearing Impaired for Pediatricians was held on 23.6.2004 (25

members participated). As an outcome of the program, they have started referring high risk neonates for hearing evaluation.

2) Cochlear Implant

Workshop on Cochlear Implant conducted by AIISH and M/s Pika Medicals was held on 30.6.2004 (99 members participated). The participants were educated regarding cochlear implant, its components, the surgical procedure and the outcome from implants. Hearing-impaired children were brought for audiological evaluation to find out if they were candidates for cochlear implants.

Workshop on Cochlear Implant was held on 10.2.2005 (90 participants). The participants were updated on the outcome with cochlear implants, changes in cochlear implants, selection criteria, radiological considerations, programming, design considerations and neural response telemetry. Analysis of case evaluations was done by the participants to select the candidates for cochlear implants.

3) Genetics of Hearing and Hearing Loss

National seminar on Genetics of hearing and hearing loss was held from 22-23 July 2004 (37 members participated). The resource people for the seminar included professionals from different parts of the country. The gene mutations that have been discovered to be a cause of hearing loss in the Indian population were discussed. A nanochip, which can identify known gene mutations by analyzing blood sample, was shown to the participants. The participants were educated regarding the methods for gene analysis and the centers where the same could be carried out.

4) Auditory Processing

Seminar on Auditory Processing Disorders was held on

5.8.2004 (78 members participated). The seminar included lectures on current status of assessment and management of auditory processing disorders in India as well as in US. There was also a demonstration of construction of tests for auditory processing disorders and therapy techniques for children with auditory processing disorders.

5) Hearing Aid Users

Workshop for Hearing Aid Users held on 3.9.2004 (43 members benefited). The problems of participants were solved through interaction during the sessions. This in turn improved their listening abilities. They wanted such programs to be conducted more frequently. A quiz competition was conducted and prizes were distributed.

6) Digital Hearing Aids

Workshop on Digital Hearing Aids conducted by AIISH and M/s. Phonak India Pvt. Ltd. was held on 4.9.2004 (75 members participated). The participants were oriented regarding digital hearing aids and trained regarding the advantages of digital hearing aids over analogue hearing aids. Various parameters that can be manipulated in different digital hearing aids were demonstrated. The difference in low cost digital and high-ended digital hearing aids was highlighted.

Workshop on Digital Hearing Aids conducted by AIISH and M/s. Widex Pvt. Ltd. was held on 28.9.2004 (43 members participated). Participants got familiarized with the technical details of different digital hearing aids, proprietary fitting rule, laser technology in making ear molds and use of NOAHlink for programming digital hearing aids.

7) Auditory Dys-Synchrony

Seminar on Auditory Dys-Synchrony was held on 22.9.2004 (95 members participated). The seminar was appreciated and the participants were educated that special care needs to be taken to select suitable audiological protocols to arrive at appropriate diagnosis.

8) Visual Theatre for the Deaf

Workshop on Visual Theatre for the Deaf titled 'Look at Me' sponsored by British Council, Chennai & AIISH was held from 23-27 November 2004 (43 members participated). The workshop was successful in training children with hearing impairment in theatrical skills as a means for self-expression, communication and social skills. It was successful in creating awareness about deaf identity, rights, accessibility, communicational strategies and deaf arts.

9) Curriculum Adaptation

Workshop on "Curriculum Adaptation for Children with Hearing Impairment: A Computer-Based Approach" was held on 10.12.2004 and 11.12.2004 (50 members participated). The teachers learnt ways to plan lessons suitable to the needs of hearing impaired children (with or without computer). The computer professionals came to know of the specific requirements of children with a hearing impairment while preparing educational programs in computer. The need for speech and hearing professionals to coordinate with teachers of hearing impaired children was felt by the group members.

10) Mismatch Negativity

Seminar on Mismatch Negativity was held on 13.12.2004 (30

members participated). The pioneer who first identified and described MMN, Prof. Risto Naatanen, Academy Professor, Cognitive Brain Research Unit, University of Helsinki, Finland, shared his expertise in the field during this seminar. In addition to his lectures, the staff from the department of Audiology also presented information regarding the research done on MMN at AIISH. This program was of considerable benefit to speech and hearing professionals working in clinical, research as well as academic set-ups.

11) Evaluation and Management of Tinnitus

Workshop on Evaluation and Management of Tinnitus was held on 17.12.2004 (50 members participated). The participants were provided with information on conditions associated with tinnitus, neuro-physiological basis of tinnitus, evaluation and management of tinnitus. The workshop broadened the knowledge of participants in the area of evaluation and management of tinnitus.

12) Auditory Learning

Workshop on Auditory Learning was held from 11-12 February 2005. (200 participants) Audiologists, Speech-Language Pathologists and Teachers of the hearing impaired attended. The participants were educated on various techniques, strategies to be used during auditory verbal training for children with hearing impairment. The demonstration of activities highlighted the strength of the auditory verbal technique.

Guest lecture

A lecture was held by Mr. Trevor Baillie from G. N. Otometrics on 11th January 2005 on Pediatric Hearing Screening and ENG. The program was attended by the III B.Sc. students and staff.

Papers Presented in Workshops / Conferences / Symposium

The following papers were presented by the staff of the department in various workshops/conference/symposium

Ajith Kumar, U., Sandeep, M., & Jayaram, M. (2004): "Processing and perception of temporal modulations through a digital hearing aid" at NSA, SJCE, Mysore. [This was also awarded the best paper in speech communication].

Shivaprasad Reddy & Asha Yathiraj. (2004): "Pre-attentive Processing of Speech Perception: Evidence from SN Hearing Impairment" at the 6th International Conference on Cognitive Systems, IIT, New Delhi.

Ravanan, M. P. & Rajalakshmi, K. (2004): "Competing sentence test in Kannada for children-Revised" at 32nd All India Conference of Dravidian Linguist held from 10-12 June 2004 at P. S. Telugu Univ., Warangal.

Ravanan, M. P. & Rajalakshmi, K. (2004): "Competing sentence test in Kannada for adults-Revised" at UGC SAP National Workshop on Clinical Linguistics held from 8-17 March 2004 at Centre for Advanced Study in Linguistics, Annamalai University.

Srikant, M., & Rajalakshmi, K. (2004): "Hearing aids and music mix like oil and water" at NSA, SJCE, Mysore.

Ravanan, M. P., & Rajalakshmi, K. (2004): "Computerized therapy module in Kannada for children with APD" at the International Convention of Linguistics, Alahabad.

Karthik, N., Aditi, A. K., & Animesh Barman.(2004): "The probable sight of DPOE generation: A pioneering report" at NSA, SJCE, Mysore.

Amith, S., Shailaja, T., & Vanaja, C. S. (2004): "Correlation of ABR thresholds in notched noise with behavioral thresholds" at NSA, SJCE, Mysore.

Venkata, K. S. D., & Vanaja, C. S. (2004): "Characteristics of ABR waveform for hearing aid processed speech bursts" at NSA, SJCE, Mysore.

Srikanta Mishra, Manjula, P and Jayaram, M (2004): "Open-jaw vs. closed jaw ear impressions in children" at IHCON 2004, International Hearing Aid Research Conference 2004, California, USA

Gowramma, I.P. (2004). "Developmental milestones of special education in Karnataka" at United Nations Development Project (UNDP) Conference on Education with Zero rejection, Hyderabad.

Gowramma, I.P. (2004): "Development of Concept and Procedure of Division to Teach Children with Dyscalculia" at the World Congress on Dyslexia at Greece.

Gowramma, I.P. (2004): "Managing children with learning disabilities in inclusive set up" at Senior Scholar Seminar Series at Mumbai.

The following papers were presented at 37th National Conference of ISHA held at Indore from 14-16 January 2005.

Ajith Kumar, U. and Jayaram M. (2005): "Incidence and audiological characteristics in individuals with auditory neuropathy/auditory dys-synchrony", awarded best poster in Audiology.

Geetha C., Ashly George and Asha Yathiraj (2005): "Perception of high frequency filtered speech in normal hearing subjects", Mukthesh award for best paper in Audiology.

Ravanan M. P. & Rajalakshmi K. (2005): "Prevalence of Auditory Processing Disorder in School Going Children".

Srikanta Kumar Mishra, Amy Kunnathur and Rajalakshmi K. (2005): "Hearing aids and music: Do they mix?"

Manuj Agarwal, Ankit Mathur, Vishwakarma Chandrakant and Vanaja C. S. (2005): "Effects of background noise on transiently evoked and distortion-product otoacoustic emissions".

Sandhya S. Shekar, Vishwakarma Chandrakant and Vanaja C. S. (2005): "Effect of peripheral hearing impairment on auditory late latency responses".

Aditee Ashok Khaladkar, Karthik N. and Vanaja C. S. (2005): "Speech burst ABR: A bronze standard for perceptual deficits in sensorineural hearing loss". Dayalan Samuel Award for best paper in Audiology.

Harini N. V., Chithra R. and Vanaja C. S. (2005): "Contralateral suppression of TEOAE" in NIHL.

Amy Kunnathur, Srikant Kumar Mishra, Vanaja C. S. and Manjula P. (2005): "Cochlear implants, hearing aids and CAEPS: Can they amplify bright smiles in children?" - Awarded Late Dr. N. R. Chaudari Memorial award for best paper in pediatric Audiology.

Amit Sehgal, Sailaja T. and Manjula P. (2005): "Effectiveness of noise reduction system in digital hearing aid: Preliminary findings".

Vijay Mohan Raaja, M., Harini, N. V., Savithri S. R. and Gowramma I. P. (2005): "A remedial programme for a dyscalculic child having Guillian Barre syndrome".

Equipment Procured

- Electric plain grinder-1no.
- Polishing machine-1 no.
- Lite Piston-1 no.
- Madsen Audiometer ITERA-1 no.
- Hand held impedance audiometer-1 no.
- GSI typmstar-1 no.
- HP Deskjet Printer-1 no.
- UPS-5 nos.
- Personal computers-5 nos.
- Tucker Davis Technology - 1 No
- Interacoustic AD-229E - 1 No.
- Interacoustics AD 229E Diagnostic Audiometer
- TDT Systems with accessories
- Oticon Synchro BTE hearing aid
- BERA Phone with EP-15 with Laptop including accessories
- Interacoustics AD 229E Diagnostic Audiometer
- TDT Systems with accessories
- Oticon Synchro BTE hearing aid
- BERA Phone with EP-15 with Laptop including accessories
- Amplivox 260 with accessories
- GSI67 Audiometer with accessories

PUBLICATIONS

Kumar, U. Ajith & Vanaja, C. S. (2004). Functioning of Olivocochlear Bundle and Speech Perception in Noise. *Ear & Hearing*, 25(2):142-146.

Manjula, P (2004). Consequences of failure to meet standards. Proceedings of the National Workshop on electroacoustic evaluation of hearing aids and audiometric transducers, 12-13 August 2004, AIISH, Mysore.

DEPARTMENT OF CLINICAL PSYCHOLOGY

The Department of Clinical Psychology is concerned with psychosocial aspects of communication disorders from the standpoint of research, training and clinical practice. The contributions made by the department in the reporting year are as follows:

ACADEMIC PROGRAM

Theoretical and practical training of B.Sc and M.Sc students in the area of clinical psychology was carried out as per course curriculum and training schedule. The students posted to the department were trained in case history taking, psychological evaluation and counseling under the supervision of departmental staff. The students also received training in administering, scoring and analysis of various psychological tests.

- ❖ **Validation and extension of Gessells drawing test for children with communication disorders.**
- ❖ **Validation of activity checklist for preschool children with development disabilities.**

Ph.D Program

The following staff member is pursuing Ph.D at the department.

- **H. H. Raju: A study of job satisfaction in relation to occupation stress and quality of life of employees in public and private sectors.**

Guide: Jyothi S Madgaonkar

CLINICAL SERVICES

Details of the clinical services provided to clients registered at the institute are as follows:

Diagnostic Services

The clients referred to the department undergo routine psychometry for differential diagnosis at the department. Pre-vocational assessment was carried out for adolescents and adults with communication disorders. Neuro-psychological evaluations were conducted for individuals with neuro-linguistic/communication problems. Psycho-educational achievement testing and grade level assessments were done for children with scholastic backwardness and academic under achievement. Behaviour assessment was carried out for children with problem behaviors/skill deficits. Family assessment was done on specific cases requiring family intervention programs. Figure 1 depicts the number of new clients and those monitored through follow up evaluation.

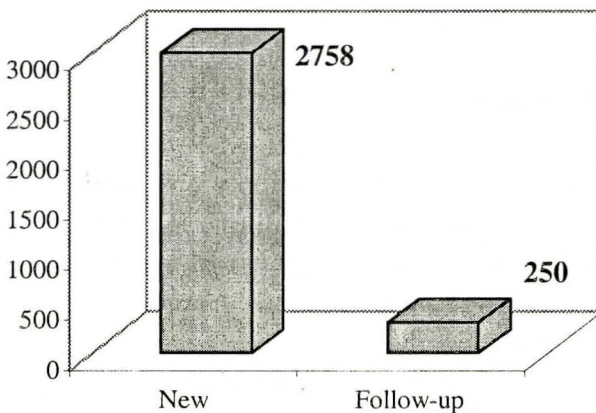


Fig. 1: Overview of clients in Psycho-diagnostic clinic

The diagnostic services which were offered at the department in the report year are given in Table 1.

Particulars	Total no. of cases
Aphasia	14
Articulation disorder	104
Autistic disorder	22
Cerebral palsy	34
Functional dysphonia	27
Hearing loss	520
Mental retardation	1307
Normal non-fluency	30
Specific learning disabilities	56
Speech & language disorders	522
Stuttering	308
Voice disorder	29
Others	35
Total	3008

Table 1: Diagnostic distribution of cases

Therapeutic Services

Therapeutic services are routinely provided for cases with various types of communication disorders. Home based and clinic based remedial educational training programs were provided for children with scholastic backwardness. Appropriate individual as well as family guidance and counseling were also carried out for these cases as and when necessary. Preadolescent and adolescent individuals with disabilities were given pre-vocational and vocational guidance after appropriate aptitude testing. Neuropsychological retraining programs including attention retraining,

memory training or allied cognitive training program were dispensed for individuals with neurolinguistic/communication problems. Individualized behavioural counseling, therapy and modification programs were carried out in clinics as well as home setting for cases reporting behaviour problems. Skill training programs on activities of daily living, functional academics, and functional living skills, social or communicative skills were given for cases showing skills deficits behaviors. Table 2 presents details of therapeutic services offered to clients with communication disorders.

Particulars	Clients	Sessions
Behaviour therapy	102	421
Behaviour modification	64	548
Home based training program for MR/SLD	257	654
Remedial training for SLD clients	96	412
Intensive parent counseling program	75	267
Neuropsychological re-training program	15	43
Vocational guidance	12	25
Total	621	2370

Table 2: Services offered at the department

Other Services

All eligible and deserving cases were issued appropriate certificates stating the nature and extent of their disability. The various concessions and social/economic benefits including certificates for financial assistance, travel concessions, income tax

rebates, special school admissions, exemptions from second language study in school, LIC/UTI schemes etc. Further, psychological reports were issued on request from professional peers, for academic and administrative purposes. Reports were provided for medico-legal cases and expert opinion was also provided during their court proceedings. Table 3 provides details of other services offered to clients.

Particulars	No.
Certificate of disability for financial assistance	914
Certificate for railway concessions for persons with mental retardation.	284
Certificate to avail Income tax Rebate by parents of M.R.	158
Psychological reports for special school admissions	32
Certificate to avail language exemption in schools for special children	14
Certificate for LIC/UTI benefits for persons with mental retardation	12

Table 3: Other services provided

OTHERS

Dr. S Venkatesan served as subject expert for Sarva Shikshana Abhiyan Program (SSA) Karnataka for matters related to Universalizing Elementary Education, Government of Karnataka, Bangalore.



Members of the UGC Expert Committee during an interaction with the staff and students of AIISH.



Prof. J. Shashidhar Prasad - Vice Chancellor, University of Mysore and Mr. H. S. Shankaralingegowda, MLA at the AIISH Open Day event on August 9, 2004. Also seen are Prof. M. Jayaram, Director, AIISH and Dr. R. Manjula, Head, Dept. of Speech Pathology.



Students of various schools standing in a queue to participate in the AIISH Open Day celebrations.



His Worshipful Mayor of Mysore City Mr. Dakshinamurthy inaugurating a camp on 'Free Repair of Hearing Aids' organized by the institute in association with Rotary Club of Mysore (West). Dr. M. S. Nagaraja Rao, President of the Rotary – Mysore (West), Prof. M. Jayaram, Director, AIISH and Mr. Ajish K. Abraham, Head, Dept. of Electronics are seen.

PUBLICATIONS

Venkatesan, S. (2005). Activity Log of Preschool Children with Developmental Disabilities and Autism Spectrum Disorders. *Asia Pacific Disability Rehabilitation Journal*, 16. 68-76.

Venkatesan, S. (2004). Efficacy of Home Training Program in Skill Enhancement of Children with Developmental Disabilities. *Indian Journal of Clinical Psychology*, 31, 121-127.

DEPARTMENT OF ELECTRONICS

The Department of Electronics offers engineering services in Biomedical Instrumentation and Acoustics, Electrical systems, Computers & Peripherals and Data & Voice communication systems to the entire institute and undertakes external consultancy services in these areas. During the report year, the department continued to pursue its objectives of:

- Training the Diploma, Graduate, Postgraduate and B.S.Ed students in Electronics, Acoustics, Bio-medical instrumentation and Computer Applications.
- Repair and servicing of all biomedical instruments, computers and management & maintenance of a computer (LAN) network with 207 nodes and 3 servers.
- Electroacoustic evaluation.
- Issue of hearing aids under ADIP scheme.
- Repair, servicing and electro acoustic evaluation of Body worn and BTE hearing aids.
- Maintenance and repair of all electrical installations, EPABX & telephone network.
- Calibration of diagnostic equipments and acoustic noise measurements.
- Indigenous technology development.

- Received a record grant of Rs. 50.00 lakhs from Ministry of Social Justice and Empowerment for distribution of hearing aids under the ADIP Scheme.
- Computerized the evaluation of B.Sc. & M. Sc. entrance examinations.
- Computerization of AIISH activities - Prototype of clinical module is implemented. Academic and payroll packages made fully functional.
- Installation of direct reception set (DRS) for satellite downlink facilities (A project of RCI in collaboration with IGNOU, New Delhi)

ACADEMIC PROGRAM

TRAINING

Short-term Training

The following short term training programs were conducted for the Speech and Hearing professionals, Biomedical Engineers and Technicians working in other speech and hearing institutes/centers.

Title of the program	No.
Servicing, calibration and repair of modern audiological equipments	1
Repair and servicing of body-worn hearing aids	1
Repair and servicing of BTE hearing aids	1
Biomedical instrumentation in Speech and Hearing	1
Acoustic measurement	1
Computer hardware maintenance	1

Table 1: Details of short-term training programs conducted.

In-house Training

Theoretical & practical training was given to

- (i) Post graduate students on Technology for Speech, Language & Hearing.
- (ii) Diploma students on Hearing Aid repairs and electronic circuits.
- (iii) Graduate students on Biomedical Instrumentation and Acoustics.
- (iv) B.S.Ed students on Computer Applications in the education of hearing impaired.

Apprentice Training

The institute is accredited as a National Apprentice Training Center by the Board of Apprenticeship Training (Ministry of HRD, Govt. of India). In the report year, one graduate engineer in Electronics and Communication engineering, two diploma holders in Electronics engineering, one diploma holder in Electrical and Electronics engineering and one diploma holder in Commercial practice were trained as apprentices.

MAINTENANCE SERVICES

Hearing Aid Issue & Electroacoustic Evaluation

Department of Electronics distributes free hearing aids and solar battery chargers under ADIP scheme of the Union Ministry of Social Justice and Empowerment to the eligible persons with hearing impairment. In the report year, the department received a grant of Rs. 50.00 lakhs. A total of 2451 hearing aids and solar battery chargers were distributed out of which 2101 were distributed at the institute and 350 were distributed in the speech and hearing camps conducted at various places in South India.

Ministry of Social Justice and Empowerment has selected the institute as the sole authorized agency for electro-acoustic evaluation of hearing aids distributed in the States/UTs of Karnataka, Orissa, West Bengal, Arunachal Pradesh, Meghalaya, Tripura, Assam, Nagaland, Manipur, Sikkim and Mizoram. This year 40 hearing aids were evaluated under this program.

Hearing Aid Repairs

Hearing aid repair is another major activity of the department where the service and repair of both body level and BTE hearing aids are available to all hearing aid users at a nominal cost. Table 2 shows the number of hearing aids repaired in the department.

Type of hearing aid	Quantity
Body level hearing aids	828
BTE hearing aids	112
Total	940

Table 2: Number of hearing aids repaired

Calibration, Repair and Servicing of Biomedical Instruments and Computers

Repair and maintenance of equipment at the laboratories and departments of the institute is one of the major activities of the department. Table 3 shows the number of instruments repaired/calibrated during 2004-05. The table also includes details of repair work done for the equipments of other institutions.

Title	Quantity
Instruments repaired	120
Instruments and systems calibrated	21
Computers and peripherals repaired	135

Table 3: Number of instruments repaired/calibrated

Repair and Maintenance of Electrical Installations

The department maintains the electrical network of Naimisham and Panchavati campuses. All major electrical installations such as HT yard, centralized AC plant, lifts, automatic diesel generator system, motors and pumps etc. are maintained by the department. The department had taken up 103 major repair works and 39 minor repair works related to electrical maintenance in the report year.

Acoustic Noise Measurement

The department is equipped with state-of-the-art equipments and expertise for acoustic noise measurement. The department has carried out two external consultancy services for noise measurement of dot matrix printers of Wipro peripherals. The department also conducted noise audit at four major industries around Mysore as part of the process of obtaining ISO certification for environmental management system - 14001-1996. The industries for which the noise audit was done this year are:

1. VWF industries Ltd., KRS Road, Mysore.
2. Bacardi-Martini India Ltd., Nanjangud.
3. Karnataka Silk Industries Corporation Ltd., Unit: Silk weaving factory, Mysore.

4. Karnataka Silk Industries Corporation Ltd., Unit: Silk Filature, T. Narasipura.

Major works completed

- Design, development and launching of new AIISH website.
- Computerized evaluation of B.Sc & M. Sc entrance examination.
- Air conditioning of the stage and installation of acoustic curtains at Gymkhana auditorium.
- Laying of new UG cable from generator room to new ladies hostel.
- Fabrication and evaluation of three units (3 transmitters and 30 receivers) of FM hearing aid.

Major Works Ongoing

- Further computerization of AIISH activities.
- Design and construction of sound proof room for calibration of diagnostic instruments and acoustic noise measurements.
- Acoustication of twenty rooms for listening training unit at therapy clinic.
- Electrification of new ladies hostel, administrative block and academic block.

- Telephone and network cabling of ladies hostel, administrative and academic blocks.
- Air conditioning of lecture hall and conference room at academic and administrative blocks.
- Installation of 125 KVA diesel generator with AMF panel and acoustic enclosure.

RESEARCH

Project Completed

Development of Mouse Mover

Principal Investigator: Ajish K Abraham

The standard mouse is usually difficult to access by a person with a physical disability or by a child who lacks the coordination. The mouse mover acts as a standard mouse and allows control of all mouse functions using a combination of separate big push button switches for left, right, up & down movement. The left click and right click functions are also provided by separate push button switches. The project is complete and the device is fully operational. With this device, the mouse can be operated with foot or with the palm. The device plugs directly into any computer and requires no special software.

Projects in Progress

Development of FM Hearing aid system

Cost: Rs.5.6 lakhs

Duration: 2 years

Investigating team: M. Jayaram, Ajish K. Abraham and S. R. Srinivasa

Sponsor: S&T under DRC, Ministry of Social Justice and Empowerment, Govt. of India

This is a sponsored project of Rs.5.6 lakhs by the Ministry of Social Justice and Empowerment, Govt. of India with an objective to indigenously develop a complete FM hearing aid system. The complete system has been tested. FM system developed works satisfactorily in the FM mode, environment mode and in the combined mode. AGC has been incorporated in the amplifier for all these modes. Electroacoustic evaluation of this system is complete and clinical trials are in progress. The fabrication work of three transmitters and thirty receivers is in progress.

Project work of B.E students

The department has been identified by the Vishweshwaraiah Technological University, Belgaum, as a centre for project work for their B.E., B. Tech and M. Tech students. Students from the following institutes are working on their Final semester project at the department.

1. National Institute of Engineering, Mysore
2. Sri Jayachamarajendra college of Engineering, Mysore.
3. Vidyavardhaka College of Engineering, Mysore.

OTHERS

Workshops Organized

The department organized workshops for Bio-medical Engineers, Speech & Hearing professionals and other professionals interested in this field with an objective to share the expertise which our engineers have acquired through the years in the field of repair, maintenance, calibration of bio-medical instruments in Speech & Hearing and Acoustics. The details of the workshops conducted

this year are as follows:

1) Workshop on "Introduction to computers & word processing" held on 31.7.2004.

This was an in house workshop for all fresh post graduate, graduate and diploma students of the institute to introduce them to the world of Information Technology. The workshop had both practical and theoretical sessions. In the practical sessions, the participants were given hands on training on internet, intranet, creating documents using MS word, MS power point, Excel etc. Theoretical sessions were focused on the latest technology of computers, peripherals such as pen drives and thumb drives and different types of printers etc. A demonstration of internal parts of the computer such as mother board, processor, hard disk, floppy drive, CD ROM drive etc., was also arranged. Eighty four students participated in the program.

2) National workshop on "Electroacoustic evaluation of hearing aids and audiometric transducers" held from 12-13 August 2004.

This workshop was organized to provide practical training on measurement of electroacoustic parameters of hearing aids and transducers used for audiometric testing and also to create awareness on the consequences of failure to meet the standards. The workshop was attended by 15 participants which included engineers from hearing aid industries, scientists from acoustic research laboratories, rehabilitation officers from Ministry of Social Justice and Empowerment, Government of India and audiologists.

3) Camp for free repair of hearing aids held from 4-7 October 2004.

This 4-day camp was organized for the benefit of hearing impaired children and adults wherein any individual with an hearing

aid can walk in and get his hearing aid serviced and repaired free of cost. 264 hearing aid users benefited from the camp.

4) National workshop on "Speech processing" held from 18-19 November 2004.

This was a 2-day workshop with an objective to impart basic information and hands on experience on speech processing to engineers, linguists and research professionals. 60 participants attended the workshop which included scientists, engineers, R&D professionals working in the area of speech processing, speech and hearing professionals and students from engineering colleges.

Papers Presented at Workshops/Seminars/Symposium

Ajish K. Abraham: "Technology of Hearing Aids" Workshop organized by Department of Rehabilitation Science & Special Education, Holy Cross College, Tiruchirappally, Tamilnadu on 18-19 November, 2004.

Karthik Narayanan, Aditee Ashok Khaladkar, Ajith U. Kumar, Ajish K. Abraham & Jayaram, M. (2004). "Distorted output from hearing aids because of Electromagnetic interference (EMI): Some preliminary findings". IHCON, California, August 2004.

Material Development

The following handbooks were published.

- Introduction to Computers and Word processing.
- Electroacoustic evaluation of hearing aids and audiometric transducers.

Equipment Procured

- Artificial ear (Larsen & Davis make)
- Artificial Mastoid (Larsen & Davis make)
- Swipe card access control system for Library & Information Center
- HICOM modules and new power console for upgradation of EPABX system.

DEPARTMENT OF MATERIAL DEVELOPMENT

The Department of Material Development came into effect from March 2004. The department consists of a Coordinator, a Production manager, a Graphic Designer, a Copy Writer and an Artist/ Photographer. The objective of the department is development and standardization of different types of resource materials with the help of using performing arts, electronic and print media. The resource materials are useful to:

- Create awareness regarding communication disorders
- Make the services of AIISH more effective
- Facilitate rehabilitation for people with communication disorders through development of the needed material.

The following is the summary of work produced at the department during the report year:

Nature of the work	No.
Invitations	15
Cover pages	15
Posters	18
Workshop Brochures	6
Folders	5
Handouts	11
Certificates	5
Reports	4
Charts	1
Publications	13
Others (Stickers, greeting cards, banners, stage design, test pictures etc.)	21

Table 1: Work completed during the year 2004-05

Ongoing Activities

- Book on RCI-CRE workshop proceedings titled 'Learning needs of disabled children in schools'.
- Handbook on 'Cochlear Implant'.
- Booklet on handbook for parents of children with learning disability. Vol-1 [Department of Speech pathology]
- Handbooks on children with mental retardation, autism and cerebral palsy and Infant stimulation for communication skills-Folder & Booklet (POCD)
- AIISH Newsletter
- Prevention of hearing loss in new born babies' for expectant mothers
- To modify three handouts and prepare the same for publication on the following-MR, Autism, stimulation technique [Therapy clinic]
- AIISH campus map and directional boards
- AIISH Museum
- AIISH Documentary
- RCI-CRE handbook on LD

Public Education Activities

'Vani' - The AIISH Street Play

The Department of Material Development, AIISH produced a street play titled 'Vani' for the National level theatre festival 'Bahuroopi' held in Mysore on 5 December 2004. The students of AIISH were trained to enact the play. The team gave several performances in Mysore. The play attempts to see through the eyes of a girl child named Vani, who is speech and hearing impaired. It tries to portray that the people with communication disorders are not disabled, but differently abled. The play stresses on the responsibility of the society to integrate and rehabilitate such people

to the mainstream. The play has been very much appreciated by the viewers.

Workshops/Seminars/Conferences Organized

Workshop on Poster Making

The Department of Material Development conducted a workshop on poster making on 8 January 2005. The workshop was inaugurated by Prof. M. Jayaram, Director of AIISH. The objective of the workshop was to impart skills on poster preparation to the students, NGO workers and special educators associated with training and educating the public. Mr. Kranthi Madhav, Program Producer, Education and Multi Media Research Center, Mysore delivered a talk on the importance of posters as a tool in education and their relevance in public education. Mr. M. Raju, Coordinator, State Resource Center, Mysore was the resource person for the group activity. The department staff gave a demonstration on the use of digital media to generate posters. The participants produced 15 posters during the workshop.

Workshops/Seminars/Conferences Attended

R. Srinivas, Production Manager and Tina Sahela, Copywriter attended the workshop on Word Processing organized by the Department of Electronics on 31.7.2004.

In-house Training Programs

- The Special Educators at the institute were trained by the Graphic Designer in the department regarding the use of computer while teaching art.
- Master Abhilash, a client of the institute with Mild MR was given training regarding the basics of drawing in the department.

TEACHING AND TRAINING

Short-term Training Program

Mr. Rahul Tirpude, a student of Post-Graduate Diploma in Toy Design and Development from the National Institute of Design, Paldi, Ahmedabad was placed as an 'institutional trainee' from 17.11.2004 to 3.12.2004 in the department. During his stay, he designed some toys for the sensory-motor development in children with communication disorders.

Equipments Procured

- IBM Think centre computer systems - 2
- IBM Smart centre Computer system
- HP LaserJet 2420 dn B/W printer
- Aplab UPS for the computers - 3
- Samsung portable digital voice recorder



Prof. M. Jayaram, Director, AIISH, unveils the foundation stone for the academic block building.



Dr. B.G. Sangameshwar, Principal, SJCE, Mysore inaugurating AIISH Durbar 2005 by lighting the lamp. Smt. Geetha, a well known mimicry artist from Rangayana, Prof. M. Jayaram, Director, AIISH and Dr. K.C. Shyamala, Vice-President, AIISH Gymkhana are also seen.



Students of AIISH strike an impressive pose in the variety entertainment competition at AIISH Durbar 2005.



Students of AIISH caught in jubilation celebrating winning of overall championship for the first time at AIISH Durbar.

DEPARTMENT OF OTORHINOLARYNGOLOGY

The Department of Otorhinolaryngology plays an active part in achieving the major objectives of the institute. The department offers theoretical and clinical training to students in specific areas of Otolaryngology. Clinical services are also offered to individuals with communication disorders. Research and outreach programs are the other activities of the department. Surgery for problems of ear, nose and throat, as related to speech & hearing disorders, is done at Krishna Rajendra Hospital, attached to Mysore Medical College, Mysore.

ACADEMIC PROGRAM

The students pursuing undergraduate and post-graduate courses in speech and hearing are given theoretical and clinical training in otorhinolaryngological problems associated with speech and hearing problems by the faculty of the department.

CLINICAL SERVICES

Medical and surgical services are offered to individuals with ear, nose and throat diseases. The OPD unit is equipped to conduct minor OT procedures such as suction clearance of ear discharge, removal of foreign bodies and wax. The department has an OPD and surgical unit at KR Hospital, Mysore where clinical services are extended to larger population. A total of 8630 clients with ear, nose and throat diseases and 10,092 clients for follow-up evaluation were offered clinical services at the institute. A total of 5410 new clients were offered clinical services at AIISH-D unit of K.R. Hospital, Mysore and 4331 old clients were monitored through follow-up evaluation.

Particulars	At AIISH	At KR Hospital
New cases	8630	5410
Follow up cases	10092	4331
Microscopic examination	5870	-
Endoscopic examination	369	-

Table 1: Details of the therapeutic services offered

RESEARCH

Project in Progress

Assessment of Etiological Factors for Conductive Hearing Loss

Cost: Rs. 3.60 lakhs

Duration: 18 months

Investigating team: M. Jayaram and G. Rajeshwari

Sponsor: WHO

The project aims at etiological assessment of conductive hearing loss in various age groups. The project aims at assessing 4000 patients with conductive etiology. 1250 patients with external and middle ear diseases, development anomalies, infections, structural and genetic etiology have been assessed till date.

OTHERS

Papers Presented in Workshops / Conferences / Symposium

Sundara Raju, H. "Causes, identification and management of ENT problems in the hearing impaired children" at the Workshop on Prevention, Early Identification and Management of Hearing Impairment" held at AIISH from 1-2 July 2004.

Sundara Raju, H. "Anatomy of the Larynx" at RCI-CRE program on Professional Voice Care held at AIISH from 31st January to 4th February 2005.

Rajeshwari, G. "Medical evaluation, medical/surgical treatment for tinnitus" at the Seminar conducted by Department of Audiology, AIISH on 17th December 2004.

Awards/Honours

G. Rajeshwari, Lecturer in ENT, AIISH was awarded the membership of the National Academy of Medical Sciences (India), 2004 in recognition of her success in the National Board Examination with top honours.

DEPARTMENT OF SPEECH-LANGUAGE SCIENCES

The Department of Speech-Language Sciences is involved in clinical, academic, research and public education activities. Clients with complaints of voice, articulation, fluency and language are being evaluated and rehabilitated. Students are trained to carry out various measurements for assessment and therapeutic techniques for the management of voice, articulation, fluency and language disorders. The faculty offers guidance to special educators in planning activities for development of speech and language skills in pre-school children with communication disorders. The department also undertakes research activities and projects funded by AIISH and outside agencies. The areas pertaining to voice, fluency disorders, acoustics of speech, speech production, speech perception, speaker verification, language, and literacy are the prime focus of investigation. Work to develop a speech and hearing museum was initiated under the chairmanship of the departmental Head.

ACADEMIC PROGRAM

The faculty of the department was involved in teaching courses on introduction to speech, language and communication, anatomy, physiology and pathology of the speech and language mechanism, phonological disorders, voice and its disorders, scientific enquiry in speech pathology, speech production, language, cognition and brain, speech processing, music acoustics, suprasegmentals and research methods in speech pathology. As part of the practical training, under-graduate and post-graduate students were trained in case history taking and evaluation and assessment procedures for various speech and language disorders.

- **Project with MATF on a screening program for school children.**
- **Four national level workshops/seminars conducted in the report year.**

Ph. D Program

The following scholars are pursuing Ph.D at the department.

- | | |
|-------------------|---|
| B. T. Arun Kumar | : An investigation into phonological difficulty and phonological process in children who stutter.
Guide: M. Jayaram |
| H. Rohini | : Perception of Prosody in brain damaged.
Guide: S. R. Savithri |
| Jayashree Shanbal | : Assessment of biliterate children
Guide: K. S. Prema |
| K. Yeshoda | : Importance of spectral and temporal parameters in speaker identification
Guide: M. Jayaram |
| M. Pushpavathi | : Language and speech motor interference in children with stuttering (Submitted).
Guide: S. R. Savithri |
| M. Santhosh | : Some perceptual and acoustic correlates of stuttering: Pre-post therapy comparison.
Guide: S. R. Savithri |

N. Swapna : Fine-grained auditory discrimination in normal children and children with learning disabilities (submitted).
Guide: S. R. Savithri

P. S. Kalai Selvi : Analysis of voice in a group of Yakshagana folk artists.
Guide: M. Jayaram

T. Ananthi : Prosodic correlates of stuttering: Pre-post comparison.
Guide: S. R. Savithri

Dissertations Completed

A. Regishia : Vocal characteristics during menstrual cycle: A study on singers.
Guide: K. Yeshoda

Amita Kaul : Vocal demands in teachers: Primary Vs. secondary schools.
Guide: K. Yeshoda

Anjana B Ram : Genetics in stuttering.
Guide : S. R. Savithri

Deepa Devasisa : Voice and speech characteristics in radio jockies.
Guide : S. R. Savithri

Gowri Tamane : Perception of rhythm in music in stutterers.
Guide: S. R. Savithri

H.N. Shilpashri : Remedial manual for language based reading disabilities - in Kannada (rem-Kan).

Guide: K. S. Prema

R. Anitha : Computerized linguistic protocol for screening (CLIPS).

Guide: K. S. Prema

Dissertations in Progress

Bhuvaneshwari B. : Length of utterance for reliable speaker identification

Guide: M. Jayaram

D. Kedarnath : Relationship between complex phonological utterances and stuttering

Guide: M. Jayaram

Deema Johnson : Cross-language semantic priming in bilingual adults.

Guide: K.S. Prema

Fathima Nuzha Kufran : Speech sound characteristics in stutterers and children with NNF

Guide: M. Jayaram

Namita Kale : Melody in Carnatic and Hindustani Music.

Guide: S.R. Savithri

Pooja Kanchan : Speech motor control in stutterers- a pre-post therapy comparison

Guide: S.R. Savithri

- Rajani Sebastian : Cross-language semantic priming in bilingual aphasics.
Guide: K.S. Prema
- S. Radhakrishnan : Non-native perception of Manipuri tones.
Guide: S.R. Savithri

Orientation Lectures

Twenty-eight orientation programs for allied professionals were held as a part of the project on 'Prevention of communication disorders' on prevention, identification and management of communication disorders, speech, language, and hearing disorders and early identification and management of children with learning disability. Table 1 shows the details of the orientation programs.

Target group	No. of participants
Teachers and parents	433
Paediatricians	30
Anganawadi workers	23
NCC cadets	89
Teachers	271
Nursing students	268
M Ed students	74
Total	1188

Table 1: Number of allied professionals trained.

The voice care center of the department conducted 3 orientation programs and sensitized professional voice users on voice care. Figure 1 gives details of voice care programs.

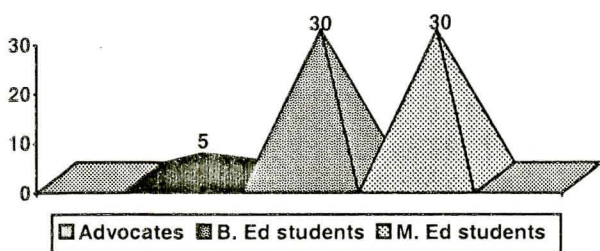


Fig. 1: Details of voice care programs.

Short-term Training

Ten short-term training programs on instrumentation in speech-language science and one program on acoustic phonetics and spectrography were conducted to students from other speech and hearing institutes, MBBS internees, PG - ENTs, B-Tech and M-Tech students.

CLINICAL SERVICES

Diagnostics: A total of 1931 patients were evaluated for voice, fluency, phonology and language disorders. Table 2 gives the details.

Period	Case history	Voice	Phonology	Fluency	Language
April	155	15	11	20	17
May	170	20	18	22	12
June	162	6	5	9	78
July	235	29	23	32	143
August	180	21	14	15	125
Sept	112	31	7	11	86
Oct	85	12	6	10	57
Nov	137	10	7	10	100
Dec	118	16	7	16	73
Jan	177	17	5	15	140

Feb	181	17	10	23	127
March	219	29	13	17	148

Total	1931	223	126	200	1106
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Table 2: Total number of patients evaluated.

"Professional Voice care center" of the department offers specialized services to professional voice users on care and maintenance of voice and vocal hygiene. Sixty-one individuals were offered consultancy for evaluation and management of effective voice.

Forensic voice evaluation is another important program of the department. The identity of speakers is verified using acoustic and perceptual measures. The department carried out four forensic evaluations and submitted reports to the department of police, Government of Karnataka, and Magistrate, Government of Kerala.

Therapeutics: Supervision and counseling of 1480 patients with voice, articulation, fluency, and language disorders were carried out. The details are as shown in Table 3.

Period	Voice	Phonology	Fluency	Language	Pre school	Total
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April	0	8	17	26	31	82
May	2	8	14	29	31	84
June	6	6	16	42	31	101
July	4	2	3	31	31	71
August	2	1	11	25	31	70
Sept	10	2	6	19	31	68
Oct	6	12	19	111	31	179
Nov	4	5	16	83	31	141

Dec	4	6	11	94	31	146
Jan	4	3	11	99	31	148
Feb	4	4	16	129	31	184
March	7	9	20	139	31	206
<hr/>						
Total	53	56	160	827	315	1480
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Table 3: Total no. of patients supervised for therapy

Home based training program: 261 patients with voice, articulation, fluency and language problems were given home-based training program. Table 4 shows the details.

Period	Voice	Phonology	Fluency	Language	Total
<hr/>					
April	1	2	3	10	16
May	1	1	6	10	18
June	5	1	7	14	27
July	3	3	3	12	21
August	1	1	6	10	18
Sept	5	1	7	14	27
Oct	1	2	2	18	23
Nov	3	4	4	18	26
Dec	1	2	3	10	19
Jan	1	1	6	10	18
Feb	5	1	7	14	27
March	3	3	3	12	21
<hr/>					
Total	30	22	57	152	261
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Table 4: Total no. of patients given home-based training program.

RESEARCH

Projects Completed

Language Acquisition in Multilingual Children - A Survey

Cost: Rs. 1.05 lakhs.

Duration: 12 months

Investigating team: K.S. Prema and Y. V. Geetha

Sponsor: AIISH Research Fund

Acquisition of language in children has been investigated from many perspectives, one such being its implications for causative factors. One of the salient factors that is widely focused in the recent years is the issue of multilingualism. The interest in this area emerged because of its crucial significance in making up policy for language intervention. A need to address the unanswered question 'does bilingualism /multilingualism interfere with language acquisition process?' is thus strongly felt. In order to address the above issue, a survey was conducted on 100 children each from monolingual and multilingual background and 30 children from clinical population. Language acquisition in the two groups was investigated with the help of checklists developed for the purpose. The possible relationship between multilingualism and language acquisition and the intensity of 'risk' associated with multilingualism in children with language disorders was investigated. The results of the survey indicated that multilingualism is not a hindrance to language acquisition; rather children from multilingual background were ahead in cognitive skills and receptive language skills. However, expressive verbal language skills were slightly delayed but communication skills were not impaired.

Speech and Language Tests of AIISH (SaLT-AIISH)

Cost: Rs. 1.10 lakhs.

Duration: 8 months

Investigating team: K.S. Prema, M. Jayaram and S.R. Savithri

Sponsor: AIISH Research Fund

The project aimed at the compilation of tests developed as a part of M.Sc dissertations at AIISH for assessment of speech and language disorders. The tests have been compiled and put in the form of a test kit including a brief description of the test, a manual for administration and scoring, test stimuli, scoring sheet and the normative scores. Tests for assessment of articulation, voice, fluency, prosody and language disorders are included. The test list would be made available for use in the clinic for field-testing so that clinically useful tests can be standardized in due course of time.

Projects in Progress

Rate of Speech/Reading in Dravidian Languages

Cost: Rs. 0.95 lakhs.

Duration: 10 months

Investigating team: S.R. Savithri and M. Jayaram

Sponsor: AIISH Research Fund

The project aims at establishing normative data on rate of speech. Specifically syllables per second and words per minute will be measured in subjects speaking Kannada, Tamil, Telugu and Malayalam and these measures will be carried out in subjects' age ranging in 10 decades. Material for administration of the test in Kannada, Telugu, Tamil and Malayalam languages has been developed. Reading samples of 274 subjects from Kannada, Tamil, Telugu and Malayalam speaking normal adults in the age range of

11-80 years has been collected. Statistical analysis is in progress.

Differential Diagnosis of Laryngeal disorders

Cost: Rs. 0.67 lakhs

Duration: 8 months

Investigating team: H. Rohini, M. Jayaram and S.R. Savithri

Sponsor: AIISH Research Fund

The project aims at comparing the acoustic, aerodynamic and laryngeal parameters in patients with voice disorders with laryngeal pathology. The database will be utilized to arrive at a consensus about aerodynamic, acoustic and laryngeal parameters specific to laryngeal disorders. The various dimensions of voice studied will provide a better diagnostic and rehabilitation procedure. Data has been collected from 96 cases with voice disorders extracting 5 aerodynamic and 18 acoustic parameters. Statistical analysis is in progress.

Evolution of Voice in Different Species of Animals

Cost: Rs. 1.75 lakhs

Duration: 10 months

Investigating team: S.R. Savithri and M. Jayaram

Sponsor: AIISH Research Fund

This project aims at collecting voices of species in order to obtain answers to questions on evolution of human language through research on voices of various species. A database of voices of species will be created which can be used by interested researchers to explain the evolution of speech and language and species-specific processes involved in human communication. Till date voices of about 5000 birds, reptiles and mammals are collected and larynxes of four mammals have been studied.

Prevention of Deafness and Communication Disorders under Annual Plan

Investigating team: M. Jayaram and K. S. Prema

Sponsor: Ministry of Health & Family Welfare, Govt. of India

The main objective of the project is primary, secondary and tertiary prevention of communication disorders. The activities include screening of infants and school children, material development, extension activities, sensitization program for public and other professionals. The summary of infant and school screening is given in Table 5.

Screening	Screened	Referred
Infant	6607	174
School	4228	338
Camps	563	376
Pre-school	106	7
Total	11504	895

Table 5: Summary of screening.

28 Orientation lectures were given to allied professionals on prevention, identification and management of communication disorders, speech, language and hearing disorders and early identification & management of children with learning disability. The details are in Figure 2.

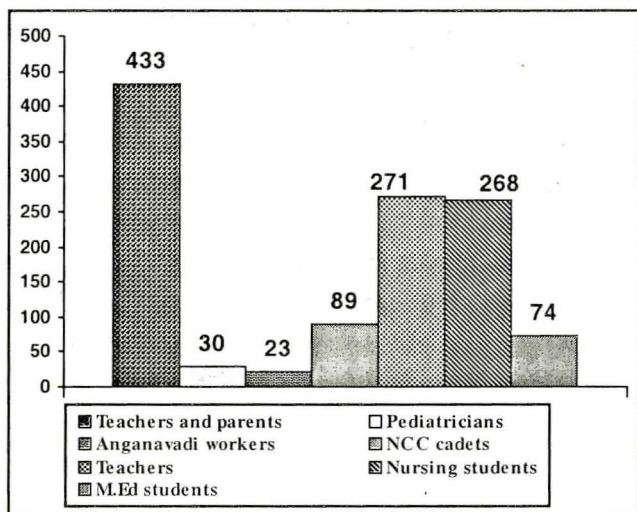


Fig. 2: Details of sensitization programs.

Material Development

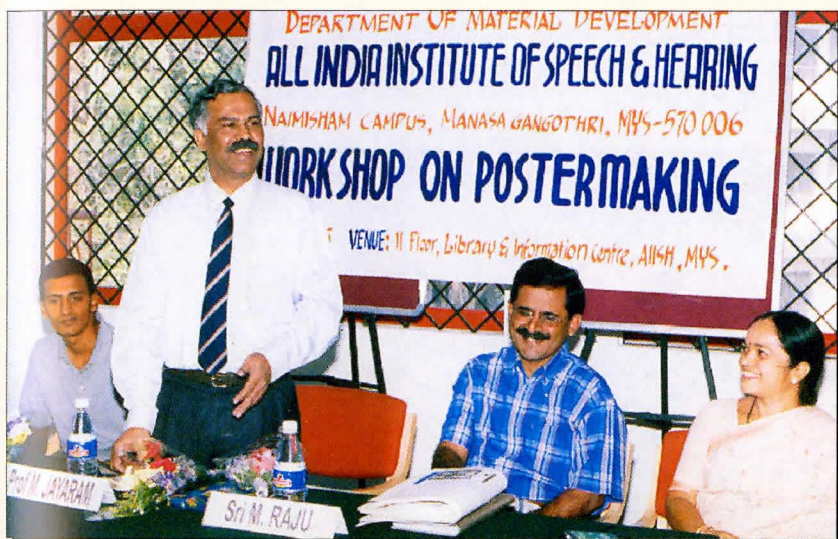
Following materials are under preparation:

- Infant stimulation module in Kannada and English.
- Poster on developmental milestones for speech in children.
- Checklist on Speech - language development in children.
- Checklist for identification of various communication disorders.
- Checklist for screening preschool children.
- Brochures on articulation, fluency and voice disorders.
- Brochures for parents of children with MR and Autism.

Collaborative screening program with Mysore Agenda Task Force for 1500 children in four schools of Mysore city is in progress. Screening checklist to identify the school children with communication disorders have been developed in Kannada and English. Training programs were conducted to train the teachers and nurses who are involved in this project to identify the school



The overall championship trophy being given to the winning CFTRI team at the Inter-institutional sports tournament for Central Government employees organized by AIISH



A jovial moment.....Prof. M. Jayaram, Director, AIISH delivering president's address at the Workshop on Poster Making at the institute. Mr. Kranthi Madhav, Executive Producer, EMMRC, Mysore, Mr. K. Raju, Coordinator, SRC, Mysore and Dr. K.S. Prema, Coordinator, Dept. of Material Development, AIISH are also seen.



"I too have wings to fly..." - Students of AIIISH presenting a street play 'Vani'- story of a successful hearing impaired girl - to the citizens of Mysore.



The members of the AIIISH Ethics Committee engrossed in deep discussion. At the centre of the table is Justice Mr. A. R. Sadashiv, Retd. Judge of the Hon'ble High Court of Karnataka, who is the Chairman of the AIIISH Ethics Committee.

children with communication disorders using the checklists. Administration of screening checklist to identify the school children with communication disorders would be conducted in the next academic year.

Perception of Prosody in Individuals with Brain Damaged (DST)

Cost: Rs. 11, 26,140/-

Duration: 3 years from 31.7.2002

Investigating team: S. R. Savithri and H. Rohini

Sponsor: Department of Science & Technology, Ministry of Science & Technology, Government of India

The project aims at investigating the processing of linguistic stress in patients with brain damage. Specifically the perceptual abilities of emphatic stress in Kannada speaking patients with left hemisphere damage and right hemisphere damage will be compared with their age-matched non-brain damaged Kannada speaking subjects. It is hypothesized that individuals with brain damage process the stimuli differently on stress identification task as compared to non-brain-damaged subjects. To approve or reject the speculation, independent manipulation of the cues available in the stimuli would help to determine if two groups use different acoustic parameters in judging word stress. Material for prosodic analysis has been prepared, analyzed and synthesized. Perceptual evaluations of synthesized phrases have been completed on 50 left hemisphere damaged, 50 right hemisphere damaged and 50 non-brain damaged individuals. Report writing is in progress.

Differential Diagnosis of Stuttering and Normal Nonfluency

Cost: Rs.4.91 lakhs (I year)

Duration: 3 years

Investigating team: S. R. Savithri and K. Yeshoda

Sponsor: Indian Council of Medical Research, New Delhi

The project aims at evolving a protocol for differentially diagnosing stuttering and normal non fluency. Speech samples of children with disfluencies will be recorded and acoustically analyzed to extract parameters that can differentially diagnose stuttering and normal non-fluency. This project was initiated in March 2005.

OTHERS

Public Education Activities

Staff of the department briefed general public regarding the activities of the department, speech production mechanism, assessment of speech and language through demonstration of instruments, models and charts, during the open day of the institute held on 9 August 2004.

Staff of the department attended various speech and hearing screening camps held within and outside the state of Karnataka.

Dr. K.S. Prema coordinated the street play staged as a part of 'Bahuroopi' on 5 December 2004. She also submitted an article on 'Speech-Language and Hearing Science' for 'Kannada-Vishwakosha'.

Workshops / Seminars / Conferences Organized

National Workshop on Acoustic Analysis of Speech

The workshop was conducted from 19-20 August 2004 in collaboration with the Speech Science Group, CIIL, Mysore. The purpose of the workshop was to train speech pathologists and linguists to perform acoustic analysis. Around 100 delegates participated in the workshop. Ten lectures followed by sessions for practical demonstration and hands-on experience were held on

various aspects of acoustic analysis.

National Seminar on Current Perspectives on the Nature and Treatment of Fluency Disorders

This Seminar was conducted from 19-20 October 2004 in collaboration with the Medical Council of India and Indian Council of Medical Research. The objectives of the seminar were to provide a forum for the professionals in the field to highlight the current status of research in the area of nature and management of fluency disorders and to suggest areas for future research in this field. Around 170 delegates participated in the seminar in which 13 lectures were delivered on the nature and treatment of fluency disorders. A panel discussion on genetics, epidemiology, early identification and neurogenic stuttering was conducted. An amount of Rs. 80,000/- was received from the Medical Council of India and the Indian Council of Medical Research.

National Workshop on Speech Processing

This workshop was conducted from 4-5 November 2004 in co-ordination with the department of Electronics, AIISH. The objectives of the workshop were (a) to impart basic information and hands-on experience on speech processing to engineers, speech pathologists, and industrial persons, (b) to expose the participants to research needs in the area, (c) to enlighten the participants about the use of such expertise in disability related issues, and (d) to identify specific projects to be taken up in the next five years. Around 60 delegates participated in the workshop in which ten lectures were delivered on speech signal processing, speech signal processing in hearing aids and speech and speaker recognition. A panel discussion on signal processing in hearing aids was held. Lectures were followed by practicals on speech signal acquisition and processing. The institute funded the workshop.

Seminar on Infant Perception

A Seminar on "Infant Perception" was conducted on 22 December 2004. Dr. Megha Sundara, Research Associate, Washington University, USA was the resource person. She delivered three lectures on methods of study in the area of infant perception, phonetic and rhythm perception in infants. 50 students and staff attended the seminar. The institute funded the seminar.

RCI-CRE Program on Professional Voice Care

A continuing rehabilitation program on Professional Voice Care was conducted from 31 January to 4 February 2005 in collaboration with the Rehabilitation Council of India. The objectives of the program were to educate the speech pathologists and ENT professionals on prevention, assessment and rehabilitation of voice disorders in professional voice users and to provide hands-on experience in professional voice care. Around 60 delegates participated in the program in which 16 lectures were delivered along with practical demonstration. The panel suggested directions for future research, music training for speech pathologists and using endoscopy and clinical documentation.

Demonstration of Video Endoscopy and CSL 4500

A demonstration of Video Stroboscopy was arranged on 11th January 2005. Dr. Stephen Cramp, Kay Elemetrics Inc. demonstrated the video stroboscopy and CSL 4500. Around 25 professionals attended the demonstration.

A demonstration of Video Stroboscopy and EGG was arranged on 16 March 2005. Mr. Manic Sethi, Engineer Sales, Care Internationals demonstrated the usefulness of both the equipment. 20 members of the staff attended the demonstration.

Papers presented in Workshops / Seminars / Conferences

Ananthi, T: "Perceptual Protocols in the Assessment of Childhood Stuttering" in the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19-20 October 2004 at AIISH (co-authored).

Ananthi, T: "Intonation Analysis in the Fluent Speech of Persons with Stuttering" in National symposium on Acoustics held from 25-27 November, 2004 at SJCE, Mysore.

Arunkumar Thangavel, B: "Stuttering and associated problems" in the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19-20 October 2004 at AIISH (co-authored).

Arunkumar Thangavel, B: "Measurement of VOT in stutterers: A cross linguistic study" in National symposium on Acoustics held from 25-27 November, 2004 at SJCE, Mysore.

Arunkumar Thangavel, B., & Yeshoda, K: "Syllabic priming in reading" in the National Seminar on Language and Technology held from 28-30 March 2005 at Hampi.

Jayashree C. Shanbal: "Phonological impairment in developmental dyslexia: Effect of varying voice onset" in National symposium on Acoustics held from 25-27 November, 2004 at SJCE, Mysore.

Jayashree C. Shanbal, & Prema, K. S: "Visual word recognition in reading: exploring through technology" in the National seminar on language and technology held from 28-30 March 2005 at Hampi.

Kalaiselvi, P.S., & Yeshoda, K: "Acoustic study of

anticipatory labial co-articulation: A cross-linguistic study", in ICSLT - 2004, held from 17-19 November 2004 at New Delhi.

Kalaiselvi, P.S., & Yeshoda, K: "Relevance of unimodal and multimodal information on the interpretation of emotional prosody", in ICSLT - 2004, held from 17-19 November 2004 at New Delhi.

Kalaiselvi, P. S: "Special voice evaluation in singers" presented in RCI-CRE program on Professional voice care held from 31st January - 4th February 2005 at AIISH.

Prema, K. S: "Speech disorders" in the workshop on Speech processing held from 4-5 November 2004 at AIISH.

Rohini, H: "Acoustic analysis of speech" in the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

Rohini, H: "Acoustic characteristics of fricatives" in the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

Rohini, H: "Epidemiology of stuttering" presented in the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19- 20 October 2004 at AIISH.

Rohini, H: "Vocal abuse reduction program" in RCI-CRE program on Professional voice care held from 31st January - 4th February 2005 at AIISH.

Sairam, V.V.S: "Introduction to the study of speech acoustics" in the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

Sairam, V.V.S: "Acoustic characteristics of other consonants"

in the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

Sairam, V.V.S: "Management technique for cluttering" presented in the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19-20 October 2004 at AIISH (co-authored).

Sairam, V.V.S: "Speech production" in the workshop on Speech processing held from 4-5 November 2004 at AIISH.

Sairam, V.V.S: "Quiz on anatomy, physiology of larynx" in RCI-CRE program on Professional voice care held from 31st January - 4th February 2005 at AIISH.

Sairam, V.V.S: "Pitch and intensity changing mechanism" in RCI-CRE program on Professional voice care held from 31st January - 4th February 2005 at AIISH.

Santhosh, M: "Acoustic characteristics of nasal continuants" in the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

Santhosh, M: "Aerodynamic measures in the assessment of fluency disorders" in the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19-20 October 2004 at AIISH (co-authored).

Santhosh, M: "Management technique for adult stutterers" in the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19-20 October 2004 at AIISH (co-authored).

Santhosh, M: "Treatment efficacy measures" in the National seminar on Current perspectives on the nature and treatment of

fluency disorders held from 19-20 October 2004 at AIISH (co-authored).

Santhosh, M: "Multidimensional analysis of voice in monozygotic twins" in National symposium on Acoustics held from 25-27 November, 2004 at SJCE, Mysore.

Santhosh, M: "Regulation of tonus, posture, breathing exercises" presented in RCI-CRE program on Professional voice care held from 31st January - 4th February 2005 at AIISH.

Santhosh M, & Savithri, S.R: "Voice prints in monozygotic twins" in National symposium on Acoustics held from 25-27 November, 2004 at SJCE, Mysore.

Savithri, S. R: "Acoustic characteristics of vowels and diphthongs" in the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

Savithri, S. R: "Acoustic theory of speech production" in the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

Savithri, S. R: "Acoustics of stop consonants" in the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

Savithri, S. R: "DST project report" at PAC meeting held on 2nd May 2004 at NIMHANS, Bangalore.

Savithri, S. R: "Fluency and its disorders - Current status and future perspectives" in the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19- 20 October 2004 at AIISH.

Savithri, S. R: "Specch perception" in the workshop on Speech processing held at AIISH on 4-5 November 2004.

Savithri, S. R: "DST project report" at PAC meeting held on 6-7 December 2004 at Shankara Netralaya, Chennai .

Savithri, S.R: "Overview of professional voice care" in RCI-CRE program on Professional voice care held from 31st January - 4th February 2005 at AIISH.

Savithri, S.R: "Voice therapy for singers" in RCI-CRE program on Professional voice care held from 31st January - 4th February 2005 at AIISH.

Savithri, S.R, Jayaram. M., & Girijamma. M.V: "Rate of reading in 20-50 years Kannada speakers" in National symposium on Acoustics held from 25-27 November, 2004 at SJCE, Mysore.

Savithri, S.R. Jayaram, M, & Girijamma, M.V: "Rate of reading in Kannada and Malayalam speakers" in the National seminar on language and technology held from 28 -30 March 2005 at Hampi.

Savithri, S. R., Rohini, H, & Sairam, V.V.S: "The effect of spectral and temporal manipulation on the perception of word stress in Kannada" in National symposium on Acoustics held from 25-27 November, 2004 at SJCE, Mysore.

Savithri, S.R., Rohini, H, & Sairam, V.V.S: "Acoustic correlates of word stress in Kannada" in the National seminar on language and technology held from 28-30 March 2005 at Hampi.

Savithri, S.R., Rohini. H, & Sairam, V.V.S: "Speech oriented learning system for handicapped: An aid for communication with hearing impaired persons" in the National seminar on language and

technology held from 28 -30 March 2005 at Hampi.

Shivaprakash, M, & Savithri, S. R: "Speaker verification in mimicry" in National symposium on Acoustics held from 25-27 November, 2004 at SJCE, Mysore.

Yashoda, K: "Voice evaluation" in RCI-CRE program on Professional voice care held from 31st January - 4th February 2005 at AIISH.

Yeshoda, K: "Effects of speaker and context on acoustic analysis" at the workshop on Acoustic analysis of speech held from 19-20 August 2004 at AIISH.

The following papers were presented at 37th National Conference of ISHA held at Indore from 14-16 January 2005.

Arunkumar Thangavel, B, & Yeshoda, K: "Word length and lexical decision in stutterer."

Kalaiselvi, P.S, Santosh, M., & Savithri, S.R: "Voice characteristics in monozygotic twin carnatic singers: A preliminary study."

Santosh, M., & Arun Kumar Thangavel, B: "Lexical access in persons with stuttering."

Savithri, S.R., Rohini H, & Sairam, V.V.S: "Word stress perception in left hemisphere damaged: Is it functional lateralisation or differential cue lateralization?"

Departmental staff guided the following students who presented papers at

1. ISHA 37 (Indian Speech and Hearing Association), 14-16 January 2005, Indore

Ankit Mathur, Santosh M., Vishwakarma Chandrakant, Manuj Agarwal & Savithri, S.R: "Acoustic analysis of vowels in persons with stuttering: Pre post therapy data comparison,"

Anushya M., Ramia Narayanan, Savithri S.R., & Sairam, V.V.S: "A synthetic test of intonation patterns".

Dheepa, D., Sreedevi, M, & Savithri, S.R: "Acoustic characteristics of the voice of the hearing-impaired children".

Divya, C., Tanushree Saxena, & Savithri, S.R: "Acoustics of whisper".

Janani J., Hema, N., & Savithri, S.R: "Effectiveness of Wilson's program for children with vocal abuse".

Namita S, Kale, Jayakumar, T., & Prema, K.S: "Non-linguistic screening tool for dyslexia".

Nuzha, K., Pooja, K., & Prema, K.S: "Phonology to orthography or orthography to phonology? A cognitive search".

Pooja Kanchan, Bhuvanewari, B., & Savithri, S.R: "Cognitive cueing and voice changes in children", ISHA 37, held from 14-16 January 2005 at Indore.

Prasitha, P., & Prema, K.S: "Specific language impairment - do we cognize?"

Rajani Sebastian, Bhuvaneswari, B., & Prema, K.S: "Lexical access in dyslexics: An insight from shallow orthography". The paper won the Sheila Vora's award for best paper in Learning Disability.

Rajani, V., Anagha Ashok Dehadrai, & Savithri, S.R: "Visual word identification in children with learning disability".

Somy Elizabeth Sam, Kavitha, P., & Prema, K.S: "PDD, HFA, PLI - Is there a boundary?"

Sreejyothi, B., Radhika & Savithri, S.R: "Acoustic and physiological measures in the voice of dysphonics: Evidence based therapy".

Sumitha, M.M., Shweta Prakash & Prema, K.S: "Language of mathematics or mathematics of language? An exploratory study".

Swati, B., Cecilia, Z., & Savithri, S.R: "Acoustics of voice in children and adult females".

Vijay Mohan Raaja, M., Harini, N.V., Savithri, S.R., & Gowramma, I. P: "A remedial programme for a dyscalculic child having Guillilan Barre syndrome".

2. International conference on South Asian Languages (ICOSAL) 2005, 6-8 January 2005 at Hyderabad

Dheepa, D., Srividya, & Prema, K.S: "Digit V/s number word processing in bilinguals".

3. National Symposium on Acoustics, 25-27 November 2004 at SJCE, Mysore

Jayakumar, T. & Venugopal, M: "Perception of voicing in Tamil and Hindi speakers".

Namita S. Kale: "Fundamental frequency and intensity Control in Singers and Nonsingers".

Kavitha, P., Kalai Selvi, P.S. & Yeshoda, K: "Anticipatory labial co-articulation in stutterers and normal adults".

Kavitha, P., Kalaiselvi, P.S. & Yeshoda, K: "Some temporal measures of anticipatory labial co-articulation in stutterers and normal adults".

Kedarnath, D. & Radhakrishnan, S: "Effect of filtering on speech intelligibility & perceptual cues of sibilants in Telugu".

Mili, M.M., Bhuvaneswari, B. & Pooja Kanchan: "Word Recognition in Malayalam Sentences".

Nuzha, K. & Rajani Sebastian: "Acoustic characteristics of Sinhala vowels".

Pradyumn Srivastava & Ram Mohan: "Effect of Vowel Duration on Speech Intelligibility".

Rajasudhakar, R. & Deema Jean Johnson: "Duration of Nasal Murmur as a Cue to Perception of Nasal Continuants".

Sreedevi, N. & Dheepa, D: "Duration as a cue for the perception of fricatives in Tamil".

Srikanth, C., Vinaya Kumar, C.M., Sumesh, K. & Yeshoda, K: "Speech characteristics in auditory neuropathy".

Tanushree Saxena & Divya, C: "Perception of Voicing in Native Malayalam Speakers".

4. FRSM 2005, 6-7 January 2005 at Bhubaneshwar

Namita S Kale & Savithri, S.R: "Melody in Carnatic and Hindustani music".

Radhakrishnan, S., Maharani Suryapragasam & Savithri, S.R: "Acoustic characteristics of Manipuri tones".

Material Development

A voice database is being made. This will be a CD with voice samples of hoarse voice, high-pitched voice, breathy voice etc. The database when completed can be marketed.

Following materials are under preparation in POCD project

- Developmental milestones in speech and language
- Check yourself
- Pre school screening check list
- Checklist - Mysore Agenda Task Force
- Cognitive kit
- Computerized test battery for school screening
- Checklist for screening geriatric population

Visitors and Guest Lectures

Visitors from Ethiopia

Two Norwegian Speech-Language Pathologists presently working in Ethiopia visited the department on 28.2.2005.

Program on Infant Stimulation

A guest lecture on "Infant stimulation Program - Home based training program" was arranged on 27th July 2004. Mrs. Lakshmi Jagadish, Speech pathologist, New Jersey spoke on infant stimulation. Around 60 participants attended the program. The institute funded the program.

Program on Reporting Research

A guest lecture on reporting research was organized on 9th December 2004. Prof. M. N. Hegde, Professor, Dept. of Communication Sciences and Disorders, California State University spoke on writing research reports. Around 20 professionals (faculty and research fellows) attended the program. The program was funded by AIISH.

Program on Phonological Development and Phonological Process Analysis

The program was conducted on 15th February 2005. Ms. Roopa Rao, working for Fairfax County ESL Program at USA, spoke on the topic and gave practical demonstrations. Seventy undergraduate and postgraduate students of speech pathology, and faculty attended the program. The institute funded the program.

Equipment Procured

Computer - HP Compaq D330 UT, Intel Graphic P4 2.8 G Hz, 250 MB

The system was procured to load software CSL 4500 which is used for acoustic analysis of speech to extract frequency, amplitude, spectrography and multidimensional voice analysis. This is being specifically used for the evaluation and rehabilitation of patients with voice disorders, teaching and research.

Sony Mini tape recorder - TCM 150

This is procured under ARF project 'Rate of speech/reading in Dravidian languages'. This is being used for recording the speech samples of individuals speaking different Dravidian languages.

IBM PIV Desktop Computer, 3.0 G H

Software for speech analysis was procured to facilitate research undertaken by faculty of the department and students.

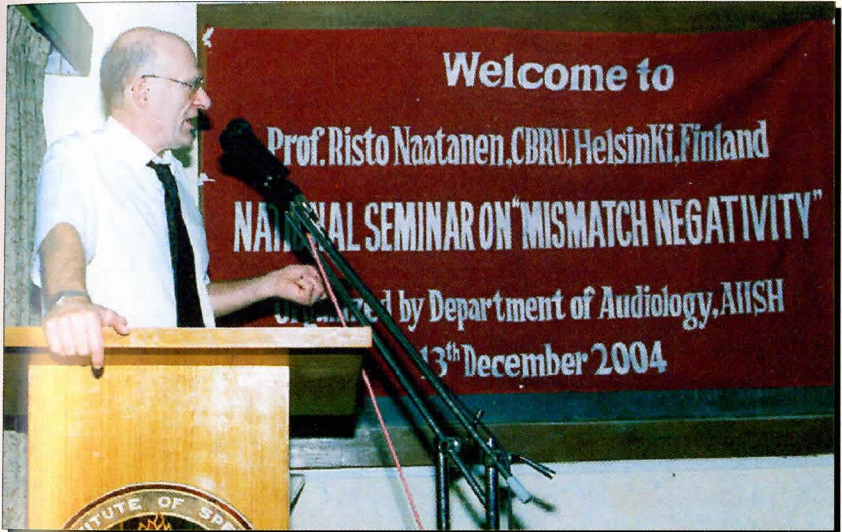
Honours

Namita S Kale, II M. Sc (Speech-Language Pathology) student, won the *best student paper award in music acoustics* at NSA 2004 held from 25th to 27th November 2004 at SJCE, Mysore. She presented a paper on Fundamental Frequency and Intensity Control in Singers and Nonsingers prepared under the guidance of Dr. S.R. Savithri.

Rajani Sebastian and Bhuvaneswari B., II M. Sc (Speech-Language Pathology) students, won *Shiela Vora's best paper award for LD* at ISHA37 held from 14th to 16th January 2004 at Indore. They presented a paper on Lexical Access in Dyslexics: An Insight



Prof. Risto Naatanen CBRU, Helsinki, Finland inaugurating the 'National Workshop on Mismatch Negativity'. Prof. M. Jayaram, Director, AIISH and Dr. Asha Yathiraj, Head, Dept. of Audiology are seen.



Prof. Risto Naatanen conducting a workshop on mismatch negativity for the benefit of the speech and hearing professionals and students at the institute on 13 December 2004.



Dr. K.S. Chari, Head, Microelectronics, Dept. of Science and Technology, New Delhi, releasing the handbook on 'Speech Processing' at the National workshop on speech processing held from 4-5 November at the institute. Prof. M. Jayaram, Director, AIISH and Dr. S.R. Savithri, Head, Dept. of Speech-language Sciences Mr. Ajish K. Abraham, Head, Dept. of Electronics were present on the occasion.



Dr. B.V.A. Rao, President, Acoustic Society of India speaking at the workshop on Electroacoustic Evaluation of Hearing Aids and Audiometric Transducers at the institute. Prof. M. Jayaram, Director, AIISH and Mr. Ajish K. Abraham, Head, Dept. of Electronics are seen.

from Shallow Orthography prepared under the guidance of Dr. K.S. Prema.

PUBLICATIONS

Ananthi, T. (2004). Intonation analysis in the fluent speech of persons with stuttering. Proceedings of the National Symposium on Acoustics, Section C, 1-5.

Jayakumar T., Venugopal M. & Savithri S. R. (2004). Perception of voicing in Tamil and Hindi speakers. Proceedings of the National Symposium on Acoustics, Section C, 1-9.

Jayashree C. Shanbal. (2004). Phonological impairment in developmental dyslexia: Effect of varying voice onset. Proceedings of the National Symposium on Acoustics, Section C, 1-7.

Kedarnath D., Radhakrishnan S, & Savithri S. R. (2004). Effect of filtering on speech intelligibility & perceptual cues of sibilants in Telugu. Proceedings of the National Symposium on Acoustics, Section C, 1-6.

Kedarnath D., Radhakrishnan S. & Savithri S. R. (2004). Perceptual cues of sibilants in Telugu. Proceedings of the National Symposium on Acoustics, Section C, 1-6.

Mili, M.M., Bhuvaneswari B., Pooja Kanchan & Savithri S. R. (2004). Word recognition in Malayalam sentences. Proceedings of the National Symposium on Acoustics, Section C, 1-6.

Namita S Kale & Savithri S. R. (2004). Fundamental frequency and intensity control in singers and nonsingers. Proceedings of the National Symposium on Acoustics, Section C, 1-9.

Namitha S. Kale & Savithri, S.R. (2005). Melody in Carnatic and Hindustani music. Proceedings of Frontiers of Research on Speech and Music (FRSM-2005), 69-74.

Nuzha, K., Rajani Sebastian & Savithri, S. R. (2004). Acoustic characteristics of Sinhala vowels. Proceedings of the National Symposium on Acoustics, Section C, 1-7.

Pradyumn Srivastava, Ram Mohan, & Savithri, S. R. (2004). Effect of vowel duration on speech intelligibility. Proceedings of the National Symposium on Acoustics, Section C, 1-6.

Radhakrishnan. S., Maharani S. & Savithri, S. R. (2005). Acoustic characteristics of Manipuri tones. Proceedings of Frontiers of Research on Speech and Music (FRSM-2005), 140-143.

Rajasudhakar R., Deema Jean Johnson, & Savithri, S. R. (2004). Duration of nasal murmur as a cue to perception of nasal continuants. Proceedings of the National Symposium on Acoustics, Section C, 1-7.

Santhosh, M., Savithri S.R. (2004). Voice prints in monozygotic twins. Proceedings of the National Symposium on Acoustics, Section C, 1-8.

Savithri, S. R., Rohini. H. & Sairam V.V.S. (2004). The effect of spectral and temporal manipulation on the perception of word stress in Kannada. Proceedings of the National Symposium on Acoustics, Section C, 1-7.

Savithri, S. R., Jayaram. M. & Girijamma M. V. (2004). Rate of reading in Kannada speakers. Proceedings of the National Symposium on Acoustics, Section C, 1-6.

Shivaprakash. M. & Savithri S. R. (2004). Speaker verification in mimicry. Proceedings of the National Symposium on Acoustics, Section C, 1-7.

Tanushree Saxena, Divya C. & Savithri S. R. (2004). Perception of voicing in native Malayalam speakers. Proceedings of the National Symposium on Acoustics, Section C, 1-6.

DEPARTMENT OF SPEECH PATHOLOGY

The major responsibilities of the department of speech pathology are to carry out teaching and research in the field of speech and language pathology and to offer clinical rehabilitation services to clients with speech-language disorders. Public education and extension clinical services are the other primary responsibilities of the department.

ACADEMIC PROGRAM

Academic training, that is, theoretical and practical training for students of B.Sc (Speech & Hearing) and M.Sc (Speech-Language Pathology) was carried out as per schedule. The courses were taught through lectures, seminars, and discussions. Practical training included intensive training in clinical skills (diagnostic and therapeutic) under the supervision and guidance of the departmental staff. Students of final M.Sc (Speech-language pathology) were given exclusive orientation sessions and clinical training in identification, evaluation and management of clients with craniofacial anomalies.

The department received a research grant of Rs.70.00 lakhs from DST, GOI under the Funds for Improvement of Science & Technology Infrastructure in Universities and Higher Educational Institutions (FIST). The project is for a period of five years.

Ph.D Program

The following scholars are pursuing Ph.D at the department.

Gouri Shanker Patil : Aspects of stress and intonation in the speech of Broca's aphasics.

Guide: R. Manjula

- N. Banumathy : Subgrouping Developmental Apraxia of speech.
Guide : R. Manjula
- P. Sameer : Phonological process in Malayalam speaking hearing impaired children.
Guide: K.C. Shyamala
- Swapna Sebastian : A comparative study of speech and language skills in normal children and children with learning disabilities.
Guide : K.C. Shyamala
- V. P. Vandana : Speech dimensions in dysarthria with lesions in different cerebellar loci.
Guide: R. Manjula
- Vani Rupela : Assessment of oral motor, oral praxis and verbal praxis skills in children with Down's Syndrome.
Guide : R. Manjula

Thesis Submitted

- S.P. Goswami : Comprehension deficits in aphasics.
Guide: K.C. Shyamala
- Sapna Bhat : Code switching and code mixing in bilingual aphasics.
Guide: K.C. Shyamala

Dissertations Completed

- Binay Kant Choudhury : Assessment protocol for SLI children.
Guide : K.C. Shyamala

- M. Sona : Development and standardization of BDAE-3 in Malayalam.
Guide : K.C. Shyamala
- N. Banumathy : Behavioral correlates of speech processing in normal speakers under delayed auditory feedback (DAF).
Guide: R. Manjula
- Poornima Ram : Development and Standardization of an assessment scale for SLPs.
Guide: K.C. Shyamala
- Richa Deshpande : Manual for anterior aphasic therapy in Hindi
Guide : S.P. Goswami
- Shivani Tiwari : Cognitive deficits in TBI adults.
Guide : S.P. Goswami
- Sneha Susan Jacob : Training manual in Malayalam for children with developmental apraxia of speech.
Guide: R. Manjula
- Tanuja Jawale : Scale for assessment of conversational discourse impairment in individuals with traumatic brain injury.
Guide: R. Manjula

Dissertations in Progress

- D. Dheepa : Pragmatics protocol.
Guide : K.C. Shyamala

- C. Divya : Manual for correction of intonation in Kannada speaking children.
Guide: R. Manjula
- M. B. Venugopal : Therapy manual for anterior aphasics in Kannada language.
Guide : S.P. Goswami
- M. Sreedevi Sathish : Narrative skills in bilinguals.
Guide : K.C. Shyamala
- Mili Mary Mathew : Scanning index as a temporal measure in dysarthric speech.
Guide: R. Manjula
- R. Rajasudhakar : Effects of age, gender and bilingualism on cognitive linguistic performance.
Guide: K.C. Shyamala
- T. Jayakumar : Development of normative data for nasometer in Kannada language (Mysore dialect).
Guide: M. Pushpavathi
- Tanushree Saxena : Assessment kit for selection of aided AAC system.
Guide: R. Manjula

Guest Lectures

Prof. Gary Libben (Department of Linguistics, Edmonton, Alberta Canada) delivered a guest lecture on "Neurolinguistics, language processing and mental lexicon" on 10th December 2004.

Short-term Training

Short-term training programs on communication disorders and speech and language therapy were conducted for speech and hearing professionals and allied professionals.

CLINICAL SERVICES

The staff of the department carry out diagnostic evaluation and therapeutic management of children and adults with speech-language and communication disorders. Clients with disorders of phonology, fluency, voice and language (children and adults) are evaluated and assessed in individualized settings. Differential diagnosis of speech and language disorders is done with the help of subjective clinical protocols as well as instrumental measures. Counselling and guidance are also offered to the clients and their parents/care givers. Here, detailed information regarding the problem, management strategies to be employed at home (i.e. home training), discussion on therapeutic plans and programs, choice of educational or vocational placements of the clients are discussed. Text based material are prepared for home training programs of individual clients.

The graduate and post-graduate student clinicians are also trained in supervised clinical practicum, to optimize their clinical skills and to sharpen their clinical application skills required for the rehabilitation of various speech, language and communication disorders in children and adults.

The statistics of clients evaluated by the staff of the department for various speech and language disorders during the period from April 2004 to March 2005 is shown in Figure 1.

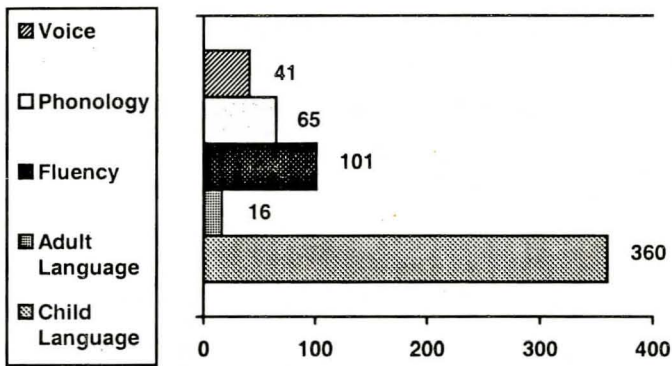


Fig. 1: Number of clients evaluated for Speech-language disorders

The faculty of the department supervised the therapeutic program of clients with speech-language disorders. The details of the supervisory activities were shown in Figure 2.

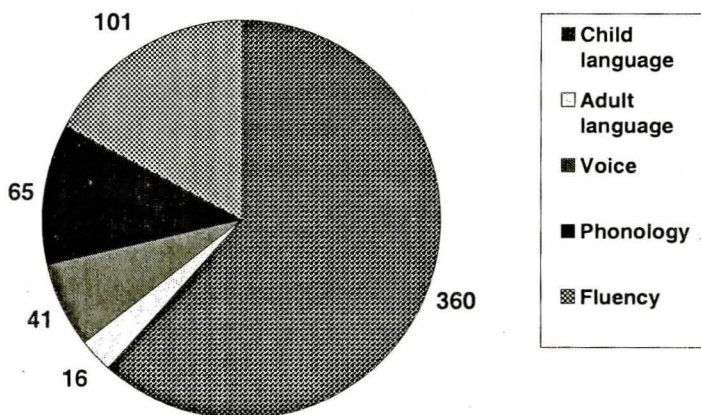


Fig. 2: Total number of clients supervised by the faculty

A team consisting of Speech-Language Pathologist, Plastic Surgeon, Prosthodontist and Prosthetic Technician provide clinical services to clients with craniofacial anomalies every Wednesday. Audio-visual recording of the evaluatory procedures for craniofacial

anomalies of these clients are carried out and suitable rehabilitation methods are advised after interactive sessions by the team of professionals. The details of the different consultation and management services provided for clients with craniofacial anomalies are shown in figures 3a and 3b.

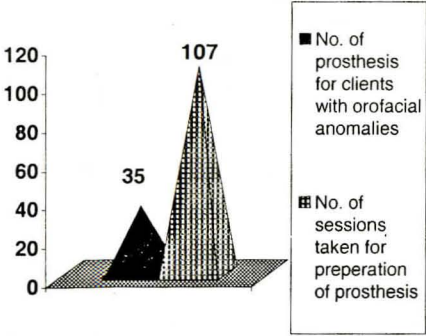


Figure 3a: Clinical activities related to craniofacial disorders

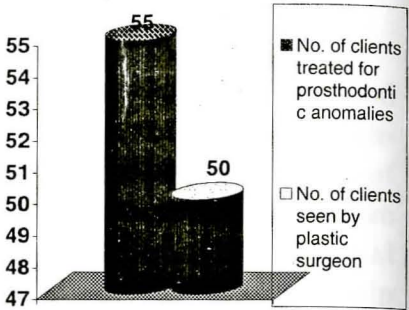


Fig 3b: No. of clients evaluated by specialists

Specialized Clinical Units/Activities

AAC Unit

The Augmentative and Alternative Communication unit (AAC), is involved in the evaluation and rehabilitation of clients who require non-vocal modalities of rehabilitation to augment their verbal communication skills to use as an alternate method of communication. The clinical sessions are held in individualized settings. Each candidate is subjected to a detailed evaluation to determine the candidacy for AAC and the type of AAC intervention. Various activities were undertaken to strengthen the infrastructure of the unit and to impart clinical training to internees of B.Sc (Speech & Hearing) and students in the final year of M.Sc (Speech Language Pathology). The statistics of the clinical activities of the unit are shown in Figure 4.

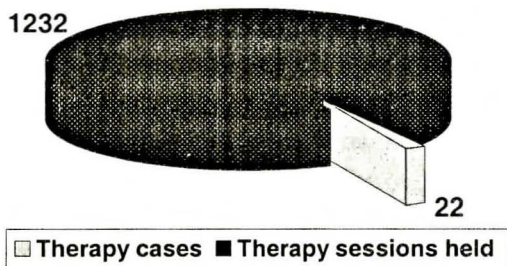


Figure 4: Clinical activities at AAC Unit

Activities in the Preschool

The faculty of the department also supervise and offer guidance to children with mental retardation and hearing impairment in a group setting in the preschool training program in order to improve speech and language abilities. The details of supervision of pre-school groups are given in Table 1.

Pre-School Groups	Supervising faculty	Language	No .
Mental Retardation	M. Pushpavathi	Hindi	One
	S. P. Goswami	Kannada	Two
	N. Sreedevi	Malayalam	One
Hearing Impairment	N. Sreedevi	Kannada	One
Autism	K.C. Shyamala	Kannada	One

Table 1: Details of supervision of pre-school groups.

Extension Services

The staff of the department of Speech Pathology participated in the speech and hearing camps conducted at various villages, taluks and districts of Karnataka. They are involved in

identification, evaluation, diagnosis and counseling of the clients with speech, language and communication disorders. The details of the number of beneficiaries of these clinical services are shown in figure 5.

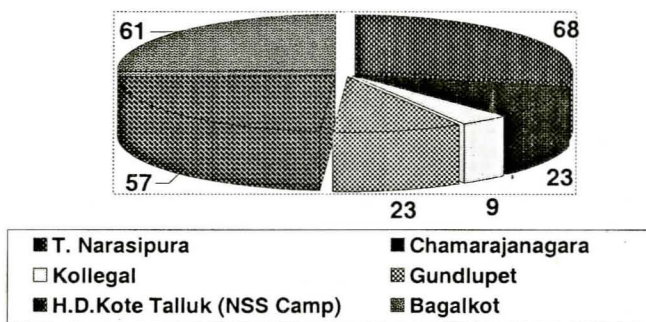


Figure 5: No. of clients evaluated in various camps

RESEARCH

Research is an integral part of the training program in the institute. All postgraduate students have to take up individual research topics and work towards preparation of a dissertation under the guidance of a faculty. Apart from individual research carried out by the faculty, they also undertake research projects under various funding agencies. Faculty also attended various workshops/seminars/conferences and present scientific papers.

Projects in Progress

Development of Phonological Processes in Kannada - A Profile

Cost: Rs.1.35 lakhs

Duration: 10 months

Investigating team: N. Sridevi and M. Jayaram

Sponsor: AIISH Research Fund

The research study investigates the various phonological

processes occurring in children between one to four year old Kannada speaking normal children. Totally 36 children were considered for the study. Pictures representing selected Kannada words were used to elicit verbal responses from the subjects. The responses of the subjects were audio recorded and later the data was transcribed using IPA. Sound by sound analysis was carried out to identify various phonological processes. The results of the study reflect the pattern of suppression of phonological processes in normal children.

Personality Correlates of Voice Disorders

Cost: Rs.01.07 lakhs

Duration: 8 months

Investigating team: S. Venkatesan and M. Pushpavathi

Sponsor: AIISH Research Fund

The objective of the project is to discover the personality and adjustment correlates of patients with organic, mutational as well as functional voice disorders. A comprehensive battery of eight questionnaires and interview schedules were used individually on a sample of more than 100 clients with voice disorders. The data was analyzed to study the correlation of voice disorders with the personality traits.

Aging and Pathological Characteristics of Voice

Cost: Rs.1.65 lakhs

Duration: 10 months

Investigating team: M. Pushpavathi and M. Jayaram

Sponsor: AIISH Research Fund

This project aims at analyzing the acoustic parameters of normal and pathological voice using MDVP software. The phonation and spontaneous speech samples of normal subjects

across various age groups were collected. The data was also collected across various languages and geographical conditions to find subtle voice changes across ages and geographical conditions.

FIST Program

Cost: Rs.70.00 lakhs

Duration: 5 years

Investigating team: R. Manjula and M. Jayaram

Sponsor: Department of Science & Technology

The scheme entitled "Fund for improvement of Science & Technology infrastructure in Universities and Higher Educational Institutions - (FIST)" is initiated by the Department of Science and Technology. The grants-in-aid under "FIST" are to provide infra-structural facilities for research and teaching in the department in identified areas. The department of Speech Pathology has been identified for support in Level - I category by the DST for the purchase of equipment and the maintenance of the same.

OTHERS

Workshops / Seminars / Conferences organized

1. Workshop on "Prevention, Early Identification and Management of Hearing Impairment" held from 1-2 July 2004.

The objective of the workshop was to provide "hands on training" and knowledge to parents of the hearing impaired to work with their wards, and to equip them with expertise to solve the problems encountered during intervention. Lectures and demonstrations were arranged on speech problems in hearing impaired, hearing disorders and management, identification and causes of ENT problems in the hearing impaired, facilities for hearing impaired with respect to education, early detection and

prevention, employment and training, aids and appliances, education and vocational management etc. Group discussions were held and parent interaction was encouraged. Nineteen parents and 10 staff members participated in the workshop. The participants were given text-based 'carry home' guidelines. Written feedback obtained from the participants suggested that they gained better insight in managing the auditory and speech-language behaviors of their children.

2. Workshop on "Sensory Integration Therapy" held on 6.09.04.

The workshop was conducted by Dr. Rajkumar Rajan, an NDT specialist and Physiotherapist at SPASTN, Tamil Nadu and Bobath Centre, United Kingdom. The objective of the workshop was to provide practical orientation on sensori integration therapy and its usefulness in treating children with communication disorders. The various topics included (a) Life is sensori experience, (b) Sensory abilities in a fetus (c) introduction to sensori integration therapy, (d) issues in children with reference to treatment strategies of sensori integration therapy. Video cassettes on fetal development and sensori integration therapy, demonstration of sensori integration therapy on a client with multiple disorders were also shown to the participants. Sixty seven participants including graduate and post graduate students of speech and hearing and staff members participated in the program.

The entire session was video recorded and is being used for demonstration to student clinicians in the practical classes. The program directed to provide new insights in rehabilitation of children with neuro-motor disorders and other multiple disorders.

3. Workshop on "Phonological Process Analysis - A Practical Orientation" held from 20-21.09.2004.

The objectives of the workshop were to provide practical

knowledge and focused training in phonological process analysis to participants within the perspective of Indian context and to update the information on recent developments in the area of phonology. 143 Speech-language pathologists participated in the workshop.

The participants found the program to be useful to understand the specific nature of pathological speech. A panel discussion was held to discuss the current and future needs. The following future directions were suggested:

- Development of common transcription method for the four Dravidian languages and Hindi.
- Study the structure of the syllabus in normative data in the five languages.
- Development of a battery of tests for recording the phonological process in the five languages.
- Developing curricula for diploma course in clinical linguistics.

4. Workshop on "Statistical Application in Speech and Hearing- A Practical Orientation to use of SPSS 10" held on 12.3.2005.

The workshop was conducted by Ms. Vasantha Lakshmi M. S, Lecturer in Biostatistics. The objective of the workshop was to provide practical orientation on use of SPSS in Speech and Hearing field. One day orientation program was conducted for II M.Sc students. The program aimed at providing theoretical input for using parametric and nonparametric statistics and also practical training for data feeding, data analysis and data interpretation using the SPSS software. Students were provided various types of raw data and were taught to select and apply appropriate statistical procedure for the given data. They were also trained in interpreting and inferring the statistical outcome. Students from M.Sc (Audiology) and M.Sc (Speech-Language Pathology) and staff participated in the workshop.



Dr. K. N. Pavithran, Director, National Institute of Speech and Hearing, Trivandrum speaking at the RCI sponsored workshop on 'Curriculum Adaptation for Children with Hearing impairment – A Computer Based Approach'.



Sri. Shimoga Subbanna, A renowned singer, delivering the keynote address in the RCI-CRE program on 'Professional Voice Care' at the institute



Mr. Krishnamurthy, Commissioner for Disabled Welfare, Karnataka addressing the participants during the valedictory program of the workshop on 'Auditory Learning'. Ms. Jaspal Choudhry, Head, Infant Center, EAR Society, Mumbai who is an acknowledged expert in the area of auditory learning is also seen.



Ms. Jaspal Choudhry, Head, Infant Center, EAR Society, Mumbai interacting with a child and a student clinician at the workshop on 'Auditory Learning'.

Papers Presented in Workshops / Conferences / Symposium

The following papers were presented by the staff of the department in various workshops/conferences/symposium.

Balaji, R., Sreejyothi B. & Manjula, R. (2005): "Anacrusis in narrative mode in normal English speaking adults" at the 6th International conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Bhavayarani, M.S., Simmi Annie Sam, & Manjula, R. (2005): "Variability of peak FO & timing in intonation of the non-propositional speech: A comparison across normals & hearing impaired individuals" at the 6th International Conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Gauri Shanker Patil, & Manjula, R (2005): "Phrasal stress in Kannada & Hindi languages" at the 6th International Conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Gouri Shanker Patil & Manjula, R. (2004): "Correlates of intonation in discourse mode of speech in Broca's aphasics" at the NSA-04 Acoustic Society of India conference held from 25-27 November at JCE, Mysore.

Karthikeyan, B.M., Rubina, P.M. & Manjula, R. (2005): "Analysis of pauses in the speech of mentally retarded children" at the 6th International Conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Kedarnath, Radhakrishna, & Goswami S.P. (2005): "Semantic category comprehension deficit in Broca's aphasia - A reaction time

measure" at the 6th International conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Manjula, R. (2004): "Perceptual protocols for assessment of adult stutterer and assessment and management of neurogenic stuttering" at the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19-20 October at AIISH.

Mili, M.M., & Manjula, R. (2005): "Rhythm typology in Hindi and Kannada : Stress-timed or syllable-timed" at the 6th International Conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Namita Kale, & Shyamala K.C. (2005): "Code switching in bilingual children with SLI" at the 6th International conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Pratiksha Mehta, & Sreedevi N. (2005): "Formant frequency changes across accents: A comparative study" at the 6th International Conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Pushpavathi, M (2004): "Normal phonological development current outlook" at the workshop on phonological process analysis - A practical orientation held from 20-21 September at AIISH.

Pushpavathi, M, & Sreedevi, N. (2005): "Voice characteristics in subjects with cleft palate" at the 4th Annual Congress of Indian Society of Cleft Lip, Palate & Craniofacial Anomalies held on 15th January at Hyderabad.

Pushpavathi, M. & Sreedevi, N. (2004): "Effects of palatal prosthesis on speech acoustics - A case study" at the NSA-04 Acoustic Society of India conference held from 25-27 November at JCE, Mysore.

Pushpavathi, M. (2004): "Management of children with stuttering." at the National seminar on Current perspectives on the nature and treatment of fluency disorders held from 19-20 October at AIISH.

Pushpavathi, M. (2005): "Prevention of voice disorders and maintenance of healthy voice" at the RCI/CRE program on Professional voice care held on 2nd February at AIISH.

Shyamala, K.C. (2004): "Language problems in children with hearing impairment" at the workshop on Prevention, early identification and management of hearing impairment for parents of hearing impaired Children held from 1-2 July at AIISH.

Sreedevi Satish, & Shyamala K.C. (2005): "Language performance in bilingual autistic children" at the 6th International conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Sreedevi, N (2004): "Changes in formant frequencies across age" at the NSA-04 Acoustic Society of India conference held from 25-27 November at JCE, Mysore.

Sreedevi, N. (2004): "Speech disorders in the hearing impaired" at the workshop on Prevention, early identification and management of hearing impairment for parents of hearing impaired children held from 1-2 July at AIISH.

Sreedevi, N. (2004): "An overview of common phonological processes occurring in normal children" at the workshop on

Phonological process analysis - A practical orientation held from 20-21 September at AIISH.

Sreedevi, N. (2005): "Articulation transfer exercises" at the RCI/CRE program on Professional voice care held on 2nd February at AIISH.

Sreedevi, N., Jayaram, M., & Shilpashree, H. N. (2005): "Development of phonological processes in 2 to 3 year old children in Kannada" at the 6th International conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Vandana, V. P. & Manjula, R. (2004): "Temporal measures in the speech of cerebellar ataxics : An acoustic analysis" at the NSA-04 Acoustic Society of India conference held from 25-27 November at JCE, Mysore.

Vandana, V.P., & Manjula, R. (2005): "Phonemic vowel length contrasts and voice onset time in focal cerebellar lesions" at the 6th International conference on South Asian Languages (ICOSAL) held from 6-8 January at Osmania University, Secundrabad.

Vasanth Lakshmi, M. S (2004): "On the growth of partial maxima and partial sums of non-negative i.i.d. random variable" at the National Seminar on Order statistics and concomitants held on 28th November at Department of Statistics, Mysore

The following papers were presented at 37th National Conference of ISHA held at Indore from 14-16 January 2005.

Balaji, R., Raja Sudhakar, R & Shyamala K.C. (2005): "Attention allocation and language performance in normals and aphasics".

Banumathy, N., & Manjula, R (2005): "Effects of delayed auditory feedback on normal speech in different cognitive linguistic tasks".

Pratiksha Mehta & Sreedevi, N. (2005): "A comparison across accents: acoustic correlates".

Raja Sudhakar, R., Venugopal, M. B., & Goswamy, S. P. (2005): "Attitudes of prospective elementary and special school teachers towards children who stutter in school situation".

Shilpi Purwar & Shyamala K.C. (2005): "Autistic savants and their profile".

Swapna Sebastian & Shyamala, K.C. (2005): "Metaphonological skills in SLI & LD".

Tanushree Saxena, Divya, C. & Manjula, R. (2005): "Effect of speaking rate on vowel space".

Vandana, V.P., & Manjula, R. (2005): "Relational speech timing in dysarthria associated with focal cerebellar lesions: Word context" (Muktesh award for best paper in Speech Pathology at the conference).

Vani Rupela & Manjula R. (2005): "Efficacy of nutritional supplementation on speech & language skills of children with developmental apraxia of speech".

Venugopal, M. B., Raja Sudhakar, R. & Goswamy S. P. (2005): "Foix-Chavany-Marie syndrome: A case study".

Material Development

The following materials were prepared for public education and for use by student clinicians in their practical work. The following materials were prepared.

Resource Material

- Audio cassettes on introduction to voice disorders and spasmodic dysphonia.
- Guidelines for commencing a speech & hearing institute.
- Handbook for parents of children with LD. Preparatory skills for reading & writing - Part I.
- Handbook for parents of children with LD - Part II
- Speech & language training for the mild to moderate mentally challenged children - A handout for parents.
- Speech & language training for autistic children - Guidelines to parents.
- Speech & language training for the mild to moderate mentally challenged children in Kannada.
- Aphasia - A handout for relatives and caretakers.

Materials for AAC

AAC Assessment Protocol

- 100 Blissymbols Cue Cards
- 50 Cued Speech Cue Cards
- Functional Sight Reading Word Cards in 5 languages (Hindi, Tamil, Telugu, Malayalam & English)
- 50 Functional Cue Words in Hindi
- Alphabet Communication Board in English
- Sentence Communication Board in English
- Activity Wheel

- Activity Belt
- Key board plates for computer key boards - 2 Nos.
- Writing aid: Pencil Gripper - 3 Nos.
- 100 Picture Set for Scan Mate
- Communication Plates using Board Maker Software
- Head Pointers
- Wrist Pointers
- Optical View Pointer
- E-TRAN Board

Resource Books

- My daily object book
- Sentence-picture cue book
- Picture communication book
- My picture communication book in Hindi
- Picture sequence book in Hindi & English

Equipments Procured

1. Servox - Digital Speech Aid Artificial Larynx - 1 No.
2. Voice Recorder VY - H 350 - 1 No.
3. EMG Pathway (MR-20) - 1 unit
4. Sensori Software (for AAC unit) - 11 Nos.

PUBLICATION

Shyamala, K.C. (2004). Language mixing and switching in Malayalam - English bilingual aphasics. Asia Pacific Disability Rehabilitation Journal, 15(2) 68-77.

ACADEMIC SECTION

One of the major objectives of the institute is manpower training. The institute offered the following programs related to speech and hearing in the academic year 2004-05.

1. Diploma (Hearing Aid and Earmold Technology)
2. B.Sc (Speech and Hearing)
3. B.S.Ed (Hearing-Impairment)
4. M.Sc (Speech-Language Pathology)
5. M.Sc (Audiology)
6. Ph.D (Speech and Hearing)

The courses offered by the institute are specially designed to impart training to individuals who aspire to become professionals in the area of speech and hearing and render service to society. The students of B.Sc (Speech and Hearing) were given intensive training in both the theoretical and practical aspects of speech, language and hearing that will help them to serve individuals with speech-language and hearing disability. The post-graduate program, apart from imparting in-depth knowledge and skills in the areas of speech, language or hearing, also focused in training students to become researchers. The doctoral students carried out research specially designed to help those with communication disorders. Doctoral program in Speech-Language Sciences and Audiology will be offered, instead of Ph.D (Speech and Hearing), from the academic year 2005-06.

Students of Diploma in Hearing Aid and Earmold Technology were trained in the area of hearing aid servicing and preparation of earmolds. Educators interested in helping children with hearing impairment were offered B.S.Ed (Hearing Impairment) in which training in theoretical and practical aspects of classroom management of children with hearing impairment was imparted.

Highlights of the year

- National level entrance examination for B.Sc admission
- Academic autonomy granted to the institute by the University Grants Commission.
- Presentation of scientific papers at International platforms (conferences)

Autonomy in Academics

The undergraduate, postgraduate and doctoral programs offered by the institute are affiliated to University of Mysore and recognized by the Rehabilitation Council of India. An expert committee from the University Grants Commission visited the institute on 27 and 28 September 2004 to inspect the infrastructure of the institute and the quality of the education programs. The committee offered grant of academic autonomy to the institute. With conferment of autonomy, it is hoped that the institute will have greater academic freedom in conducting undergraduate and postgraduate programs.

New Admissions

Around 750 applications were received from various parts of India and abroad, for admission to B.Sc (Speech and Hearing) program. For the first time, students had the option of applying from any part of the world through the online application facility of institute's website (www.aiishmysore.com). National level entrance examinations were conducted for admission to B.Sc (Speech and Hearing) program, M.Sc (Speech-Language Pathology) and M.Sc (Audiology) programs. More than 600 students appeared for B.Sc entrance examination conducted in six cities - Delhi, Kolkata, Guwahati, Mumbai, Chennai and Mysore. The details of the admission during the year are as follows:

Admission Details

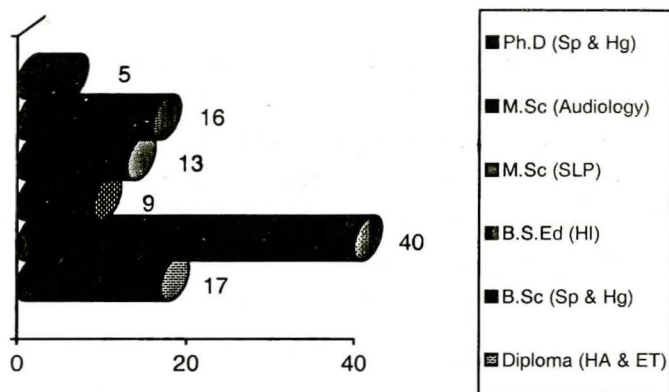


Fig 1: Students enrolled during the year 2004-05

Gender-wise distribution of students studying in various courses in the academic year 2005-06 is as follows:

Name of the course		Male	Female	Total
1.B.Sc (Sp & Hg)	I	11	29	40
	II	25	15	40
	III	26	14	40
2.M.Sc (SLP)	I	07	06	13
	II	11	05	16
3.M.Sc (Aud)	I	08	08	16
	II	09	07	16
4.Ph.D	I	02	03	05
	II	01	02	03
	III	01	03	04
5.B.S.Ed (HI)		05	04	09
6.Diploma (HA&ET)		08	09	17
Total		114	105	219

Table 1: Distribution of male and female students in different courses

The state-wise distribution of students enrolled to various courses is as follows:

State	Courses / No. of students					
	B.Sc (S&H)	M.Sc (SLP)	M.Sc (Aud)	Ph.D (S&H)	B.S.Ed (HI)	Dip. (HA & ET)
Andhra Pradesh	..	02	04	1	..	01
Assam	01	..	..	..	..	..
Bihar	01	..	03	..	..	..
Delhi	..	01	..	..	..	..
Foreign	01	..	..	..	..	01
Haryana	..	01	..	..	..	..
Himachal Pradesh	..	..	..	..	..	01
Karnataka	27	01	02	3	8	10
Kerala	03	01	..	..	1	..
Maharashtra	..	01	02	..	..	01
Manipur	01	..	..	..	..	..
Orissa	..	..	01	..	..	..
Rajasthan	01	..	..	..	..	..
Tamil Nadu	..	03	01	1	..	03
Uttar Pradesh	03	01	..	..	..	..
Uttaranchal	01	01	..	..	..	..
West Bengal	01	..	03	..	..	..
Total	40	13	16	5	9	17

Table 2: State-wise distribution of students admitted to different courses

Results

A total of 31 graduate, 24 post-graduate, 6 special educators and 5 diploma students successfully completed the training program. A brief summary of the results are given in Table 3.

Course	I Class	II Class	Pass	Total
B.Sc (Sp & Hg)	12	16	3	31
M.Sc (Sp & Hg)	12	12	-	24
B.S. Ed (HI)	6	-	-	06
Diploma (HA & ET)	3	2	-	05

Table 3: Summary of results of 2004-05

The following students have secured ranks in different courses:

Course	Name of the student	%
B.Sc (Sp & Hg)	Yatin Mahajan	66.55
	S. Savitha	66.31
	V.V. Rahana Nandan	64.93
M.Sc (Sp & Hg)	Varghese Peter	68.11
	N. Banumathy	64.57
	Tanuja Sudhir Jawale	64.11
B.S.Ed (HI)	H.P. Sumana	74.33
Diploma (HA & ET):	Priyanka Madhok	74.80

Table 4: Details of the rank - holding students in the report year

Internship

First batch of internship students successfully completed their 10-month internship training. The internship helped the students to tone-up their clinical skills as well as provided exposure to a wide spectrum of clinical population. Their postings in centers/institutions outside AIISH, provided them greater exposure to clinical population and settings different from that of AIISH. The list of outside centers where the students were trained is as follows:

1. National Institute of Mental Health and Neuro Sciences, Bangalore
2. Kidwai Memorial Institute of Oncology, Bangalore
3. St. John's Medical Hospital, Bangalore
4. Sheila Kotwala Institute for the Deaf, Bangalore
5. Dr. Chandrashekar Institute of Speech and Hearing, Bangalore
6. Ali Yavar Jung National Institute for the Hearing Handicapped, Mumbai
7. BYL Nair Hospital, Mumbai
8. Education Auditory Research Center School for the hearing impaired children, Mumbai
9. Hellen Keller School for the Deaf and Blind, Mumbai
10. National Institute for the Mentally Handicapped, Secunderabad
11. Sweekaar Research Institute for the Handicapped, Secunderabad
12. Government ENT Hospital, Hyderabad
13. Sri Ramachandra Medical College and Research Institute, Chennai
14. Spastic Society of Tamil Nadu, Chennai
15. Little Flower Convent Higher Secondary School, Chennai
16. Madras ENT Research Foundation, Chennai

17. The School for the Young Deaf Child, Balavidyalaya, Chennai
18. Madras Dyslexia Association, Chennai
19. Apollo Hospital, Dept. of ENT, Chennai

Stipend / fellowship

Details of the stipend given to diploma, undergraduate, postgraduate students and fellowships given to doctoral students are shown in Table 5. Apart from this, students were also given financial assistance to attend and present papers at various National and International seminars. A few post graduate and doctoral students also received fellowships from ICMR and International agencies to attend International Conference.

Course	Stipend (in Rs)
B.Sc (Sp &Hg)	400/month
B.Sc (Internship)	1,500/month
M.Sc (SLP)	650/month
M.Sc (Aud)	650/month
B.S.Ed (HI)	400/month
Diploma (HA&ET)	250/month
PhD (1st and 2nd year)	5,000/month
Ph.D (3rd year)	5,600/month

Table 5: Details of stipends

Guest Faculty

Expertise in allied areas of speech and hearing such as Paediatrics, Pathology, Neurology, Epidemiology and Genetics was augmented by inviting visiting faculty from other premier institutions such as K.R. Hospital, JSS Medical College, BGS

Apollo Hospital, PGIBMS, Chennai and MAHE Manipal. This enabled the institute to fulfill the commitment made to the student fraternity in imparting higher education. The names and area of expertise of the visiting faculty is given in Table 6.

Course	Name	Qualification
Neurology	Dr. Somnath Vasudev	M.B.B.S, M.D
Paediatrics	Dr. J. Krishnamurthy	M.B.B.S, M.D
Psycholinguistics	Dr. Basanti Devi	Ph.D
Epidemiology	Dr. Sreekumaran Nair	Ph.D
Genetics	Dr. Sreekumari Srishailapathy	Ph.D
Pathology	Dr. A.L. Hemalatha	M.B.B.S., M.D

Table 6: List of visiting faculty

The following guest lectures were arranged for the benefit of the students:

1. Ms. Dakshayini, Prosthodontist, Mysore on "Material for earmold".
2. Dr. Ranganatha, Professor in Zoology, University of Mysore on "Human Genetics".
3. Dr. Prabha Ghatge, Rtd HOD., Dept of Special Education, A.Y.J.N.I.H.H., Mumbai, on "Techniques for teaching speech and language to the hearing impaired"
4. Ms. Roopa Rao, Fairfax, Virginia, USA (Alumni of AIISH) on "Phonological development and phonological process analysis".
5. Ms. Laxmi Jagadish, New Jersey, USA (Alumni of AIISH) on "Infant stimulation".

Short-term Training

National

ENT postgraduate students from JJ Medical College, Davanagere and Vijayanagar Institute of Medical Sciences, (VIMS), Bellary underwent training in the field of Audiology and related areas of disability.

International

Mr. Pradeep Kumar Malik, WHO fellow from Nepal underwent training on earmolds in the department of Audiology.

Conferences and Seminars

Apart from the curriculum, the students were actively engaged in carrying out research under the guidance of faculty members. The students brought laurels to the institute by presenting scientific papers at various national, international level conferences by winning awards.

International

The following students and faculty presented papers at different international conferences:

Srikanth Kumar Misra and Jayaram, M. (2005). Evaluation of Hearing Aid with Artificial Intelligence at American Auditory Society held at Arizona, USA.

Srikant Kumar Misra, Manjula, P., Jayaram, M (2004). Open-jaw Vs Closed jaw ear impressions in children" at International Hearing Aid Research Conference 2004 held at California, USA.



Dr. Suresh Patil, Director, Dept. of Anthropology, Manav Bhavan, Mysore, Prof. M. Jayaram, Director, AIISH and Dr. R. Manjula, Head, Dept. of Speech Pathology at the workshop on Phonological Process Analysis.



Prof. D. Nagaraja, Vice Chancellor, NIMHANS, speaking at the inaugural function of the National Seminar on "Current Perspectives on the Nature and Treatment of Fluency Disorders".



Prof. B. S. Ramakrishna, former Vice Chancellor, Central University, Hyderabad speaking at the workshop on Acoustics of Speech at the institute. Prof. M. Jayaram, Director, AIISH and Prof. S.R. Savithri, Head, Dept. of Speech-language Sciences are also seen.



Dr. Joyce Thomas, Medical Audiologist, Coimbatore addressing the public at the workshop on 'Evaluation and management of Tinnitus'.

Karthik, N., Aditi, A. K., Ajith Kumar, U., Ajish Abraham and Jayaram, M. (2004). Distortion output of Hearing Aids due to Electromagnetic interference at International Hearing Aid Research Conference 2004 held at California, USA.

National

About eighty research papers were presented by students and staff of institute at various National conferences which included the annual conference of Indian Speech and Hearing Association, Frontiers of Research on Speech and Music, International Conference of South Asian Languages. The following papers were adjudged Best paper in various disciplines at the Annual Conference of ISHA at Indore (14-16 January 2005):

Names	Paper title	Award
Ajith Kumar, U M. Jayaram	Incidence and audiological characteristics in individuals with auditory neuropathy / auditory dys-synchrony	Best poster in Audiology
Amy Kunnathur Srikanth Kumar Mishra, C.S. Vanaja, P. Manjula	Cochlear implants, hearing aids and CAEPs: Can they amplify bright smiles in children?	Late Dr. N.R. Chaudari Memorial award for best paper in pediatric audiology
Aditee A Khaladkar N. Kartik C.S. Vanaja	Speech burst ABR : A bronze standard for perceptual deficits in SN hearing loss.	Dayalan Samuel award for best paper in audiology

Vandana V.P, R. Manjula	Relational speech timing in dysarthria associated with focal cerebellar lesions: Word contest.	Mukthesh award for best paper in speech pathology
Vishwakarma Chandrakant, Manuj Agarwal, Ankit Mathur, Ajith Kumar U, Sandeep M	Distortion product otoacoustic emissions: Comparison of sequential vs. simultaneous presentation of primary tones in individuals with normal hearing and sensori-neural hearing loss.	Young scientist in Audiology
M. Jayaram Kalaiselvi P.S	Effect of performance and voice rest on voice characteristics of Yakshagana folk artists	Dr. B. M. Abrol award for best paper in voice
Geetha C Ashly George Asha Yathiraj	Perception of high frequency filtered speech in normal hearing subjects.	Mukthesh award for best paper in audiology
Rajani Sebastian B. Bhuvaneswari Prema K. S	Lexical access in dyslexics: An insight from shallow orthography	Sheila Vora award for best paper in award learning disability

Table 7: Details of award winning papers at 36th ISHA Conference

THERAPY CLINIC

The Therapy clinic functions as a coordinating center catering to the needs of individuals with various types of communication disorders since January 2003. It houses all diagnostic and therapeutic services, including out patient departments (OPDs) and services from a host of allied professionals under a common roof. The new set up provides the much-needed multi-disciplinary professional management, including physiotherapy and occupational therapy, all under one roof. All the departments in the institute coordinate with the therapy clinic in order to facilitate effective functioning.

The main objectives of Therapy clinic are imparting professional training to students and providing clinical services to clients with communication disorders. The other objectives are to:

- Train students in the management of communication disorders
- Provide diagnostic and rehabilitative services to all the clients
- Provide short term training and orientation to allied professionals
- Provide public education services
- Develop assessment and training materials for rehabilitation
- Conduct workshops/seminars related to rehabilitation issues
- Conduct orientation programs for teachers, parents and students
- Conduct clinical research

ACADEMIC PROGRAM

The therapy clinic imparts clinical training to diploma, graduate and postgraduate students in the management of clients with speech, hearing and language disorders. The students are provided training in the assessment and management of various types of communication disorders, preparation of teaching aids, writing clinical reports, documentation of patient related information, preparation of lesson plans, work records and planning of home based training programs etc. The major manpower training activities of the therapy clinic include:

- Imparting **practical and professional clinical training** in the management of speech-language & hearing disorders to:
 - Undergraduate and post graduate students in speech and hearing
 - B S Ed (hearing impairment)
- Conducting short term training programs to allied professionals.
- Orientation programs
- Conducting workshops/seminars related to rehabilitation issues.
- Providing public education services

The number of students trained during the reporting year is given in Table 1.

Classes	No. of students
I B.Sc	39
II B.Sc	43
III B.Sc	36
Interns	35
I M.Sc	13
II M.Sc	16
B S Ed	9

Table 1: Students trained in the Therapy clinic during 2004-05

Ph.D Program

- Ms. N. Swapna - Submitted her Ph.D thesis on 'Fine grained auditory discrimination in normal children and children with Learning disability'.

Guest Lectures

- Ms. Lakshmi Jagadish, New Jersey, USA, on "infant stimulation and early intervention program" for the parents and caregivers on 6 August 2004.

Orientation Lectures: Orientation lectures/programs were organized for parents, students and professionals. The details are as follows:

Topic	Target group	No.
Available therapy software and FM hearing aids	Engineering students	01
Software development	Engineering students, Vidyavardaka College, Mysore	04

Preschool activities	M.Ed. students, RIE, Mysore Rotary, Mysore Midtown	24 05
Rights/privileges of persons with disabilities and their caregivers in Kannada and Malayalam	Parents of children with communication disorders	50
Facilities for the speech and hearing handicapped in Kannada and Malayalam	Parents of children with communication disorders	50

Table 2: Details of the orientation lectures
organized/ conducted

Short-term Training Program: Short term training was provided to:

- A student from National Institute of Design, Ahmedabad - 3 weeks
- ENT PG students from JJM Medical College, Davanagere - 2 days
- ENT PG students from VIMS, Bellary - 2 days.

CLINICAL SERVICES

Clinical Services/Activities

1. **Clinical services:** Providing diagnostic and therapeutic services to all varieties of speech, hearing and language disorders

Diagnostic Services:

- Comprehensive **assessment procedures** for all types of communication disorders, for different age and language groups by a team of speech-language pathologists and audiologists
- **Consultancy services** by allied professionals -ENT doctors, Clinical psychologists, Pediatrician, Neurologist, Phonosurgeon, Plastic surgeon, and Prosthodontist
- **Counseling and guidance** for clients with communication disorders
- **Individual and group counseling** services for caregivers, teachers and employers for family, educational and vocational management
- **Referral services** for extended evaluation, school placement and recommendations
- Issue of **certificate of disability** for welfare measures, school admission and related issues.

Therapeutic Services:

Therapeutic services on **individual &/or group basis for short/long term**

- **Language therapy**, including reading and writing for individuals with hearing impairment, specific language impairment, learning disability, mental retardation, cerebral palsy, autism spectrum disorders, aphasia etc.
- **Listening training** for individuals with hearing impairment
- **Articulation therapy** for individuals with misarticulation, cleft lip & palate, dysarthria etc.
- **Voice therapy** for individuals with voice problems
- **Fluency therapy** for individuals with stuttering, cluttering etc.

- **Physiotherapy** for individuals with neuromotor problems
- **Occupational therapy** for individuals with neuromotor problems
- **Alternate and Augmentative Communication (AAC) training**
- **Behavior modification** for clients with behavior problems
- Guidance through **correspondence** for the needy clients

2. Research and Development:

- Undertaking projects and research having clinical implications

3. Material Development:

- Developing **assessment materials** for various speech-language & hearing disorders.
- Developing **teaching aids like** audiovisual aids, models, posters, drill materials for therapy, materials for clinical training, home training and public education purposes.
- **Translations and development** of evaluation and training materials in different languages and for different disorders and age groups.

A total of **31,965 children and adults have been registered** during the year with various types of speech, hearing and language disorders. This includes **13,344 new clients and 18621 clients who have made repeat visits** for the evaluation of their problems. They were evaluated in detail for audiological and speech, language problems. The clients were also evaluated for associated ENT and Psychological problems by the faculty and staff from the respective departments wherever indicated. Clients requiring further management are given speech/language therapy and listening training. The faculty and clinical staff provide supervision and

counseling along with support and guidance to parents for home training. In addition, group therapy sessions and group parent counseling sessions are regularly conducted to improve interaction and socialization. Consultancy services are provided, by allied professionals such as pediatrician, neurologist, plastic surgeon, prosthodontist, phonosurgeon, physiotherapist and occupational therapists from October 2002 for better patient care and management. The detailed statistics regarding the clinical services provided during the year 2004-05 are given in Appendix 1.

Clinical supervision by the staff in the Therapy clinic (2004-05)

Particulars		No.
Dr. Geetha	Diagnostics	247
	Therapy	280
Ms. Swapna	Diagnostics	365
	Therapy	165
Ms. Sangeetha	Diagnostics	281
	Therapy	94
Ms. Shilpashri	Diagnostics	39

Table 3: Details of the cases supervised by the staff of therapy clinic.

PRESCHOOL TRAINING CENTER

A regular center for preschool training program for children with hearing impairment, mental retardation, and cerebral palsy was started in 2002-03. The objective of this program is to identify and train preschool children at a young age to achieve successful integration of these children in the normal school at an appropriate age. The activities in the school are planned with specific curriculum framed for various communication disorders for different skills and age groups.

Services and Activities

1. Clinical:

- a) **Provide early intensive preschool training** in communication skills for
 - Different disorder groups - Hearing impairment, Mental retardation, Cerebral palsy and Autism
 - Different age groups - 2 to 4 years and 4 to 6 years
 - Different language groups - Kannada, Malayalam, Hindi & English
- b) Promote complete **integrated and all-round development** of a child in each and every domain (speech-language, cognitive, physical, motor, sensory, social, self help, academic etc) in a balanced and harmonious manner.
- c) **Successful mainstreaming**

2. Training:

- a) Imparting **practical and professional clinical training** in the management of speech-language & hearing disorders to
 - Undergraduate and post graduate students in speech and hearing
 - BSEd (hearing impairment)
- b) **Training teachers of normal schools** for successful inclusion
- c) **Peer group training** for supportive education in an inclusive set up
- d) Conducting **short term training programs** to allied professionals
- e) **Orientation programs**

- f) Conducting **workshops/seminars** related to rehabilitation issues
- g) Training & periodic **guidance to the parents** of children attending preschool program for carrying out systematic and intensive home training.

3. Research and Development:

Undertaking **projects and research** having clinical implications

4. Material Development:

- a) Development of appropriate **teaching aids** (audiovisual aids, charts, models, flash cards etc.) for different skill training for preschool children.
- b) Development of **curriculum and corresponding workbooks** for training in different skills and in different languages.

5. Extra Curricular Activities:

- a) Conducting summer camp and Dasara camp for children attending therapy and preschool training program.
- b) Celebration of important dates like Republic day, Independence day, Helen Keller deaf-blind awareness week, World disabled day etc.
- c) Conducting **co-curricular activities** like sports, games, drawing, painting, crafts, dance, yoga, cultural programs and competitions.

Inauguration of Preschool Training Center:

Sri S. Siddaramaiah, Deputy Chief Minister, Karnataka state inaugurated the Preschool training center on 16.10.2004. Preschool and Therapy clinic children participated in the cultural program during the Institute's 38th anniversary on 16.10.2004.

During the report year, 80 new children were enrolled for the program. 14 preschool groups were made according to two age groups (2-4 and 4-6 years), 4 languages (Kannada, Hindi, Malayalam and English) and 3 disorders (Hearing impairment, Mental retardation, Autism) The children enrolled in the program have been provided 4 hours of daily intensive training in pre-academic, academic, language, communication, cognitive and extra-curricular skills in addition to speech therapy and listening training. A total of 18 children have been discharged with recommendations for inclusive education. The detailed statistics of the Preschool center are given in table 4.

Month	No. of groups	No. of children
April 2004	12	49
May 2004	12	61
June 2004	13	72
July 2004	13	72
Aug. 2004	13	81
Sept. 2004	13	86
Oct. 2004	14	86*
Nov. 2004	14	86*
Dec. 2004	14	85
Jan. 2005	14	85
Feb. 2005	14	83
Mar. 2005	14	90

Table 4: Particulars regarding preschool groups

(* Dasara Camp [one month] held for children during October-November)

Summer camp was organized for the children attending Therapy clinic and Preschool from 16.4.2004 to 15.5.2004. A total of 54 children were trained daily in various skills such as paper collage making, crayon melting, spray and thumb painting, flower making, paper folding, knitting, embroidery work, dance, yoga and music. The items prepared by them were exhibited on the last day of the camp and children volunteers explained about the exhibits.

Dasara camp was organized for the children attending Therapy clinic and Preschool from 18.10.2004 to 12.11.2004. 35 children were trained in various extra-curricular skills.

Special educators are provided periodic guidance and training in the management of various skills through their participation in various workshops, seminars, short term training etc.

Various charts, models and training materials are regularly prepared by the special educators for use in preschool training for various skills and in different languages. Some of the parent volunteers also assist the teachers in building up these aids for day-to-day usage.

Parents of children attending Preschool training are given periodic guidance for home training through observation of the training program on rotation basis as well as group parent counseling sessions on various topics. They are also encouraged to provide training to their children at specified timings and place in the clinic or preschool center on a day-to-day basis and are given guidance during that time, which in turn facilitates home training. Two workshops have been organized for parents of children with hearing impairment and mental retardation. This was aimed at providing information regarding the nature, causes and prevention of various problems and specific skill training activities to improve

children's abilities for successful mainstreaming.

RESEARCH

Projects in Progress

An Epidemiological Study of Cases Registered at AIISH

Cost: Rs. 0.90 lakhs

Duration: 8 months

Investigating team: Y.V Geetha, M. Jayaram, K. S. Prema, N. Swapna and B S Gururaja

Sponsor: AIISH Research Fund

The project was started in August 2004. A detailed format was prepared for the collection of data under different variables. The data was collected from the case files of clients registered at AIISH from April to July 2003. This is being analyzed with respect to variables such as age, sex, socio-economic status, causative factors, various communication disorders, presence of family history and other factors.

Treatment Efficacy in the Management of Stuttering

Cost: Rs.1.20 lakhs

Duration: 8 months

Investigating team: Y.V Geetha, M. Jayaram and Sangeetha.M

Sponsor: AIISH Research Fund

The main objective of the project was to check how fruitful and long lasting the treatment that is provided to clients with stuttering, which is well known for its variability and resistance to treatment. The data is being collected from children and adults who have received therapy for their stuttering during the last couple of years. The treatment efficacy rating scale was developed comprising

of 12 different subsections with regard to situational factors, confidence in speaking, changes in attitude, belief and the listeners reactions to be rated by the clients before discharging and at 3 months follow up. The project work is in progress.

OTHERS

Workshops/Seminars/other functions Organized

Workshop for the Parents of Children with Mental Retardation:

A one day workshop was organized for the parents of children with mental retardation on 10 March 2005 in the therapy clinic. 40 parents participated in the workshop. They were given orientation on causes, identification and prevention of the disability. They were also provided guidance for the management of medical, behavioral, auditory, speech, and language, educational and vocational aspects. Information regarding various facilities made available by the Govt. was highlighted. Exhibition of various books, charts and teaching aids available for home training was arranged for the benefit of the parents.

Other Programs:

The following programs were organized by the Therapy clinic and Preschool center during the year:

International Stuttering Awareness Day was celebrated in the Therapy clinic on 20 October 2004 by conducting quiz, writing, Pick and speak competitions for 15 individuals with stuttering. Orientation and exhibition was also arranged for adults with stuttering and parents of children with stuttering

Vigilance Awareness Week: As a part of the Vigilance

awareness week, orientation program was organized for the parents of children attending therapy and preschool on 5 November 2004. Around 50 parents participated. They were given orientation in Kannada and Malayalam regarding the rights and privileges as consumers of clinical services and also regarding the facilities available to the handicapped.

World Disabled Day

World disabled day was celebrated on 9 December 2004 in AIISH gymkhana. Prizes were distributed to the winners of various sports and games competitions held for the children attending Preschool and Therapy clinic. More than 80 children participated in the program along with their parents and siblings. Children also performed cultural programs on this occasion.

Papers Presented in Workshops / Conferences / Symposia

The following papers were presented by the staff of the therapy clinic in various workshops / conferences/ symposium.

Geetha, Y.V: "Management of speech problems in hearing impaired" in the workshop for parents of hearing impaired held on 2 July 2004 at AIISH.

Geetha, Y.V: "Perceptual protocols for assessment of cluttering presented" in the National seminar on Fluency disorders held from 19-20 October 2004 at AIISH.

Geetha, Y.V: "Management of speech problems in mental retardation" in the workshop for the parents of children with mental retardation held at AIISH on 10 March 2005.

Swapna, N: "Educational and vocational management of children with hearing impairment" in the workshop for the parents

of children with hearing impairment held on 2 July 2004.

Swapna, N: "Educational and vocational management of children with mental retardation" in the workshop for the parents of children with mental retardation held on 10 March 2005.

Sangeetha, M: "Facilities for the Hearing handicapped" in the workshop for the parents of children with hearing impairment held on 2 July 2004.

Sangeetha, M: "Facilities for children with mental retardation" in the workshop for the parents of children with mental retardation held on 10 March 2005.

Development of Resource Material

- 8 Charts on stuttering for International stuttering awareness day.
- 4 charts on communication disorders for open day.
- One handout on self-therapy for stuttering in Kannada.
- 39 workbooks and kits for developing language, cognitive, motor and academic skills in different languages.
- '25 Golden rules' handout for parents of children with hearing impairment sent for printing in Kannada, English and Hindi languages.
- Chart on play skills for parents of children with communication disorders in different languages.

Public Education

- Organized exhibition of activities of the clinic on the eve of Institute Open Day on 9 August 2004
- Coordinated with the Department of Material Development for street play 'Vani' as a part of 'Bahuroopi'

- a national level drama festival organized by Rangayana on 5 December 2004.

Equipment Procured

- Spirometer
- 10 portable tape recorders

LIBRARY AND INFORMATION CENTER

AIISH library and information centre is the main learning resource centre catering to the ever growing information requirements of faculty and students. It is a specialist documentation centre in the field of communication disorders. The library has a good collection of resource material in the form of books, periodicals, abstracts, independent projects, dissertations, thesis, audio/video cassettes and other publications. The library, on date, contains 13584 volumes including books and back- volumes of periodicals.

Users of the library include students, researchers and faculty of AIISH. The library is also open to other institutions. Professionals from allied fields and other speech and hearing institutions can become temporary members of the library. Photocopies of articles were also made available to others on request.

The entire collection is organized according to the classification and cataloguing scheme. The technical processing reflects the easy accessibility of books to the readers. New arrivals - books, periodicals and reference collections - are displayed in the first floor of the library.

The Library and Information center is providing various kinds of services such as:

a) The Conventional Wing Services

1. Providing latest books and periodicals in the speech and hearing specialty
2. Indexing and cataloguing services
3. Current awareness service

4. Extension of inter library co-operation
5. Document delivery services
6. Compilation of bibliographies
7. Rendering effective reference services
8. Rendering reprographic services
9. Orientation and guidance for library use
10. Display of new arrivals

b) The IT Wing Facilities and Services

1. Internet facility
2. Databases and multimedia CDs.
3. Online Public Access Catalogue (OPAC)
4. Bar code scanner facility
5. Access Control System for library entry
6. Printer services
7. Database of no. books referred, issued, most frequently accessed.

The entire book collection is bar-coded. Important in-house functions like acquisition, cataloguing and circulation are automated using the LIBRIS library management software package. The users have found the Online Public Access Catalogue comfortable for retrieval as it is very swift. Users can search the database by author, title, classification number and subject. The library has adopted open access system, which enables the readers to go to bookshelves and handle the book freely.

Individuals other than those at AIISH can obtain the membership of the library by paying Rs. 500/- (Students) or Rs. 1000/- (Non-students).

STATISTICS

No. of volumes as on 31.3.2005	13584
No. of volumes added	321
No. of journals subscribed	57
No. of journals available online	27
No. of books/journals issued and consulted	106817
No. of outside members enrolled	71

Planned Activities

1. Increasing the collection of specialized books and to subscribe good number of technical journals pertaining to library users.
2. Digitization of the library services and activities.

ENGINEERING SECTION

The training program, clinical services, research and the other welfare activities of the institute are increased in the year 2004-05. Consequently, there is an increase in the number of students enrolled in different courses as well as clients for clinical services. Since the infrastructural facility at the institute for the above was found inadequate, the engineering section of the institute took up several civil works in the Naimisham and Panchavati campuses of the institute. Details of civil work are shown in Table 1.

Particulars	Rs.in lakhs
Construction of Ladies hostel building	171.00
Construction of Academic block	162.00
Construction of Administrative block	125.00
Fabrication of parking garage in front of library building	1.14
Interior decoration of room no. 6 & 7 of AIISH guest house	2.10
Developmental works	
Construction of storm water drain all round ladies hostel building	6.73
Construction of storm water drain all round academic block	7.80
Construction of storm water drain all round administrative block	7.20
External water supply and sanitation for ladies hostel	9.35
Renovation of existing toilets in ladies hostel building	8.97

Providing and fixing PVC Sintex water tanks for ladies hostel	1.42
Construction of retaining wall with compound grill at ladies hostel	3.89
Construction of connecting corridors and staircase head room at ladies hostel	4.83

HORTICULTURE

Following developmental works were carried out in Naimisham campus

Particulars	Area
Bermuda lawn around ladies hostel -	4600 sft
Eastern side	3200 sft
Western side	1400 sft
Bermuda lawn between Speech block and Ladies hostel	1000 sft
Plants and shrubs	400 sft
Tree planting - Teak saplings	50 Nos

Table 1: Details of work completed during 2004-05.

PUBLICITY AND INFORMATION

AIISH IN MEDIA

The mass communication media of the country gave excellent coverage of the activities and programs of the institute:

- Doordarshan telecasted a live interview with the Director in Phone-in-Program on 10 April 2004.
- **"The Hindu"** one of the leading national daily publicized an article on Academic program in their Monday's special suppliment on 7 June 2004.
- AIISH "Open Day" on 9 August 2004 was inaugurated by MLA Sri. H. S. Shankarlinge Gowda and Mysore University Vice Chancellor Prof. J. Shashidhar Prasad.
- National workshop on "Electroacoustic Evaluation of Hearing aids and Audiometric Transducers" on 12 August 2004. Dr. B. V.A. Rao, President, Acoustical Society of India inaugurated the workshop.
- National workshop on "Acoustic Analysis of Speech" on 19 & 20 August 2004. Prof. B. S. Ramakrishna, former Vice Chancellor of Hyderabad University inaugurated the workshop.
- Vijaya Karnataka, a leading Kannada daily, published an article on the institute on the eve of 38th anniversary of AIISH on 16 October 2004. Sri. S. Siddaramaiah, Hon'ble Deputy Chief Minister, Government of Karnataka inaugurated the program. Prof. K. Sudha Rao was the Guest of Honour.

- Prof. D. Nagaraja, Director and Vice-Chancellor, NIMHANS, Bangalore inaugurated the National seminar on "Current Perspectives on the nature and treatment of fluency disorders" on 19 October 2004..
- **"TARANGA"** a Kannada weekly published a lead article on institute infrastructure on 14 October 2004.
- Dr. K. J. Chari, Senior Director and Scientist Department of Information Technology, New Delhi inaugurated National workshop on "Speech Processing" on 4 November 2004.
- Renowned Singer Shimoga Subbanna inaugurated the seminar on "Professional Voice Care" on 31 January 2005.
- Deccan Herald, the English daily, published a lead article in its Thursday's special supplement on "Academic Programs" on 10 February 2005.

Apart from these, the media, both print and electronic, gave excellent coverage of the programs and activities of the institute (inter institutional sports tournament, hearing aid repair, orientation programs, workshops, seminars etc.,) and also extensively covered the visit of VVIPs to the institute.

CAMPS BY AIISH

The Speech & Hearing camps organized on the invitation from the various organizations from April 2004 to March 2005:

Place	Cases Seen/ Screened	Cases referred	Hearing aids issued	Ear molds made	Certi fied
Koppala*	96	03	70	87	-
Montford School Belagola	84	-	-	21	-
Govt. Children's Blind School, Mysore	62	11	-	-	53
Siddapura Taluk	51	07	-	-	13
Kanakapura	200	21	-	-	-
T. Narasi pura	160	27	12	-	18
Madikeri	58	07	-	-	02
Naga mangala	30	08	00	00	-
Devalapura	37	06	00	00	-
Bidigena vilu	12	-	00	00	-
Kanakapura*	51	-	51	96	-

Chamaraja nagara	67	11	18	41	16
Kollegala	59	01	45	90	02
Gundlupet	31	14	16	32	-
Bagalkot	50	07	22	44	14
H.D. Kote Taluk	663/5638	-	79	53	17
<hr/>					
Total	1604/7458	127	313	464	135
<hr/>					

Table 1: Details of the camps held by AIISH

* Hearing aid issue camp

Various organizations (Govt. and Non-Govt.) which arranged and sponsored the camps are as follows:

1. District welfare Department Koppala
2. Montford School, Belagola, Mysore District
3. Taluk Panchayat, Mysore
4. Cheshire Homes India, Pollibetta
5. Sarva Shiksha Abhiyan - Bangalore Rural District, Chamarajanagar, and Bagalkot
6. Myrada, MLA of H.D.Kote
7. NSS Unit of AIISH
8. Niranthara Seva Trust
9. District Administration, Madikeri
10. DDRC, Mandya

The statistics pertaining to the camps are as follows:

No. of camps conducted	:	16
No. of cases seen	:	7458
No. of cases identified	:	1604
No. of cases referred to AIISH	:	127
No. of hearing aids issued	:	313
No. of earmolds made	:	464
No. of certificates issued	:	35

Table 2: Camp statistics

AIISH GYMKHANA

AIISH Gymkhana fosters socio-cultural exchange among the staff and students of the institute. It is a platform for the members to exhibit their sports, art, cultural and literary skills. The activities serve the twin purpose of recreation and, achieving socio-cultural exchange among the members. The AIISH Gymkhana received a grant-in-aid of Rs.50,000/- from the institute in the year 2004-05. The following programs were conducted by AIISH Gymkhana in the last year.

Highlights of the year

1. **Launching of AIISH-Gymkhana newsletter 'Cuhoo-Cuhoo'**
2. **AIISH Durbar - the intercollegiate cultural festival**
3. **Prathibha Puraskar and Vidya Vikas programs**
4. **Inter institutional sports tournament for Central Govt. employees of Mysore**

Vidya Vikas program: The children, of staff members, studying up to 7th standard were given educational materials (school bags, books, etc.). A total of 40 children received the benefits.

Prathibha Puraskar: Staff children who secured distinction in their school / college examination were rewarded. Eight children were given certificates and cash award.

AIISH Gymkhana brought out, in collaboration with the Department of Material Development, a **Newsletter "Cuhoo-Cuhoo"** - an in-house magazine for the first time. Cuhoo-Cuhoo reports the achievements of students and staff as well as the

activities of the institute & Gymkhana. It is also a forum for staff and students to express their literacy skills. The first edition of Cuhoo-Cuhoo was released on Open day by Prof. J. Shashidar Prasad, Vice Chancellor, University of Mysore on 9 August 2004.

The members of Gymkhana interacted with the beautiful children of Bapuji Children's Home, Gokulam, Mysore on the occasion of **Deepavali** - 10 November 2004 - and expressed their love through words, sweets/fruits and firecrackers.

The **library** of the Gymkhana subscribes to 12 magazines - 6 weekly, 5 monthly and 1 bi-monthly at present. The staff and students have been utilizing the library facilities.

A talk on "Art of Living - Sudarshana Kriya" was arranged on 6 January 2005 for staff and students of the institute.

The staff members also spent some quality time together in an **excursion to MM hills** on 8th January 2005.

AIISH Durbar 2005, an inter-collegiate cultural festival for students to showcase their talents was conducted from 18-20 February, 2005. Dr. B. G. Sangameshwar, Principal, SJCE, Mysore inaugurated the program on 18 February 2005. Smt. Geetha, a well known mimicry artist from Rangayana presented a mimicry show on the occasion which is etched in our memory. That was a wonderful start to the 3-day Durbar.

The competitions included half-an-hour variety program, pencil shading, face painting, skit, group dance, pick & speak, quiz and fashion show. The cultural and fine arts events at the festival witnessed intense competitions among students from 33 colleges of Mysore who participated in the festival. More than 4000 people attended the event. All India Institute of Speech and Hearing, the host institute, bagged the overall championship.

National Science Day was conducted on 28 February 2005. Quiz in physics, guest lecture, and film/slide shows were conducted for staff and students.

Inter-institutional Sports Tournament: An Inter-institutional sports tournament for Central Government employee's in the city of Mysore was organized in March 2005. A total of 200 sportspersons, representing 45 different Central Government organizations located in Mysore, participated in the tournament. Competitions were conducted in five events - badminton, chess, carrom, table tennis and volleyball.

NATIONAL SOCIAL SERVICE (NSS)

Ever since its introduction in the institute, the NSS unit is involved in social service activities. AIISH being a professional training institute engaged in the promotion and maintenance of health in the community, the objectives of NSS were tailored in tune with the objectives and responsibilities of the institute without violating the primary motto of NSS. The following are some of the innovative programs carried out this year by NSS.

Educational Programs

- A special coaching program was initiated to needy students on core subjects of speech and hearing. Kannada teaching class for non-Kannada students of the institute were organized. The student volunteers carried out this program for 1 hour on all Saturdays and Sundays. 110 students participated in this program.
- A lecture on organ donation was organized on 3.3.2005. A total of 178 NSS volunteers and 20 staff members participated in the program.
- The movie "Black" was shown to NSS volunteers on 26.2.2005 for creating awareness about the deaf-blind individuals and their rehabilitation.

Cultural Activities

- A talent's day for NSS volunteers was conducted on 12.10.2004 in which 42 volunteers participated.
- Fishpond was conducted on 22.10.2004 in which 74 volunteers participated.
- As a part of scheduled NSS program, a 'Tableaux' competition was conducted on 21.12.2004 in which 153 volunteers and other students participated.

Shramadan Activities

- Cleaning of the area in and around AIISH canteen and Xerox shop - 30.10.2004
- 41 new saplings planted at the Naimisham campus, AIISH - 27.2.2005
- Cleaning of the area behind the men's hostel - 28.2.2005.

Blood Donation

A blood donation camp was organized in association with KR Hospital, Mysore on 5.3.2005 in which 53 volunteers donated blood. In addition, 12 NSS volunteers donated blood at different points of time.

Adventure Activities

- Nature study program conducted at Nagarahole Forest, Irupu Falls on 26.12.2004. The program was attended by 52 NSS volunteers and 2 staff members.
- A two-day trekking program at Tadiyandamol, Coorg District was conducted from 12-13 March 2005. 50 NSS volunteers and 5 staff members participated.

Health Activities

A major achievement during this year was the NSS special speech and hearing camp conducted at Chikkodanahalli, H.D.Kote from 23-27 March 2005. The camp was jointly organized by MYRADA, Mr. M. P. Venkatesh, MLA of H.D.Kote, and NSS unit of the institute. A survey was conducted in 20 villages in and around the district. Individuals with speech and hearing problems were identified and advised. In addition, medicines worth Rs. 2,000/- were also distributed free of cost to the needy. About 50 NSS volunteers and 11 staff members participated in the camp. The

NGOs and the Stree Shakti groups were oriented on the prevention and early identification of communication disorders. Welfare measures for persons with disabilities were also detailed. Tree planting in the premises of Chikkodanahalli Higher Primary School was also done which was highly appreciated by one and all. Table 1 shows the details of the camp.

Size of population surveyed	5638
No. of persons with speech and hearing problems identified	663
Hearing aids distributed	79
Hearing handicapped certificate issued	07
Mental retardation certificate issued	10
Ear moulds made	53

Table 1: Details of the NSS special speech and hearing camp at Chikkodanahalli.

OFFICIAL LANGUAGE IMPLEMENTATION

The institute has been following Government directives on the implementation of official language at all levels of its functioning. Several meetings were held to discuss the implementation of official language. The institute also participated in the Town Official Language Implementation Committee meetings (TOLIC). The following programs were implemented in the report year:

- Staff members who successfully completed Hindi examination were awarded incentives under the scheme.
- Competitions were held during 'Hindi Week' and the winners were rewarded.
- Library of Hindi books was kept open for use by staff and students throughout the year.
- Use of Hindi Leap office software in the institute computers was encouraged.

Official Language Correspondence

The provision of Clause 3(3) of Official Language Act 1963 was observed to the best possible extent. Annual reports, audited statement of accounts, performance budget, forms, general orders were all rendered in Hindi along with English. Citizen's Charter was also made trilingual i.e. in Hindi, English and Kannada. Action was initiated to make the home page of AIISH website bilingual. Information to parents / patients was made available in both Hindi and English. Word-a-day in Hindi was a favorite of the staff members.

Highlights of the year

- **Initiated action to make home page of AIISH website bilingual**
- **Initiated work on the trilingual glossary of common technical terms in the field of communication disorders.**

Hindi week was celebrated in September 2004. Various activities including Hindi competitions were conducted throughout the week. Winners were awarded attractive cash prizes.

The work of glossary of common technical terms in the field of communication disorders (trilingual - English, Hindi and Kannada) was initiated.

Hindi Workshop / Conference

Smt. H.P. Umasaraswathi, Office Superintendent (pro-tempore) attended the following workshop/ conferences:

- Joint Regional OL Conference held at Bangalore from 15 - 16 February, 2005.
- National Workshop on Translation (as resource person) held at Baroda from 3 - 5 March, 2005. She presented two papers on "Administrative translation - with special reference to general notes/memoranda", and "Translation in speech and hearing sciences".
- Delivered two guest lectures at DFRL and one at CFTRI, Mysore

APPENDIX 1

CLINICAL SERVICES

Summary of clients evaluated in the year 2003-04

Total number of :

New clients evaluated at AIISH	13344
Clients for follow-up evaluation	18621
Infants screened	13458
School children screened	9240
Clients screened at camps	3948
Industrial workers screened	95

Total	58706

No. of clients reported at AIISH Age-wise Statistics

Age Group	Male	Female	Total

0-5	1188	829	2017
5-10	879	598	1477
10-20	1334	786	2120
20-40	2189	1487	3676
40-60	1380	991	2371
60-80	1021	468	1489
80 +	135	59	194

Total	8126	5218	13344

State/region-wise distribution of clients registered

State	Male	Female	Total
Karnataka	7709	4743	12452
Kerala	308	115	423
Tamil Nadu	158	86	244
Andhra Pradesh	96	44	140
Other States	49	33	82
Overseas: (1) Singapore	1	-	1
(2) Malaysia	1	-	1
(3) Bangladesh	1	-	1
Total	8323	5021	13344

Details of extension services

Service	No.
Clients prescribed hearing Aids	2867
Free hearing aids issued in camps	2801
Earmolds prepared	2822
Hearing aid repair and service	940
Equipment repair and service	276
Certificates of disability issued	2351

Clinical Services by Consultant Specialists

Particulars	Total
Neurologist	177
Paediatrician	259
Phonosurgeon	28
Plastic surgeon	76
Prosthodontist	144
Physiotherapy	109
Occupational therapist	108
Total	901

Summary of Therapeutic Sessions conducted at AIISH

Particulars	Sessions	Clients
Individual Therapy sessions for speech- language	25076	1480
Group therapy sessions conducted	711	258
Listening training therapy sessions	9406	142
Physiotherapy Sessions	353	168
Occupational therapy sessions	264	142
Sessions for AAC	1232	22
Total	37042	2212

Particulars of group therapy sessions 2004-05

Particulars		Total
Hearing impaired	No. of groups	49
	Cases	187
	Sessions	554
Learning Disability	No. of groups	15
	Cases	56
	Sessions	100
Stuttering	No. of groups	3
	Cases	15
	Sessions	57

Statistics of POCD Project

Screening	Screened	Referred
Infant	6607	174
School	4228	338
Camps	563	376
Pre-school	106	7
Total	11504	895

Statistics of POD project

Activity	No. Screened /Tested	No. referred to AIISH	Certificates issued
Infant screening	6851	339	-
School screening	5012	1910	-
Camps	1034	168	79
Total	12897	2417	79

Preschool Statistics

Month	No. of groups	No. of children
April 2004	12	49
May 2004	12	61
June 2004	13	72
July 2004	13	72
Aug. 2004	13	81
Sept. 2004	13	86
Oct. 2004	14	86
Nov. 2004	14	86
Dec. 2004	14	85
Jan. 2005	14	85
Feb. 2005	14	83
Mar. 2005	14	90

Details of the orientation programs

Target group	No. of participants
Teachers and parents	778
Paediatricians	30
Anganawadi workers	23
NCC cadets	89
Advocates	5
B.Ed Students	30
M.Ed Students	54
Heads of schools	393
Nursing Trainees	197
Anganwadi Workers	25
Pratham Workers	28
Industrial Workers	65
Engineerring students	5

MBBS Interns	11
Rotary club members	5
<hr/>	
Total	1738
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DEPARTMENTAL DETAILS

Department of Audiology

Hearing Evaluation

Total no. of patients evaluated/screened for hearing problems	20164
No. of patients seen for hearing evaluation at AIISH	7267
No. of patients seen for hearing evaluation/screening at extension centers	11863
No. of patients seen for hearing evaluation at camps	1034
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Details of evaluation carried out at AIISH

No. of ears with	:	12002
Normal hearing	:	2988
Conductive hearing loss	:	2395
Mixed hearing loss	:	2763
Sensorineural hearing loss	:	3856
No. of certificates issued	:	749
a) financial aid	:	373
b) admission to normal school	:	70
c) physically handicapped	:	143
d) tax exemption	:	23
e) others	:	91

f) education scholarship	:	49
No. of audiogram copies issued	:	2425

Hearing Aid Trial

No. of patients seen for hearing aid trial	:	6034
No. of cases for whom hearing aid evaluation done	:	4261
No. of patients counseled	:	1898

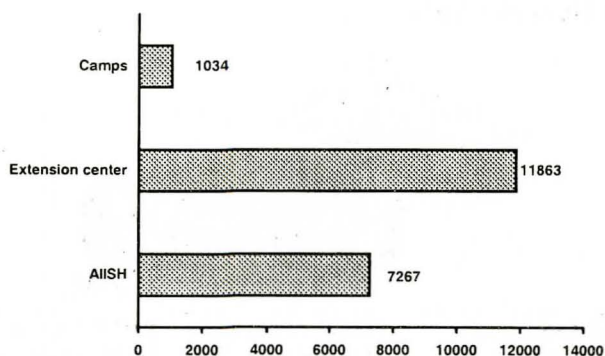


Fig. 1: No. of patients seen at AIISH, extension centers and camps

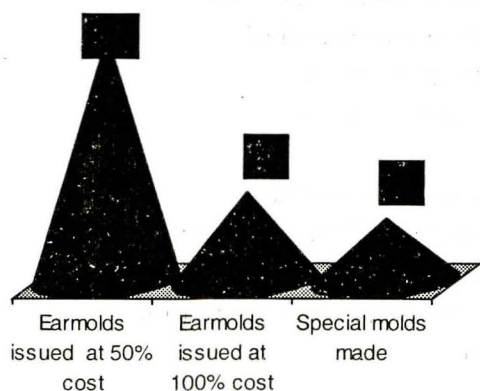


Fig. 2: Details of earmolds issued

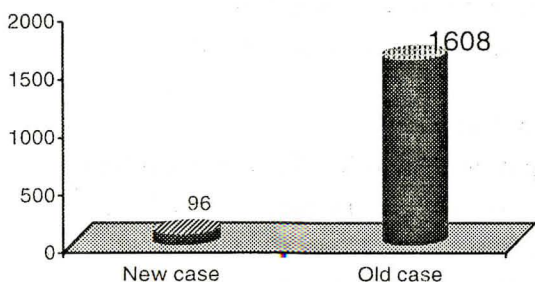


Fig. 3: Cases seen at listening unit center

Details of Hearing Aids

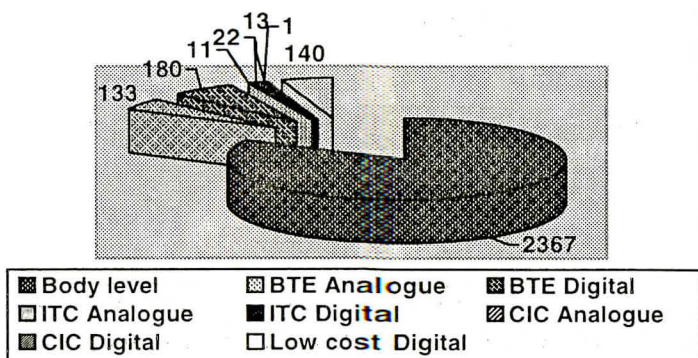


Fig.4: Details of hearing aids

No. of hearing aids prescribed : 2867

No. of cases recommended : 1078

a) Auditory training : 811

b) Speech reading : 267

No. of hearing aids issued on exchange : 251

Evaluation for cochlear implantees : 11

Mapping for cochlear implantees : 8

Candidacy for cochlear implantation : 8

Aided VRA : 90

Earmolds

No. of patients seen	:	1591
No. of impression taken	:	2752
No. of earmolds completed	:	2398

No. of earmolds issued

Total	:	2410
a) 50% payment	:	1713
b) 100% payment	:	697
No. of special earmolds made	:	436

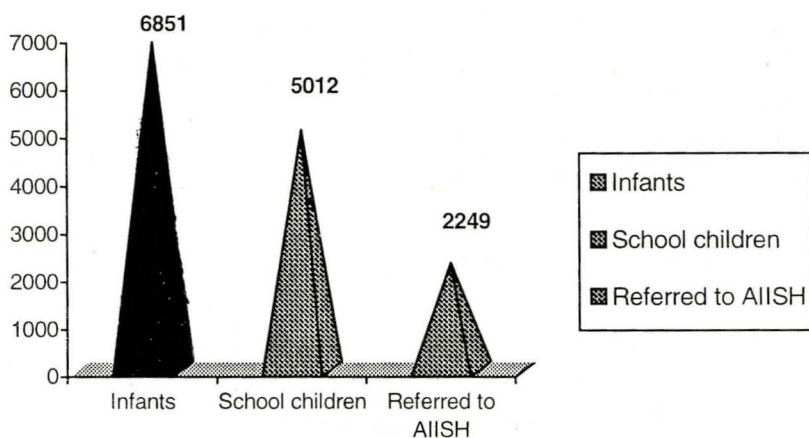


Fig.5: Camp statistics - Hearing

Age-wise statistics of patients

Age group	Hearing Evaluation		Hearing Aid Trial		HAT counselling		Earmolds	
	M	F	M	F	M	F	M	F
00-01	69	49	60	46	18	16	13	11
02-05	611	391	460	346	162	145	257	195
06-10	395	268	269	194	77	69	142	118
11-15	302	163	140	93	53	31	91	58

16-20	361	211	162	76	61	33	64	29
21-25	309	169	87	43	20	18	39	13
26-30	279	137	68	40	32	14	19	11
31-35	209	137	45	41	30	26	13	8
36-40	227	142	60	45	35	15	20	14
41-45	206	122	85	39	37	19	23	12
46-50	234	173	109	86	49	50	36	19
51-55	226	130	103	75	56	37	18	17
56-60	254	128	177	88	84	51	49	28
61-65	264	123	225	82	116	37	56	15
66-70	246	116	238	84	149	46	56	27
71-75	213	72	206	61	106	28	47	12
76-80	156	41	144	40	73	19	28	6
81-85	79	12	78	16	31	7	23	3
86-90	21	8	28	7	20	4	0	0
91+	12	2	7	2	3	1	1	0

Total	4673	2594	2751	1504	1212	666	995	596
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7267

4255

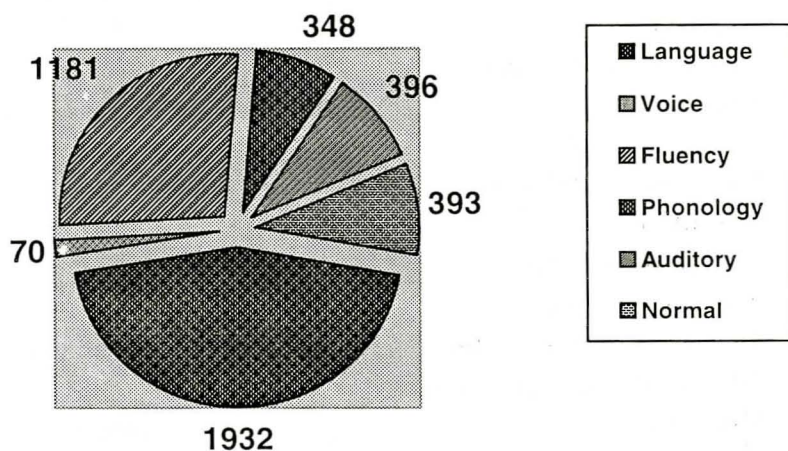
1878

1591

Grand Total 14991

Department of Speech-Language Sciences

Disorder-wise statistics Speech-Language OPD



Department of Speech Pathology

Name of the disorder	No. of clients
Language disorders	376
Phonology	65
Fluency	101
Voice	41

Department of Otorhinolaryngology

Particulars	At AIISH	At KR Hospital
New cases	8630	5410
Follow up cases	10092	4331
Microscopic examination	5870	-
Endoscopic examination	369	-

Disorder-wise statistics at Psychodiagnostic clinic

Particulars	No. of cases
Aphasia	14
Articulation disorder	104
Autistic disorder	22
Cerebral palsy	34
Functional dysphonia	27
Hearing loss	520
Mental retardation	1307
Normal non-fluency	30
Specific learning disabilities	56
Speech & language disorders	522
Stuttering	308
Voice disorder	29
Others	35
Total	3008

APPENDIX 2

AUTHORITIES OF THE INSTITUTE

EXECUTIVE COUNCIL

1. **Smt. Sushma Swaraj** Chairperson
Hon'ble Minister for Health & Family Welfare
Government of India
Nirman Bhavan
New Delhi-110 011

Succeeded by

Dr. A Ramadoss Chairman
Hon'ble Minister for Health & Family Welfare
Government of India
Nirman Bhavan
New Delhi-110 011

2. **Sri Kagodu Thimmappa** Vice-Chairman
Hon'ble Minister for Health & Family Welfare
Government of Karnataka
Vidhana Soudha
Bangalore-560 001

Succeeded by

Sri. N Cheluvarayaswamy Vice-Chairman
Hon'ble Minister for Health & Family Welfare
Government of Karnataka
Vidhana Soudha
Bangalore-560 001

3. **Sri. J.V.R. Prasad Rao** Member
Secretary (H)
Government of India
Department of Health
Ministry of Health & Family Welfare
Nirman Bhavan
New Delhi-110 011

Succeeded by

Sri. Prasanna K Hota Member
Secretary (H)
Government of India
Department of Health
Ministry of Health & Family Welfare
Nirman Bhavan
New Delhi-110 011

4. **Dr. S. P. Agrawal** Member
Director General of Health Services
Government of India
Nirman Bhavan
New Delhi-110 011

5. **Smt. P. Jyothi Rao** Member
Additional Secretary (H)
Government of India
Department of Health
Department of Health & Family Welfare
Nirman Bhavan
New Delhi-110 011

Succeeded by

Smt. S Jalaja

Member

Additional Secretary (H)

Government of India

Department of Health

Department of Health & Family Welfare

Nirman Bhavan

New Delhi-110 011

6. Sri. Arun Sharma

Member

Joint Secretary (FA)

Government of India

Department of Health

Department of Health & Family Welfare

Nirman Bhavan

New Delhi-110 011

Succeeded by

Sri. Sanjiv Misra

Member

Additional Secretary (FA)

Government of India

Department of Health

Department of Health & Family Welfare

Nirman Bhavan

New Delhi-110 011

7. Sri B.P. Sharma

Member

Joint Secretary (H)

Government of India

Department of Health

Ministry of Health & Family Welfare

Nirman Bhavan

New Delhi-110 011

Succeeded by

Smt. Bhavani Thyagarajan

Member

Joint Secretary (H)

Government of India

Department of Health

Ministry of Health & Family Welfare

Nirman Bhavan, New Delhi-110 011

8. **Smt. Rajwant Sandhu**

Member

Joint Secretary (HW)

Government of India

Ministry of Social Justice and Empowerment

Shastri Bhavan, New Delhi-110 001

Succeeded by

Smt. Jayathi Chandra

Member

Joint Secretary (DD)

Government of India

Ministry of Social Justice and Empowerment

Shastri Bhavan, New Delhi-110 001

9. **Dr. J. Shashidhara Prasad**

Member

Vice-Chancellor

University of Mysore

Mysore-570 005

10. **Dr. S. Subramanyam**

Member

Principal Secretary (H)

Government of Karnataka

Department of Health and Family Welfare

Multi-storeyed Building

Bangalore-560001

Succeeded by

Sri. D Thangaraju

Member

Principal Secretary (H)

Government of Karnataka

Department of Health and Family Welfare

Multi-storeyed Building

Bangalore-560 001

11. Dr. R Seethalakshmi

Member

Director of Medical Education

Government of Karnataka

Ananda Rao Circle

Bangalore-560 009

Succeeded by

Dr. Ramananda Shetty

Member

Director of Medical Education

Government of Karnataka

Ananda Rao Circle

Bangalore-560 009

12. Dr. Santosh Kacker

Member

Former Director, AIIMS

No.127, Navjivan Vihar

New Delhi-110 017.

13. Dr. H R Nagendra

Member

Director

Swami Vivekananda Yoga Research Foundation

19, Eknath Bhavan

Gavipuram Circle, K G Nagar

Bangalore-560 019

14. **Dr. S R Hegde** Member
Professor & Director
Vijay Nagar Institute of Medical Sciences
Cantonment
Bellary-583 104.

**Succeeded by following officers at Sl.No.12, 13, 14
with effect from 28.2.2005**

- Sri R Guru** Member
Chairman, N.R. Group
No.1553, M.G.Road
Mysore-570 004

- Dr. K K Ramalingam** Member
KKR ENT Hospital & Research Institute
827, Poonamalle High Road
Kilpauk
Chennai-600 010

- Dr. N Karunanidhi** Member
11/3, McNeichols Road
4th Lane, Chetput
Chennai-600 031

15. **A Faculty member nominated by
Director, AIISH** Member

16. **Dr. M. Jayaram** Member-Secretary
Director
All India Institute of Speech and Hearing
Mysore-570 006

FINANCE COMMITTEE

1. **Smt. Jyothi Rao** Chairperson
Additional Secretary (H)
Government of India
Department of Health
Department of Health & Family Welfare
Nirman Bhavan, New Delhi-110 011

Succeeded by

Smt. S Jalaja Chairperson
Additional Secretary (H)
Government of India
Department of Health
Department of Health & Family Welfare
Nirman Bhavan, New Delhi-110 011

2. **Sri. Arun Sharma** Member
Joint Secretary (FA)
Government of India
Ministry of Health and Family Welfare
Department of Health
Nirman Bhavan, New Delhi-110 011

Succeeded by

Sri. Sanjiv Misra Member
Additional Secretary (FA)
Government of India
Ministry of Health and Family Welfare
Department of Health
Nirman Bhavan, New Delhi-110 011

3. **The Director General of Health Services** Member
(or his nominee)

Ministry of Health & Family Welfare
Nirman Bhavan, New Delhi-110 011

4. **Sri B.P. Sharma** Member

Joint Secretary (H)
Government of India
Ministry of Health and Family Welfare
Department of Health
Nirman Bhavan, New Delhi-110 011

Succeeded by

- Smt. Bhavani Thyagarajan** Member

Joint Secretary (H)
Government of India
Ministry of Health and Family Welfare
Department of Health
Nirman Bhavan, New Delhi-110 011

5. **Dr. S. Subramanyam** Member

Principal Secretary (H)
Government of Karnataka
Department of Health and Family Welfare
Multi-storeyed Building, Bangalore-560001

Succeeded by

- Sri. D Thangaraju** Member

Principal Secretary (H)
Government of Karnataka
Department of Health and Family Welfare
Multi-storeyed Building
Bangalore-560 001

6. **Dr. M. Jayaram** Member-Secretary
Director
All India Institute of Speech and Hearing
Mysore-570006

ACADEMIC COMMITTEE

1. **Prof. B. S. Ramakrishna** Chairman
Former Vice-Chancellor
68, 2nd Main, 2nd Cross
Gangenahalli
BANGALORE-560 068
2. **Dr. S. Bais** Member
Deputy Director General (M)
Directorate General of Health Services
Government of India
Nirman Bhavan
NEW DELHI-110 011
3. **Dr. Ramananda Shetty** Member
Director of Medical Education
Government of Karnataka
BANGALORE-560009
4. **Nominee of Vice-Chancellor** Member
University of Mysore
MYSORE-570 005
5. **Prof. Ramakrishne Gowda** Member
Department of Physics
University of Mysore
Mansagangothri, MYSORE-570 006

- | | |
|--|----------------------|
| 6. Three heads of departments of AIISH,
Mysore | Members |
| 9. Dr. T. S. Sidhu
HOD-ENT
Ram Manohar Lohia Hospital
New Delhi. | Member |
| 10. Dr. P. V. Rajendrakumar
Institute of Speech and Hearing
Government General Hospital
Chennai 600 010 | Member |
| 11. Dr. Shashidhar Prasad
Vice Chancellor
University of Mysore
Mysore-560 005 | Member |
| 12. Prof. L. M. Patnaik
Convenor
Microprocessor Application Lab
Indian Institute of Science
Bangalore-560 012 | Member |
| 13. Prof. M. Jayaram
Director
All India Institute of Speech and Hearing
Mysore-570 006 | Member-
Secretary |

APPENDIX 3

PERSONNEL

Appointments - Regular

C. S. Vijayalakshmi	Clinical Supervisor
N. M. Mamatha	Research Assistant
Sanjiv Kumar	Research Assistant
H. N. Shilpashri	Clinical Assistant
C. Chandrashekar	Lower Division Clerk

Appointments - Contract/Adhoc basis

M. S. Vasantha Lakshmi	Lecturer in Biostatistics
V. Manjula	Lecturer in Clinical Psychology
I. P. Gowramma	Lecturer in Special Education
S. S. Purushothama	Jr. Technical Officer
R. Gopi Sankar	Speech Pathologist Gr. I
C. Latha	Special Educator
Lakshmi	Special Educator
E. G. Asha Kiran	Special Educator
Rajani Soni	Special Educator
N. Rasiabi	Special Educator
V. N. Shivaprasad	System Engineer
Ramesh Kumar Mishra	Lecturer in Linguistics
N. Sreedevi	Lecturer in Speech Pathology
Reddy Siva Prasad	Lecturer in Audiology
S. A. Asha	Special Educator
G. Unnikrishnan	Library and Information Assistant
B. N. Shobha	Special Educator
Vijaya Vani	Hindi Translator
K. P. Narasimha Prasad	Lower Division Clerk
Celine Martina	Receptionist

M.G. Manjuswamy
Tina Sahela
R. Srinivas

Graphic Designer
Copy Writer
Production Manager

Project Appointments

Prevention of Deafness and Hearing Impairment

Amla Agnes James
Divya Menon

Senior Audiologist
Senior Audiologist

Prevention of Communication Disorders

Aruna Kamath
Jayashree Shanbal
Shivani Tiwari
P. S. Kalai Selvi

Junior Speech Pathologist
Senior Speech Pathologist
Senior Speech Pathologist
Senior Speech Pathologist

WHO Project: Assessment of etiological factors for conductive hearing loss

Vijaya Kumar Narne
Dr. T. M. Mahadevappa

Audiologist
ENT Surgeon

Projects under AIISH Research Fund

S. Shiva Prakash
C. S. Vijayalakshmi
M. V. Girijamma
H. M. Anantha Padmanabha
Anjana B. Ram
M. Nanjundaswamy
M. A. Nalini
B. Y. Satish Kumar
S. A. Asha

Project Assistant
Research Officer
Research Assistant
Research Assistant
Research Officer
Research Officer
Teacher of Hearing Impaired
Research Officer
Research Assistant

Apprentices

K. Karthik	Graduate Apprentice (E & C)
B. K. Prashanth Kumar	Diploma Apprentice (E & C)
M. N. Pradeepa (Electrical and Electronics)	Diploma Apprentice
Kiran Kumar	Diploma Apprentice (E & C)
Savitha B. Naik (Commercial Practice)	Diploma Apprentice

Promotion

K. Purushothama	Accounts Officer
M. Mahadeva	Sr. Library & Information Assistant
H. P. Umasaraswathi	Office Superintendent

Resignation

Staff on regular establishment

Pranav Kumar Praveen	Clinical Assistant
Sanjiv Kumar	Research Assistant

Staff on contract basis

Vimi Mathew Madathil	POD Project staff
Elizabeth Antony	Clinical Assistant (Adhoc)
Jayashree Shanbal	Sr. Speech Pathologist
M. Sandeep	Lecturer in Audiology
Rakhi Lakshmi	Lecturer in Audiology
C. K. Suresh Babu	Security Officer
Vijaya Kumar Narne	Senior Audiologist
Shivani Tiwari	Sr. Speech Pathologist
C.S. Vijayalakshmi	Research Officer

H. N. Shilpashri
Amala Agnes James

Research Officer
Sr. Speech Pathologist

Superannuation

S. L. Vijayanarasimha
Madaiah

Accounts Officer
Mali

Grant of higher pay scale under ACP scheme

M. Mahadeva

Sr. Library & Information
Assistant

Papanna

Mali

M. S. ASWATHANARAYANA & CO.

Chartered Accountants

M. S. ASWATHANARAYANA, B.Com., FCA, DISA (ICA)

Chartered Accountant

AUDITORS' REPORT

The Members

of ALL INDIA INSTITUTE OF SPEECH AND HEARING

We have audited the attached Balance Sheet of 'ALL INDIA INSTITUTE OF SPEECH AND HEARING' as at 31st March 2005 and the Income and Expenditure Account for the year ended that date. These financial statements are the responsibility of the Society's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements' presentation. We believe that our audit provides a reasonable basis of our opinion.

Further to the above, we report that;

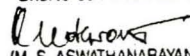
- 1] We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
- 2] The Balance Sheet and Income and Expenditure Account dealt with by this Report, are in agreement with the books of accounts maintained by the Institute.
- 3] In our opinion and to the best of our information and according to the explanations given to us, the said accounts subject to the observations set out in the Annexure, Annexed hereto, which is an integral part of this report, give a true and fair view;

(i) In the case of the Balance Sheet, of the State of affairs of the Society as at 31st March 2005, and;

(ii) In the case of the Income and Expenditure Account of the, Excess of Income over Expenditure of the Society for the year ended 31st March 2005.

Mysore,
5th August 2005.

FOR M. S. ASWATHANARAYANA & CO.
Chartered Accountants


(M. S. ASWATHANARAYANA)
Proprietor

864/2, 1st Floor, N.S. Road, Near Siddappa Square, MYSORE - 570 024
Phone : 2565180 E-mail : aswathams@yahoo.com

ANNEXURE

[referred to in para (3) of our Audit Report dated
5th August 2005, for the year ending 31st March 2005]

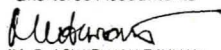
-***-

1] The Institute though maintains a Fixed Assets Register,
the same needs to be updated Periodically.

2] The Institute has not provided depreciation in respect
of its fixed assets for the year covered in the report, based
on certain clarifications by the C & AG of India.

Mysore,
5th August 2005.

FOR M. S. ASWATHANARAYANA & CO.
Chartered Accountants


(M. S. ASWATHANARAYANA)
Proprietor

AUDITED STATEMENTS OF ACCOUNTS FOR THE YEAR ENDED 31ST MARCH 2005

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ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Balance Sheet as at 31st March 2005

Liabilities	Amount							
	Current year				Previous year			
	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
Capital Fund:								
Balance as on 1.4.2004			34,57,81,454.58					
Add Amount transferred from Income & Expenditure account,			601,23,536.66					
			40,59,04,991.24					
Less Assets written off/charged off as revenue expenditure during the year (Schedule-F)	5,60,775.45							
" Amount transferred to Endowment Fund	65,799.00							
" Amount transferred to AIISH Research Fund	23,69,266.90		(-)29,95,841.35					
Closing Balance			40,29,09,149.89		34,57,81,454.58			
Funds (Schedule-A)			3,64,87,679.69		3,04,30,571.99			
Deposits and advances of outside parties (Schedule-B)			44,86,676.50		34,88,358.50			
Remittances account (Schedule-C)			18,459.68		89,704.42			
Other liabilities (Schedule-D)			28,98,118.39		35,86,254.00			
Sponsored programmes and other schemes (Schedule-E)			31,24,549.40		4,07,974.50			
ADIP Scheme (GOI, Ministry of Social Justice & Empowerment) (Schedule-J)			27,34,334.24		5,84,307.88			
Total			45,26,58,967.79		38,43,68,625.87			

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Balance Sheet as at 31st March 2005

Assets	Rs.	Ps.	Rs.	Ps.	Amount			
					Current year		Previous year	
					Rs.	Ps.	Rs.	Ps.
Fixed and other assets (Schedule-F)					30,07,51,748.40		25,89,18,181.85	
Advances to staff (Schedule-G)					9,57,903.00		12,96,785.00	
Sundry debtors for deposits and advances (Schedule-H)					9,35,51,855.88		7,15,68,040.27	
Investments (Schedule-I)					4,07,71,734.00		2,63,20,630.00	
Income accrued due:							1,75,27,665.00	
(i) Interest accrued on PF a/c with MGPO					62,323.00			
GOI. Min. of Social Justice & Empowerment (Schedule-J)					27,34,334.24		5,84,307.88	
Cash and Bank Balances								
(a) Cash on hand				26,370.41				
(b) Cash at Bank - SB A/c No.176 with BOB				1,38,03,213.86			81,53,015.87	
				1,38,29,584.27				
Less Amount due to ADIP scheme				515.00	1,38,29,069.27			
Total					45,26,58,967.79		38,43,68,625.87	

Sd/-

Sd/-

Sd/-

Sd/-

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Income and Expenditure account for the year ended 31st March 2005

Expenditure	Non-Plan		Plan		Current year		Previous year	
	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
Salaries and allowances (Annexure-2)	1,88,18,391.00		15,25,900.00		2,03,44,291.00		1,87,33,744.00	
Add: Outstanding 2004-05	17,44,967.39		1,35,403.00		18,80,370.39			
Merit scholarship/stipend : Actuals	11,03,948.00		7,29,188.00		18,33,136.00		11,62,012.00	
Add outstanding 2004-05	98,761.00		82,315.00		1,81,076.00		81,772.00	
Travelling allowance: Actuals	7,41,017.00		68,539.00		8,09,556.00		5,55,545.00	
Add out-standing 2004-2005		0.00		0.00		0.00	20,163.00	
Leave salary and pension contribution of deputationist	3,62,986.00				3,62,986.00		46,852.00	
Institute's contribution to funds:								
(a) Contributory Provident Fund	10,936.00				10,936.00		7,116.00	
(b) AIISH Pension Fund	12,21,300.00				12,21,300.00		7,78,143.00	
(c) Contributory Pension Fund - Tier-I	17,658.00				17,658.00			
(d) Internal Revenue trd. to AIISH Pension Fund	70,69,229.78				70,69,229.78		40,59,000.00	
Interest on Funds: (a) Contributory Provident Fund	19,828.00				19,828.00		19,572.00	
(b) General Provident Fund	9,43,980.00				9,43,980.00		8,28,110.00	
Professional Services: Actuals paid during the year	1,98,550.00		4,59,150.00		6,57,700.00		1,91,500.00	
Add outstanding 2004-2005	15,850.00			0.00	15,850.00		12,850.00	
Other charges (Annexure-3): Actuals paid during the year	62,67,861.61		57,22,668.09		1,19,90,529.70		84,64,035.11	
Add outstanding 2004-2005	3,86,254.00		2,47,152.00		6,33,406.00		4,44,223.00	
AIISH Research Activities : Actuals			5,09,476.25		5,09,476.25		4,49,695.25	
Add outstanding			52,750.00		52,750.00		14,000.00	
Project on Prevention of Deafness and Hearing-impairment:								
Actuals			4,29,036.00		4,29,036.00		5,36,077.77	
Add outstanding 2004-2005			37,946.00		37,946.00		32,579.00	
Other payments (Annexure-1)		0.00				0.00	1,10,940.00	
Apprenticeship	36,518.00				36,518.00		18,972.00	
Total	3,90,58,035.78		99,99,523.34		4,90,57,559.12		3,65,66,901.13	

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Income and Expenditure account for the year ended 31st March 2005

Income	Non-Plan		Plan		Current year		Previous year	
	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
Grant-in-aid from GOI, Min. of H & FW - received during the year	2,82,00,000.00		8,75,00,000.00		11,57,00,000.00			
Less grants sanctioned for the year 2003-04 but received during the Current year .		0.00	1,75,00,000.00		1,75,00,000.00			
Total	2,82,00,000.00		7,00,00,000.00		9,82,00,000.00		9,10,00,000.00	
Less: Amount transferred to Capital Fund		0.00	6,01,23,536.66		6,01,23,536.66		6,45,79	111.72
Amount of revenue expenditure out of grant	2,82,00,000.00		98,76,463.34		3,80,76,463.34		2,64,20,888.28	
Grants from other organizations		0.00	1,23,060.00		1,23,060.00			
Other income : Internal revenues and other receipts (Annexure-1)	1,07,95,712.78		0.00		1,07,95,712.78		97,06,385.35	
							4,11,962.50	
Income accrued due (Interest on SB A/c. 839050-MGPO)	62,323.00		0.00		62,323.00		27.665.00	
Total	3,90,58,035.78		99,99,523.34		4,90,57,559.12		3,65,66,901.13	

Sd/-

Sd/-

Sd/-

Sd/-

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Receipts and Payments account for the year ended 31st March 2005

Receipts	Non-Plan		Plan		Amount			
	Rs.	Ps.	Rs.	Ps.	Current year		Previous year	
					Rs.	Ps.	Rs.	Ps.
Opening Balance : Cash on hand				6,165.20				
Cash at Bank BOB SB A/c. No.176				81,46,850.67			78,28,022.94	
Total				81,53,015.87				
Add: Amount reflected under ADIP Scheme							34,059.50	
					81,53,015.87		78,62,082.44	
(1) Grant-in-aid from Ministry of Health & Family Welfare - Non-Plan			2,82,00,000.00					
- Plan			8,75,00,000.00		11,57,00,000.00		7,35,00,000.00	
(2) Grant from other institutions						1,23,060.00		
(3) Other receipts towards								
(a) Internal revenues (Annexure-1)					1,07,95,712.78		1,00,07,407.85	
(b) Interest accrued of the previous year received during the year					27,665.00		0.00	
(c) Remittances (Annexure-4)					55,20,748.86		1,49,796.12	
(d) Sponsored programmes and other schemes (Schedule-E)					7,09,578.00		0.00	
(e) Recoveries (Schedule-F)					29,361.00		51,011.00	
(f) Funds (Schedule-A)					74,55,536.92		4,54,233.00	
(g) Deposits and advances of outside parties (Schedule-B)					41,63,557.00		0.00	
(h) Advances to staff (Schedule-G)					5,79,620.00		21,678.00	
(i) Sundry Debtors for Deposits and Advances (Schedule-H)					14,81,60,314.31		0.00	
(j) Investments (Schedule-I)					60,00,000.00		0.00	
Total					30,74,18,169.74		9,20,46,208.41	
Sd/-	Sd/-		Sd/-		Sd/-		Sd/-	

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Receipts and Payments account for the year ended 31st March 2005

Payments	Non-Plan		Plan		Amount			
					Current year		Previous year	
	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
RECURRING EXPENDITURE:								
1. Salaries and allowances (Annexure-2)	1,88,18,391.00		15,25,900.00		2,03,44,291.00		1,71,28,818.00	
2. Merit scholarship/stipend	11,03,948.00		7,29,188.00		18,33,136.00		11,62,012.00	
3. Travelling allowance	7,41,017.00		68,539.00		8,09,556.00		5,55,545.00	
4. Leave salary and pension contribution to the deputationist	3,62,986.00						46,852.00	
5. Institute's contribution to funds								
a) Contributory Provident Fund	10,936.00						7,116.00	
b) AIISH Pension Fund	12,21,300.00	12,32,236.00					7,78,143.00	
5. Interest on Funds:								
a) Contributory Provident Fund	19,828.00						19,572.00	
b) General Provident Fund	9,43,980.00	9,63,808.00			25,59,030.00		8,28,110.00	
7. Professional services	1,98,550.00		4,59,150.00		6,57,700.00		1,91,500.00	
3. Apprenticeship	36,518.00		0.00		36,518.00		18,972.00	
0. Other charges (Annexure-3)	62,67,861.61		57,22,668.09		1,19,90,529.70		84,64,035.11	
0. AIISH Research activities		0.00	5,09,476.25		5,09,476.25		4,49,695.25	
Project on Prevention of Deafness & Hearing-Impairment		0.00	4,29,036.00		4,29,036.00		5,36,077.77	
NON-RECURRING EXPENDITURE								
Other liabilities (Schedule-D)	18,33,229.00		17,53,025.00		35,86,254.00		55,34,000.00	
Fixed and other assets/gift equipment (Schedule-F)		0.00	4,23,26,983.00		4,23,26,983.00		2,84,07,114.00	
Funds (Schedule-A)		0.00		0.00				

Payments	Non-Plan		Plan		Amount			
	Rs.	Ps.	Rs.	Ps.	Current year		Previous year	
					Rs.	Ps.	Rs.	Ps.
4. Deposits and advances of outside parties (Schedule-B)		0.00		0.00	32,31,038.00		5,17,112.00	
5. Remittances and other accounts		0.00		0.00	55,91,993.60		0.00	
6. Sponsored programs and other scheme (Sch-E)		0.00		0.00	3,62,270.00		10,78,944.86	
7. Advances to staff (Schedule-G)		0.00		0.00	2,40,738.00		0.00	
8. Deposits/Advance to contractors/suppliers (Sch.-H)		0.00		0.00	17,01,44,129.92		1,16,91,768.55	
9. Investment (Schedule-I)		0.00		0.00	2,04,51,104.00		64,77,805.00	
Total					29,35,89,100.47		8,38,93,192.54	
Closing balance: Cash on hand		26,370.41						
Cash at Bank: BOB SB A/c.176		1,38,03,213.86						
		<u>1,38,29,584.27</u>						
Less Amount due to ADIP Scheme		515.00						
		<u>1,38,29,069.27</u>						
					1,38,29,069.27		81,53,015.87	
Grand Total					30,74,18,169.74		9,20,46,208.41	

Sd/-
Accounts Officer

Sd/-
Admn. Officer

Sd/-
Director

Sd/-
Chartered Accountants

Details of Internal Revenues 2004-05

Annexure-1

Sl. No.	Head of Account	Credit/Receipts	
		Rs.	Ps.
1.	Admission fee (Hostels)	2,790.00	
2.	Admission fee (Institute)	11,98,670.00	
3.	Application fees	3,56,550.00	
4.	Certificate fee (Cases)	6,86,572.00	
5.	Certificate fee (Students)	10,87,348.87	
6.	Depreciation charges	7,440.00	
7.	Dharmashala charges	24,475.00	
8.	Disposal/auction proceeds	31,375.00	
9.	Donation	59,125.00	
10.	Email/Internet fee	2,45,850.00	
11.	Rent (Guest House)	1,53,995.00	
12.	Rent (Hostel)	58,032.00	
13.	Infrastructure assistance - ADIP Scheme	2,94,490.00	
14.	Infrastructure assistance - Rehabilitation Council of India	78,140.00	
15.	Infrastructure assistance - Camp	7,800.00	
16.	Interest on Advances	56,892.00	
17.	Interest on GPF	1,09,593.26	
18.	Interest on HBA	50,383.00	
19.	Interest on Investments	40,80,623.00	

Sl. No.	Head of Account	Credit/Receipts	
		Rs.	Ps.
21.	Laboratory facility	2,53,000.00	
22.	Library membership/card fee	62,200.00	
23.	Licence fee	1,03,083.00	
24.	Miscellaneous income	2,42,757.65	
25.	Orientation/short-term course fee	6,550.00	
26.	Registration fee	1,09,220.00	
27.	Sale of Journals/syllabus/prospectus	28,100.00	
28.	Sanitary charges	4,650.00	
29.	Technical consultancy services	66,666.00	
30.	Tender form fee	1,29,500.00	
31.	Therapy charges	2,01,749.00	
32.	Tuition fee	2,10,500.00	
33.	Vehicle hire charges	4,980.00	
34.	Examination fee (Diploma)	6,400.00	
35.	Establishment charges	2,23,200.00	
36.	Consumables - Earmould	1,33,676.00	
37.	Consumables - spares	56,008.00	
38.	Water/cleaning charges (quarters)	22,939.00	
39.	Water charges (contractors)	2,93,455.00	
Total		1,07,95,712.78	
Sd/-	Sd/-	Sd/-	Sd/-
Accounts Officer	Admn. Officer	Director	Cl.

Details of Salaries and Allowances - 2004-2005

Annexure-2

Sl.No.	Particulars	Non-Plan	Plan	Total
1.	Salaries - Officers	90,50,183.00	16,35,899.00	1,06,86,082.00
2.	Salaries - Establishment	1,10,26,964.00	0.00	1,10,26,964.00
3.	Overtime allowance	8,453.00	0.00	8,453.00
4.	Children education allowance	9,800.00	0.00	9,800.00
4.	Medical charges	1,72,404.00	0.00	1,72,404.00
5.	Leave travel concession	45,514.00	0.00	45,514.00
Total		2,03,13,318.00	16,35,899.00	2,19,49,217.00
(-) Outstanding liabilities 2003-2004		14,94,927.00	1,09,999.00	16,04,926.00
		1,88,18,391.00	15,25,900.00	2,03,44,291.00

Sd/-
Accounts OfficerSd/-
Admn. OfficerSd/-
DirectorSd/-
Chartered Accountants

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Details of Other Charges - 2004 - 05

Annexure-3

Sl.No.	Particulars	Non-Plan		Plan		Total	
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
1.	Advertisement	3,67,605.00		24,222.00		3,91,827.00	
2.	Affiliation fees	37,000.00		4,15,900.00		4,52,900.00	
3.	Anniversary expenses	1,17,830.00		0.00		1,17,830.00	
4.	Audit fees	6,480.00		0.00		6,480.00	
5.	Consumables - General	3,73,206.11		12,86,388.00		16,59,594.11	
6.	Consumables - Earmoulds	66,600.00		0.00		66,600.00	
7.	Consumables - Spares	1,06,754.00		0.00		1,06,754.00	
8.	Contingencies	2,08,886.00		88,323.00		2,97,209.00	
9.	Development of campus	0.00		20,91,092.00		20,91,092.00	
10.	Electricity charges	18,62,439.00		1,02,178.00		19,64,617.00	
11.	Entertainment	40,256.50		0.00		40,256.50	
12.	Grant-in-aid to AIISH Gymkhana	50,000.00		0.00		50,000.00	
13.	Legal charges	41,441.00		0.00		41,441.00	
14.	Liveries and linen	6,038.00		0.00		6,038.00	
15.	Maintenance of building - civil	7,07,545.00		1,20,747.00		8,28,292.00	
16.	Maintenance of furniture	13,815.00		0.00		13,815.00	
17.	Maintenance of TE/OE	2,67,106.00		8,72,516.00		11,39,622.00	

Sl.No.	Particulars	Non-Plan		Plan		Total	
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
19.	Maintenance of road	0.00		2,00,000.00		2,00,000.00	
20.	Public Education & Publicity Information	0.00		125.00		125.00	
21.	Postage and telegram	61,578.00		0.00		61,578.00	
22.	Printing and stationery	4,36,603.25		10,740.00		4,47,343.25	
23.	Rent/rates/taxes	2,317.00		0.00		2,317.00	
24.	Seminars/symposia/workshops	0.00		1,09,298.09		1,09,298.09	
25.	Spares and accessories	0.00		5,97,473.00		5,97,473.00	
26.	Subscription to Journals/periodicals	6,435.00		0.00		6,435.00	
27.	Subsidy to Departmental Canteen	2,63,746.00		0.00		2,63,746.00	
28.	Telephone charges/fax charges	1,18,621.85		0.00		1,18,621.85	
29.	VIP/Dignitaries account	11,015.00		0.00		11,015.00	
30.	Wages	10,40,593.00		0.00		10,40,593.00	
31.	Xerox charges	64,912.00		0.00		64,912.00	
Total		65,15,750.61		59,19,002.09		1,24,34,752.70	
(-) Out-standing 2003-04(includes wages - Plan)		2,47,889.00		1,96,334.00		4,44,223.00	
Total		62,67,861.61		57,22,668.09		1,19,90,529.70	

Sd/-

Sd/-

Sd/-

Sd/-

Details of Remittances and Other Accounts 2004-05

Annexure-4

Sl. No.	Details	Payments		Receipts	
		Rs.	Ps.	Rs.	Ps.
1.	AIISH Staff Club/Gymkhana	85,025.00		85,195.00	
2.	Awards	3,145.00		5,810.26	
3.	CTD/RD/CD recoveries	1,42,560.00		1,42,560.00	
4.	Court attachment	7,650.00		7,650.00	
5.	Examination fee	1,98,245.00		1,98,245.00	
6.	Examination remuneration		0.00	5,060.00	
7.	CGEIS	5,140.00		5,140.00	
8.	GPF/CPF deputationist	1,15,000.00		1,15,000.00	
9.	GSLIS	83,097.00		83,097.00	
10.	Income tax	13,21,015.00		13,21,015.00	
11.	LIC premia	11,86,184.60		11,86,184.60	
12.	Postal Life Insurance		308.00		308.00
13.	Housing loan recoveries (others)	2,35,158.00		2,35,158.00	
14.	Prime Ministers National Relief Fund	79,102.00		79,102.00	
15.	Professional tax	2,23,590.00		2,23,590.00	
16.	ISHA	93,140.00		17,000.00	
17.	NSS	5,000.00		5,000.00	
18.	Sales tax	11,17,713.00		11,17,713.00	

Sl. No.	Details	Payments		Receipts	
		Rs.	Ps.	Rs.	Ps.
19.	Suspense account	3,12,274.00		3,09,274.00	
20.	University of Mysore	3,29,328.00		3,29,328.00	
21.	Undisbursed salaries/DA etc.	4,500.00		4,500.00	
22.	AGOECEB	35,819.00		35,819.00	
23.	Departmental canteen dues	9,000.00		9,000.00	
Total		55,91,993.60		55,20,748.86	

Sd/-
Accounts Officer

Sd/-
Admn. Officer

Sd/-
Director

Sd/-
Chartered Accountants

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Funds 2004-05

Schedule - A

Particulars	Con.Provident Fund		Gen.Provident Fund		Pension Fund		New Pension Fund T1		Total	
	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
Opening balance as on 1.4.2004	2,81,217.00		1,18,80,319.00		1,82,69,035.99		0.00		3,04,30,571.99	
Receipts during the year:										
Subscriptions	21,168.00		43,34,310.00		0.00		17,490.00		43,72,968.00	
Institute's contribution*	10,936.00		0.00		12,21,300.00		17,658.00		12,49,894.00	
Interest on subscription	8,020.00		9,43,980.00		0.00		0.00		9,52,000.00	
Interest on contribution	11,808.00		0.00		0.00		0.00		11,808.00	
Interest on investments	0.00		0.00		8,86,524.92		0.00		8,86,524.92	
Add: Amount transferred from internal revenues	0.00		0.00		70,69,229.78		0.00		70,69,229.78	
Total Receipts	51,932.00		52,78,290.00		91,77,054.70		35,148.00		1,45,42,424.70	
Payments during the year:										
Final payments/withdrawals/advances	1,34,500.00		42,44,209.00		0.00		0.00		43,78,709.00	
Payment of gratuity	0.00		0.00		6,97,152.00		0.00		6,97,152.00	
Pension/Family pension	0.00		0.00		24,40,501.00		0.00		24,40,501.00	
Commuted value of pension	0.00		0.00		9,68,955.00		0.00		9,68,955.00	
Total Payments	1,34,500.00		42,44,209.00		41,06,608.00		0.00		84,85,317.00	
Closing balance as on 31.3.2005	1,98,649.00		1,29,14,400.00		2,33,39,482.69		35,148.00		3,64,87,679.69	

provision

Sd/-

Sd/-

Sd/-

Sd/-

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Deposits and Advances of Outside Parties - 2004-2005

Schedule - B

Sl.No.	Particulars	Opening Balance as on 1.4.2004		Receipts		Payments		Closing Balance as on 31.3.2005	
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
1	Caution money deposit	4,96,000.00		4,20,000.00		1,68,000.00		7,48,000.00	
2	Contractor's security deposit	20,07,300.50		28,49,945.00		16,66,387.00		31,90,858.50	
3	Earnest money deposit	9,85,058.00		8,93,612.00		13,96,651.00		4,82,019.00	
4	Endowment fund		0.00	*65,799.00			0.00	65,799.00	
Total		34,88,358.50		42,29,356.00		32,31,038.00		44,86,676.50	

* Transfer from Capital Fund

Sd/-
Accounts Officer

Sd/-
Admn. Officer

Sd/-
Director

Sd/-
Chartered Accountants

Remittances Due 2004-2005

Schedule - C

Sl.No.	Particulars	Closing Balance	
		Rs.	Ps.
1.	AIISH Gymkhana	170.00	
2.	Awards	2,911.68	
3.	Examination remuneration	378.00	
4.	Suspense account	15,000.00	
Total		18,459.68	

Sd/-
Accounts Officer

Sd/-
Admn. Officer

Sd/-
Director

Sd/-
Chartered Accountants

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Other Liabilities - 2004-05

Schedule-D

Sl.No.	Particulars	Opening balance		(-) Debit		(+) Credit		Closing Balance	
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
Non-Plan									
1.	Salaries and allowances	14,94,927.00		14,94,927.00		17,44,967.39		17,44,967.39	
2.	Stipend/scholarship	57,400.00		57,400.00		98,761.00		98,761.00	
3.	Professional services	12,850.00		12,850.00		15,850.00		15,850.00	
4.	Other charges	2,47,889.00		2,47,889.00		3,86,254.00		3,86,254.00	
5.	Travelling allowance	20,163.00		20,163.00		0.00		0.00	
Total Non-Plan		18,33,229.00		18,33,229.00		22,45,832.39		22,45,832.39	
Plan									
1.	Technical equipment	17,790.00		17,790.00		0.00		0.00	
2.	Furniture	3,90,530.00		3,90,530.00		0.00		0.00	
3.	Other charges (includes electricity)	1,96,334.00		1,96,334.00		2,47,152.00		2,47,152.00	
4.	Major works and minor works	1,27,839.00		1,27,839.00		0.00		0.00	
5.	Project on Prevention of Deafness	32,579.00		32,579.00		37,946.00		37,946.00	
6.	AIISH Research activities	14,000.00		14,000.00		52,750.00		52,750.00	
7.	Library and documentation	43,134.00		43,134.00		96,720.00		96,720.00	
8.	Motor vehicles	7,96,448.00		7,96,448.00		0.00		0.00	
9.	Salaries and allowances	1,09,999.00		1,09,999.00		1,35,403.00		1,35,403.00	
10.	Stipend	24,372.00		24,372.00		82,315.00		82,315.00	
Total Plan		17,53,025.00		17,53,025.00		6,52,286.00		6,52,286.00	

Sd/-

Sd/-

Sd/-

Sd/-

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Sponsored Programmes and Other Schemes - 2004-05

Schedule-E

Sl.No.	Particulars	Opening Balance		Receipts		Payments		Closing Balance	
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
Sponsored Programs									
1.	Project - Speech Perception	4,53,382.25			0.00	1,69,994.00		2,83,388.25	
2.	Scheme under Helpage India	22,850.00			0.00		0.00	22,850.00	
3.	Project on Development of FM hearing aid	8,749.85		2,00,000.00		14,475.00		1,94,274.85	
4.	WHO Project - Assessment of Etiological factors		0.00	2,18,900.00		98,685.00		1,20,215.00	
5.	Workshop on Electroacoustic evaluation		0.00	25,880.00		25,880.00			0.00
6.	Master's Trainer Programme - SSA		0.00	38,700.00			0.00	38,700.00	
7.	RCI - Conduction of Impact Study	3,257.00		5,000.00		7,750.00		507.00	
8.	Project on TOSHI	-23,388.00			0.00		0.00	-23,388.00	
9.	Grants - RCI PHC Doctors programs/CRE Programs	-1,82,939.90		1,93,052.00		45,219.00		-35,106.90	
Other Programs									
10.	AIISH Research Fund*		0.00	23,69,266.90			0.00	23,69,266.90	
11.	Patient Welfare Fund	1,24,036.30		8,046.00			0.00	1,32,082.30	
12.	Camp Organizer's a/c	2,027.00		20,000.00		267.00		21,760.00	
Total		4,07,974.50		30,78,844.90		3,62,270.00		31,24,549.40	

* Transfer from Capital Fund

Sd/-

Sd/-

Sd/-

Sd/-

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Fixed and Other Assets - 2004-2005

Schedule-F

Sl.No.	Particulars	Balance as on 1.4.2004		Additional purchase						Recoveries Transfers Written off		Balance as on 31.3.2005	
				Non-plan actuals		Plan actuals		Outstanding					
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
1.	Building and other works												
	a) Completed buildings	2,65,91,285.29		0.00	12,34,48,507.65		0.00		0.00			15,00,39,792.94	
	b) Works-in-progress	13,02,84,739.15		0.00	3,22,30,632.00		0.00	#12,34,48,507.65				3,87,35,677.50	
								**3,31,186.00					
2.	Furniture and fixtures	1,05,35,017.91		0.00	4,01,799.00		0.00		*19,378.28			1,09,17,438.63	
3.	Garden equipment	62,419.25		0.00	1,550.00		0.00		*851.50			63,117.75	
4.	Library and documentation	1,29,24,816.44		0.00	17,90,159.00		96,720.00		^29,111.00			1,47,80,196.44	
									*2,388.00				
5.	Vehicles												
	a) Car	4,00,619.00		0.00	0.00		0.00		0.00			4,00,619.00	
	b) Omni bus	7,96,448.00		0.00	43,525.00		0.00		0.00			8,39,973.00	
	c) Mobile unit	27,60,632.90		0.00	0.00		0.00		0.00			27,60,632.90	
6	Office equipment	50,82,115.89		0.00	21,290.00		0.00		*28,965.01			50,74,440.88	
7	Technical equipment	5,56,85,259.92		0.00	78,08,675.00		0.00		*1,74,275.19			6,33,19,409.73	
									^250.00				
8.	Gifted equipment	1,33,03,511.09		0.00	0.00		0.00		0.00			1,33,03,511.09	
9.	Sundry assets												
	a) Hostel utensils	1,40,163.66		0.00	0.00		0.00		*1,699.17			1,38,464.49	
	b) Teaching aids	3,51,153.35		0.00	29,353.00		0.00		*2,032.30			3,78,474.05	
Total		25,89,18,181.85		0.00	16,57,75,490.65		96,720.00	12,40,38,644.10				30,07,51,748.40	

Break up: *Written off

^ Recoveries# Transfers to completed buildings

** Charged off as revenue expenditure

Sd/-

Sd/-

Sd/-

Sd/-

Statement showing details of works in progress as on 31.3.2005

Major works in progress (PLAN)

Schedule-F1

Sl.No.	Particulars	Opening balance as on 1.4.2004	Expenditure 2004-2005						Closing Balance as on 31.3.2005
			Additions		Outstanding Liability		Credits		
			Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	
1.	Sports complex (AIISH Gymkhana)	1,25,32,389.00		0.00		0.00	1,25,32,389.00		0.00
2.	Modification of Audiology block	66,40,642.50	-17,152.00			0.00		0.00	66,23,490.50
3.	Library block	1,85,54,663.00	17,152.00			0.00	1,85,71,815.00		0.00
4.	Construction of compound wall - Dharmashala	12,31,109.00		0.00		0.00	12,31,109.00		0.00
5.	Construction of multipurpose vehicle garage	17,26,825.00		0.00		0.00	17,26,825.00		0.00
6.	Construction of stone masonry compound wall (main campus)	32,34,046.00		0.00		0.00	32,34,046.00		0.00
7.	Construction of Speech- Language Therapy Clinic	3,91,72,685.00		0.00		0.00	3,91,72,685.00		0.00
8.	Electrical work	31,68,133.00		0.00		0.00	31,68,133.00		0.00
9.	Computer Networking	8,51,783.00		0.00		0.00	8,51,783.00		0.00
10.	Providing Yelhanka tiles for terrace roof	11,85,075.00		0.00		0.00	11,85,075.00		0.00
11.	Providing and fixing sun control film for doors and windows	2,51,265.00		0.00		0.00	2,51,265.00		0.00
12.	Providing lift	7,15,446.00		0.00		0.00	7,15,446.00		0.00
13.	Developmental works	19,30,063.00		0.00		0.00	19,30,063.00		0.00

Sl.No.	Particulars	Opening balance as on 1.4.2004	Expenditure 2004-2005						Closing Balance as on 31.3.2005	
			Additions		Outstanding Liability		Credits			
			Rs.	Ps.	Rs.	Ps.	Rs.	Ps.		
15.	Modification of canteen	7,75,808.00		0.00		0.00		7,75,808.00		0.00
16.	Construction of Preschool	2,40,90,343.00		0.00		0.00		2,40,90,343.00		0.00
17.	Hearing aid lab	2,33,835.00		0.00		0.00		2,33,835.00		0.00
18.	UG cable and street lights	14,13,580.00		0.00		0.00		14,13,580.00		0.00
19.	UG cable and street lights to Dharmashala	4,06,394.00		0.00		0.00		4,06,394.00		0.00
20.	Construction of compound wall and garage to D type quarters	7,02,362.00		0.00		0.00		7,02,362.00		0.00
21.	Construction of Car garage	4,30,447.00		0.00		0.00		4,30,447.00		0.00
22.	Alteration to E type staff quarters	10,15,731.00		0.00		0.00		10,15,731.00		0.00
23.	Alteration to A & B staff quarters	8,88,577.00		0.00		0.00		8,88,577.00		0.00
24.	Alteration to D1-D7 staff quarters	54,850.00		0.00		0.00		54,850.00		0.00
25.	Parking at Speech block	2,29,593.00		0.00		0.00		2,29,593.00		0.00
26.	Chain link fencing near C type quarters	1,56,244.00		0.00		0.00		1,56,244.00		0.00
27.	Asphalting road from Canteen to Library	2,61,770.00		0.00		0.00		2,61,770.00		0.00
28.	Construction of Administrative Block	7,611.00	45,16,273.00			0.00		0.00		45,23,884.00
29.	Construction of Academic Block	7,715.00	76,13,196.00			0.00				76,20,911.00
30.	Approach road from Library & Preschool to Speech Pathology	2,40,000.00		0.00		0.00		2,40,000.00		0.00
31.	Shifting of HT yard	8,09,073.00		0.00		0.00		8,09,073.00		0.00
32.	Construction of ladies hostel	18,426.00	1,52,02,635.00			0.00		0.00		1,52,21,061.00
33.	UG cable to ladies hostel and gents hostel	72,287.00		0.00		0.00		72,287.00		0.00
34.	Formation of road to new ladies hostel	50,252.00		0.00		0.00		50,252.00		0.00
35.	Compound wall D1 quarters	0.00	19,543.00			0.00		0.00		19,543.00
36.	Providing and fabricating vehicle garage									

Sl.No.	Particulars	Opening balance as on 1.4.2004	Expenditure 2004-2005						Closing Balance as on 31.3.2005
			Additions		Outstanding Liability		Credits		
			Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	
37.	Interior decoration of room No.6 & 7 of guest house	0.00	2,10,119.00		0.00		0.00		2,10,119.00
38.	Developmental work - ladies hostel sit-out railings to existing ladies hostel	0.00	2,77,745.00		0.00		0.00		2,77,745.00
39.	Developmental work for connecting corridor and staircase headroom	0.00	4,83,009.00		0.00		0.00		4,83,009.00
40.	Developmental work - retaining wall and compound grill to the existing ladies hostel	0.00	3,89,302.00		0.00		0.00		3,89,302.00
41.	Developmental work for peripheral drain all round the existing ladies hostel	0.00	6,73,012.00		0.00		0.00		6,73,012.00
42.	Developmental work for providing PVC water tank	0.00	1,41,750.00		0.00		0.00		1,41,750.00
43.	Developmental work to new ladies hostel building - External water supply and sanitation	0.00	9,35,606.00		0.00		0.00		9,35,606.00
44.	Developmental work - Admn. Block - RCC external drain	0.00	7,20,938.00		0.00		0.00		7,20,938.00
45.	Developmental work - Academic Block - RCC external drain	0.00	7,80,318.00		0.00		0.00		7,80,318.00
Total		12,39,63,083.50	3,20,78,435.00		0.00	11,73,05,841.00			3,87,35,677.50

Sd/-
Accounts Officer

Sd/-
Admn. Officer

Sd/-

Sd/-

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Statement showing details of works in progress as on 31.3.2005

Minor works in progress (PLAN)

Schedule-F2

Sl.No.	Particulars	Opening balance as on 1.4.2004	Expenditure 2004-2005				Closing Balance as on 31.3.2005
			Debits Rs.	Ps.	Credits Rs.	Ps.	
1.	Electrification work of shifting power line/ conversion of overhead - New Library block	5,00,850.00		0.00	5,00,850.00		0.00
2.	Repair/replacement of worn-out sanitary work at Ladies hostel	2,49,063.00		0.00	2,49,063.00		0.00
3.	Fixing Curbstone at AIISH	3,05,498.00		0.00	3,05,498.00		0.00
4.	Repair/replacement of worn-out sanitary work at Gents hostel	2,02,392.00		0.00	2,02,392.00		0.00
5.	Improvement to AIISH Departmental Canteen	26,712.00		0.00	26,712.00		0.00
6.	Storm water drain at new library building	1,38,767.00		0.00	1,38,767.00		0.00
7.	Development of road to library building	4,988.00		0.00	4,988.00		0.00
8.	Construction of pump house to new library building	1,05,669.00		0.00	1,05,669.00		0.00
9.	Providing and fixing 2" pipeline near bore well of library building and providing and laying stoneware pipe and construction of manhole chambers	96,788.00		0.00	96,788.00		0.00
10.	Underground drainage line	12,25,054.00		0.00	12,25,054.00		0.00
11.	Two-wheeler parking near library	55,062.00		0.00	55,062.00		0.00

Sl.No.	Particulars	Opening balance as on 1.4.2004	Expenditure 2004-2005				Closing Balance as on 31.3.2005
			Debits		Credits		
			Rs.	Ps.	Rs.	Ps.	
13.	Renovation of bathrooms	2,05,168.00		0.00	2,05,168.00		0.00
14.	Shifting of HT	1,24,448.00		0.00	1,24,448.00		0.00
15.	Formation of road to sports complex	2,37,776.00		0.00	2,37,776.00		0.00
16.	Interior decoration of guest house	1,23,184.00		0.00	1,23,184.00		0.00
17.	Construction of sump tank at new library building	15,930.00		0.00	15,930.00		0.00
18.	Work of providing and laying concrete over drain at children therapy park entrance	7,975.00		0.00	7,975.00		0.00
19.	Re-routing of underground cable from guest house to power house	3,21,624.65		0.00	3,21,624.65		0.00
20.	Construction of security booth near guest house and ladies hostel	4,01,011.00		0.00	4,01,011.00		0.00
21.	Widening of road from main gate leading to new therapy clinic	2,24,605.00		0.00	2,24,605.00		0.00
22.	Bore well near therapy clinic	41,400.00		0.00	41,400.00		0.00
23.	Bore well near men's hostel	42,100.00		0.00	42,100.00		0.00
24.	Sign boards near Library and Guest House	20,700.00		0.00	20,700.00		0.00
25.	Aluminium partition to Electronics Department (F.37)	11,055.00		0.00	11,055.00		0.00
26.	Construction of sump tank in men's hostel (F.39)	65,881.00		0.00	65,881.00		0.00
27.	Conversion of double room to single room	46,304.00		0.00	46,304.00		0.00
28.	Renovation of bathroom near Medical records						

Sl.No.	Particulars	Opening balance as on 1.4.2004	Expenditure 2004-2005				Closing Balance as on 31.3.2005
			Debits		Credits		
			Rs.	Ps.	Rs.	Ps.	
29.	Construction of small room for installing switch (network) behind D-5 quarters	19,457.00		0.00	19,457.00		0.00
30.	UG cable and street lights (F.3)	1,71,451.00		0.00	1,71,451.00		0.00
31.	New wiring of Earmould lab (F.45)	1,41,117.00		0.00	1,41,117.00		0.00
32.	Providing and fixing powder coated aluminium sliding windows (F.47)	1,31,896.00		0.00	1,31,896.00		0.00
33.	Renovation of Speech Language Sciences	32,906.00		0.00	32,906.00		0.00
34.	Water drain to new Library block	3,60,071.00		0.00	3,60,071.00		0.00
35.	Construction of compound wall in front of C type quarters	1,11,978.00		0.00	1,11,978.00		0.00
36.	Providing drains-Phase I and II near Director's residence & LH	78,416.00		0.00	78,416.00		0.00
37.	Construction of Macadam road in front of Preschool building	30,459.00		0.00	30,459.00		0.00
38.	UG cable for AC at Panchavati campus	0.00	23,119.00		23,119.00		0.00
39.	Installation of 7.5" ductable AC	0.00	1,29,078.00		1,29,078.00		0.00
Total		63,21,655.65	1,52,197.00		64,73,852.65		0.00

Sd/-
Accounts Officer

Sd/-
Admn. Officer

Sd/-
Director

Sd/-
Chartered Accountants

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Advances to staff - 2004-2005

Schedule-G

Sl.No.	Particulars	Balance as on 1.4.2004		Additions/ Debits		Recoveries/ Credits		Balance as on 31.3.2005	
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
A. Interest bearing Advances									
1.	Cycle advance	25,150.00		3,000.00		19,000.00		9,150.00	
2.	House building advance	4,01,314.00		0.00		1,00,089.00		3,01,225.00	
3.	Motor car advance	3,81,820.00		0.00		1,34,145.00		2,47,675.00	
4.	Scooter advance	4,35,441.00		84,428.00		1,53,426.00		3,66,443.00	
B. Interest free Advances									
1.	Advance of pay		0.00	10,000.00		10,000.00			0.00
2.	Festival advance	39,000.00		97,800.00		1,03,950.00		32,850.00	
3.	LTC advance	13,500.00		20,670.00		34,170.00			0.00
4.	TA advance		560.00	24,840.00		24,840.00			560.00
Total		12,96,785.00		2,40,738.00		5,79,620.00		9,57,903.00	

Sd/-

Accounts Officer

Sd/-

Admn. Officer

Sd/-

Director

Sd/-

Chartered Accountants

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Sundry Debtors for Deposits and Advances : 2004-05

Schedule-H

Sl.No.	Particulars	Opening balance as on 1.4.2004	Debits / Payments Rs. Ps.		Credits / Receipts Rs. Ps.		Closing Balance as on 31.3.2005
A. Permanent							
1	Karnataka Power Transmission Corporation Ltd., (3MMD)	4,97,340.00		0.00		0.00	4,97,340.00
2	Telephone - Department of Telecommunication/ Bharati Mobile Ltd.	19,400.00		0.00		0.00	19,400.00
3	M/s. Little Gas Co. Kitchen equipment system.	23,500.00		0.00		0.00	23,500.00
4	KPTCL/MESCOM	91,583.00		0.00		0.00	91,583.00
B. Temporary							
1	Deputy Controller of Accounts, Dept. of Supplies	3,693.11		0.00		0.00	3,693.11
2	PF A/c. with MGPO, Mysore SB A/c.839050*	28,72,309.00	56,64,756.00		71,81,226.00		13,55,839.00
3	Pension fund A/c with Bank of Baroda SB A/c No.177	16,03,177.99	1,14,23,186.92		1,11,86,608.00		18,39,756.91
4	Contributory Pension Fund with BOB SB A/c No.1619	0.00	17,490.00			0.00	17,490.00
5	Advances - Suppliers	14,99,447.31	2,92,61,686.00		2,69,63,916.31		37,97,217.00
6	Short-term fixed deposit with Bank	6,47,34,799.00	12,37,75,511.00		10,27,96,464.00		8,57,13,846.00
7	Loan with AIISH Departmental Canteen	1,82,288.00	1,500.00		32,100.00		1,51,688.00
8	Internal Revenue A/c with Bank of Baroda SB A/c No.196	38,987.36		0.00		0.00	38,987.36
9	SB A/c No. C & I 12 with State Bank of Mysore	1,515.50		0.00		0.00	1,515.50
Total		7,15,68,040.27	17,01,44,129.92	14,81,60,314.31	9,35,51,855.88		

Sd/-

Sd/-

Sd/-

Sd/-

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

Investment 2004-05

Schedule-I

Sl.No.	Particulars	Balance as on 1.4.2004		Additions / Payments		Realizations / Receipts		Balance as on 31.3.2005
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	
A. Contributory/General Provident Fund:-								
1.	Government Securities	1,40,000.00			0.00		0.00	1,40,000.00
2.	Units with Units Trust of India	16,00,000.00		25,00,000.00			0.00	41,00,000.00
3.	Fixed deposits with Bank of Baroda	75,49,227.00			0.00		0.00	75,49,227.00
B. Pension Fund:-								
1.	Government Securities	2,50,000.00			0.00		0.00	2,50,000.00
2.	Units with Units Trust of India	60,04,200.00		75,00,000.00		60,00,000.00		75,04,200.00
3.	Deposit with Bank of Baroda	63,52,658.00		3,23,638.00			0.00	66,76,296.00
C. Others: (CMD/Donations/PWF):-								
1.	Fixed deposit with State Bank of Mysore (PWF)	1,31,012.00		6,583.00			0.00	1,37,595.00
2.	Fixed deposit with Bank of Baroda (CMD)	4,09,025.00			0.00		0.00	4,09,025.00
3.	Fixed deposit with Bank of Baroda (Donations)	19,08,733.00			0.00		0.00	19,08,733.00
4.	Fixed deposit with Bank of Baroda (CSD/Other schemes)	19,10,775.00		1,01,20,084.00			0.00	1,20,30,859.00

Sl.No.	Particulars	Balance as on 1.4.2004		Additions / Payments		Realizations / Receipts		Balance as on 31.3.2005
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	
D. Endowment funds:-								
1.	Units with Units Trust of India:							
	Mother of the year award: Dr. Prathibha Karanth	60,000.00			0.00		0.00	60,000.00
2.	Fixed deposit with Bank of Baroda:							
	Abhilash award: Smt. Indira Kumari	5,000.00			799.00		0.00	5,799.00
Total		2,63,20,630.00		2,04,51,104.00		60,00,000.00		4,07,71,734.00

Sd/-
Accounts Officer

Sd/-
Admn. Officer

Sd/-
Director

Sd/-
Chartered Accountants

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

ADIP Scheme (Government of India, Ministry of Social Justice and Empowerment

Balance Sheet as at 31st March 2005

Schedule-J

Liabilities		Current year		Previous year		Assets		Current year		Previous year	
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.		
Capital Fund:-						Closing stock of hearing aids		15,54,828.00		2,42,121.00	
Opening balance	5,84,307.88					Closing stock of solar batteries		88,200.00		0.00	
Add: Amount transferred from											
Income &											
Expenditure a/c	21,50,026.36	27,34,334.24		5,84,307.88		Cash at Bank		10,90,791.24		3,42,186.88	
						Amount due from AIISH		515.00		0.00	
Total		27,34,334.24		5,84,307.88		Total		27,34,334.24		5,84,307.88	

Sd/-
Accounts Officer

Sd/-
Admn. Officer

Sd/-
Director

Sd/-
Chartered Accountants

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

ADIP Scheme (Government of India, Ministry of Social Justice and Empowerment)

Income and Expenditure account for the year ended 31st March 2005

Schedule J-1

Expenditure	Amount				Income	Amount			
	Current year		Previous year			Current year		Previous year	
	Rs.	Ps.	Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
Expenditure on purchase of hearing aids and solar batteries					Grants from Ministry of Social Justice & Empowerment	50,00,000.00		18,00,000.00	
Opening stock	2,42,121.00								
Add: Purchases					Interest on S.B. A/c.		35,974.36		19,452.00
2004-2005	39,92,805.00				50% cost recovered on sale of hearing aids		625.00		0.00
	42,34,926.00								
Less: Closing stock									
a) Hearing aids	15,54,828.00								
b) Solar batteries	88,200.00	16,43,028.00	25,91,898.00	28,19,991.00					
Infrastructure assistance/ fitment charges			2,94,490.00	1,00,135.00					
Contingencies			185.00	932.00					
Excess of income over expenditure transferred to Balance Sheet			21,50,026.36	0.00	Excess of expenditure over income transferred to Balance Sheet			11,01,606.00	
Total		50,36,599.36	29,21,058.00			50,36,599.36		29,21,058.00	
Sd/-		Sd/-			Sd/-			Sd/-	

ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE 570 006

ADIP Scheme (Government of India, Ministry of Social Justice and Empowerment)

Receipts and Payments account for the year ended 31st March 2005


Schedule J-2

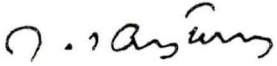
Expenditure	Amount				Income	Amount			
	Current year		Previous year			Current year		Previous year	
	Rs.	Ps.	Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
Opening Balance									
Cash at Bank	3,42,186.88		15,90,295.38		Purchase of hearing aids and solar batteries	39,92,805.00		29,32,014.00	
Less: Amount due to AIISH		0.00	34,059.50		Infra structural assistance & fitment charges	2,94,490.00		1,00,135.00	
	3,42,186.88		15,56,235.88		Contingencies	185.00		1,352.00	
Grants from Ministry of Social Justice and Empowerment, GOI	50,00,000.00		18,00,000.00		Closing Balance:				
Sale of hearing aids	625.00		0.00		Cash at Bank	10,90,791.24		3,42,186.88	
Interest S.B A/c	35,974.36		19,452.00		Amount due from AIISH	515.00		0.00	
Total	53,78,786.24		33,75,687.88			53,78,786.24		33,75,687.88	

ALL INDIA INSTITUTE OF SPEECH & HEARING: MYSORE-6

Replies to observations of the Accounts of the Institute for the year ended 31.3.2005

Sl. No.	Observations of the Chartered Accountants	Replies
1.	The institute though maintains a Fixed Assets Register, the same needs to be updated periodically	Noted for compliance.
2.	The institute has not provided depreciation in respect of its fixed assets for the year covered in the report based on certain clarifications by the C&AG of India.	Fixed assets are procured out of the grants sanctioned by the ministry to the institute. As and when the assets are written off on account of becoming obsolete or unserviceable, the assets are purchased again, if required out of the replacement grants provided by the ministry. As such, no depreciation has been provided as per the advice of by C&AG of India.


M/s M.S. Aswathanarayana & Co.,
Chartered Accountants


Director