**III. CLINICAL AND OTHER SERVICES**

The institute has been providing services to individuals with communication disorders through a multidisciplinary approach with consultancy services for identification, assessment and management of communication disorders. The services are presented under the following headings:

1. Clinical Services
2. Specialized Clinical Services
3. Preschool Training and Special Education
4. Technological Services
5. **CLINICAL SERVICES**

The clinical services are provided for diagnosis and rehabilitation of communication disorders with a team of professionals under various specialized units. Various departments housed in the institute have specific roles in these services. These include a whole range of activities towards prevention, identification, evaluation and assessment, management, counseling and guidance, extension services, follow up services and community based services for individuals with speech, language and hearing disorders. Table 12 provides an overview of major clinical services offered by various departments of the institute.

Table 12: Overview of Clinical Services offered at AIISH.

|  |  |  |
| --- | --- | --- |
| Sl. No | Name of the Department | Services |
| 1. | Audiology | Diagnostic | Therapeutic | Extension |
| * Audiological evaluation
* Hearing Aid prescription
* Ear mold Preparation
* Pre and Post evaluation and intervention for Cochlear Implantees
* Counseling and Guidance Services
 | * Audiological rehabilitation of persons with Hearing Impairment
 | * Screening programs
* Camps
* Sensitization & orientation programs (for prevention, identification and management of persons with hearing impairment)
 |
| 2. | Speech-Language Pathology  | * Evaluation of individuals with speech, language and communication disorders
* Assessment of normal aspects of speech, language and communication
* Counseling and guidance services
 | * Therapeutic and Rehabilitation Services for individuals with speech, language and communication disorders
 | * Screening Programs
* Camps
* Sensitization and Orientation programs (for prevention, identification and management of speech-language and communication disorders)
 |
| 3. | Speech-Language Sciences | * Evaluation of individuals with speech, language and communication disorders
* Assessment of normal aspects of speech, language and communication
* counseling and guidance services
 | * Therapeutic and Rehabilitation Services for individuals with speech, language and communication disorders
 | * Screening programs
* Camps
* Sensitization and Orientation programs (for prevention, identification and management of speech-language and communication disorders)
 |
| 4. | Prevention of Deafness and Communication Disorders | * Infant screening, school screening, screening of industrial workers, conducting screening camps for individuals with communication disorders, referrals for further assessment and managements, counseling. Orientation/sensitization programs for anganwadi workers, teachers and other professionals are also conducted.
 | * Therapeutic and Rehabilitation Services for individuals with speech, language and communication disorders
 | * Screening programs
* Camps
* Sensitization &

orientation programs (for prevention, identification and management of persons with hearing impairment) |
| 5. | CREDM | Offers Diagnostic and Therapeutic services through video conferencing system to the 11 DHLS centers and two outreach centers of POCD department - Hullahalli & Akkihebbalu. Apart from this lot of audio visual materials are developed to help the parents of the children with communication disorders. |
| 6. | Clinical Services | All the departments participate in the clinical services. Medical consultants - Pediatrician, Neurologist, Phono surgeon, Prosthodentist, Prosthetic surgeon visit the institute and provide services to the needy individuals. Apart from this, routine physiotherapy and occupational therapy services are also provided in the clinical services.  |
| 7. | Clinical Psychology | * Routine Diagnostic activities/Psychological testing and detailed assessments.
* Evaluation of cognitive behavioral neuro-psychological and psycho-educational problems in persons with hearing, speech and language disorders.
 | * Behavioral Therapy
* Behavioral Modification
* Home based training
* LD remedial programs
* Parent counseling
 | * Participation in extension services to assist in prevention, identification and rehabilitation of communication disorders
 |
| 8. | Otorhinolaryngology | * Evaluation of otological, rhinological and laryngeal disorders
 | * Minor and major surgical interventions at the collaborative district hospital (i.e. K.R. Hospital, Mysore)
 | * Participation in extension services to assist identification and rehabilitation of communication disorders.
 |
| 9. | Material Development | Developing resource materials in textual, electronic and audio-video web based media for general public, persons with communication disorders and their parents/caregivers, professionals in the field of speech and hearing and other allied professionals. The input for the development of these materials is need based and is undertaken as per the requests made from the other departments of the institute. |
| 10. | Special Education | To provide clinical and educational services to children with different kinds of communication disorders and to prepare skills necessary for later schooling. |

**DEPARTMENT OF AUDIOLOGY**

The Department of Audiology is mainly involved in the prevention, identification and management of individuals with hearing impairment. A series of evaluation procedures are adopted to make an appropriate diagnosis. It provides diagnostic services which guides and suggests the next line of treatment. The department is also involved in the management of individuals with hearing impairment by fitting suitable hearing devices such as hearing aids and assistive listening devices for those who cannot be managed by medical or surgical line of treatment.

* + **Hearing Evaluation**

A battery of tests is administered with the state-of-the-art equipments to clients who visit the institute from all over the country and abroad. Table 13 gives the details of clients seen for hearing evaluation. Figures 2 and 3 provide details of status of hearing in clients evaluated and the audiological tests carried out:

Table 13:Clients seen in hearing evaluation section.

|  |  |
| --- | --- |
| Total no. of clients evaluated/screened for hearing problems | 12207 |
| No. of clients seen for hearing evaluation at AIISH | 11512 |
| No. of clients seen for hearing evaluation at camps | 695 |
| No. of ears tested  | 18219 |
| * Normal hearing
 | 3381 |  |
| * Conductive hearing loss
 | 2478 |  |
| * Mixed hearing loss
 | 4029 |  |
| * Sensori-neural hearing loss
 | 7798 |  |
| * \* Others
 | 928 |  |
| No. of audiogram copies issued | 8940 |
| No. of Hindi cases | 433 |
| No. of certificates issued  | 2077 |
| * Financial aid
 | 1088 |  |
| * Admission to school for the deaf
 | 89 |  |
| * Physically handicapped
 | 480 |  |
| * Tax exemption
 | 80 |  |
| * Education scholarship
 | 91 |  |
| * At camp
 | 172 |  |
| * Others
 | 124 |  |
| Clients History taken | 12292 |
| Pure tone audiometry | 10445 |
| Speech audiometry | 10586 |
| Immittance | 11105 |
| BOA | 714 |
| ABR | 2708 |
| OAE | 493 |
| VRA | 41 |
| CAPD tests | 11 |
| VEMP | 16 |

\* Re-evaluation suggested, test incomplete, etc.

Figure 2:Details ofStatus of hearingin the no. of ears tested.

Figure 3:Details ofaudiological tests carried out.

* **Hearing Aid Evaluation**

 For those clients who require hearing devices, evaluation is done to select appropriate hearing devices such as hearing aids and assistive listening devices. Evaluation is also done to decide Cochlear Implant (CI) candidacy. Table 14 and figure 4 give the details of hearing aid evaluations carried out at AIISH and at camps.

Table 14:Clients seen in hearing aid trial unit.

|  |  |
| --- | --- |
| Total no. of clients evaluated  | 13708 |
| No. of clients seen for hearing aid trial at AIISH  | 8174 |
| No. of clients seen for hearing aid trial at Camps | 744 |
| No. of hearing aid prescribed at camps | 404 |
| No. of clients counseled | 4814 |
| Hearing aids prescribed | 5009 |
| * Body level
 | 4092 |  |
|  - ADIP | 4047 |  |  |
|  - Purchased | 45 |  |  |
| * Analogue BTE
 | 6 |  |
| * Digital BTE
 | 794 |  |
| * Trimmer Digital BTE
 | 76 |  |
| * Digital ITC
 | 28 |  |
| * Digital CIC
 | 3 |  |
| No. of clients recommended  |  | 1150 |
| * Auditory training
 | 758 |  |
| * Speech reading
 | 392 |  |
| No. of hearing aids prescribed on exchange  | 207 |
| No. of clients for whom aided ASSR done  | 4 |
| No. of unaided/aided audiograms | 474 |
| No. of unaided/aided audiograms for CI | 33 |
| Mapping for CI | 67 |
| Candidacy for CI | 35 |
| Aided VRA  | 70 |
| Programming of digital hearing aids | 760 |
| No. of certificates issued | 199 |
| No. of IGO done | 26 |
| No. of EAC of hearing aids done | 141 |
| No. of Hindi clients tested | 264 |
| No. of clients recommended for retrial with custom Ear mold | 225 |
| No. of clients referred to AIISH | 49 |

Figure 4:Clients details on hearing aids.

* **Hearing Aid Dispensing Scheme**

For clients who are not eligible to avail a hearing aid under the ADIP scheme and who can afford to purchase the hearing aids, the hearing aids are dispensed at discounted rates through this scheme. The details of hearing aids prescribed for purchase under hearing aid dispensing scheme are given in Table 15.

Table 15:No. of hearing aids prescribed for purchase under HAD scheme.

|  |  |
| --- | --- |
| Types of hearing aid | Number |
| Body level  | 33 |
| BTE Analogue | 10 |
| BTE Digital | 689 |
| BTE Trimmer Digital  | 55 |
| ITC Digital | 25 |
| CIC Digital  | 6 |
| **Total** | **818** |

* **Counselling and Guidance**

 Counseling and hearing aid demonstration were carried out for 4814 clients who have been issued or procured hearing aids. Individuals with poor speech identification ability were advised to use communication strategies and speech reading.

* **Ear moulds**

Custom ear moulds were made for clients who were prescribed and issued hearing aids. Ear moulds were also made with acoustic modification for research purposes. The Central Prosthetic Lab (CPL) had received ear impressions to be processed as ear moulds. Table 16 and figure 5 give the details of activities carried out in the ear mould lab at AIISH and at camps.

Table 16:No. of clients seen in ear moulds lab.

|  |  |
| --- | --- |
| Details | Number |
| No. of clients seen | 2804 |
| No. of impressions taken | 4350 |
| No. of ear moulds completed | 3802 |
| No. of ear moulds issued  | 3116 |
| No. of ear moulds made free-of-cost | 2543 |
| No. of ear moulds made on 50% payment | 230 |
| No. of ear moulds made on 100% payment | 1577 |
| No. of special ear moulds made | 151 |
| No. of soft moulds made | 1393 |
| No. of moulds made for clients evaluated at camps | 498 |
| CPL: No. of ear impressions received and processed | 230 |

Figure 5: Details of ear moulds made

Age-wise statistics of clients seen in the department of audiology is given in the Table 17 and figure 6.

Table 17: Details of Age-wise statistics.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| AgeGroup in yrs | HearingEvaluation | Hearing Aid Trial | HATCounseling | Ear moulds |
| Male | Female | Male | Female | Male | Female | Male | Female |
| 00-01 | 109 | 74 | 117 | 86 | 39 | 23 | 35 | 26 |
| 02-05 | 642 | 508 | 674 | 586 | 274 | 192 | 271 | 223 |
| 06-10 | 434 | 384 | 474 | 337 | 183 | 136 | 163 | 125 |
| 11-15 | 351 | 374 | 266 | 215 | 152 | 104 | 133 | 112 |
| 16-20 | 391 | 374 | 289 | 169 | 136 | 101 | 107 | 68 |
| 21-25 | 403 | 377 | 233 | 144 | 134 | 86 | 78 | 51 |
| 26-30 | 379 | 377 | 209 | 132 | 133 | 89 | 55 | 49 |
| 31-35 | 382 | 318 | 184 | 88 | 110 | 59 | 54 | 37 |
| 36-40 | 309 | 324 | 181 | 110 | 113 | 72 | 65 | 30 |
| 41-45 | 356 | 330 | 166 | 109 | 130 | 85 | 66 | 37 |
| 46-50 | 281 | 268 | 212 | 151 | 133 | 116 | 63 | 49 |
| 51-55 | 361 | 327 | 225 | 112 | 159 | 81 | 66 | 33 |
| 56-60 | 323 | 323 | 317 | 146 | 221 | 118 | 105 | 55 |
| 61-65 | 357 | 300 | 393 | 147 | 294 | 106 | 104 | 55 |
| 66-70 | 316 | 278 | 417 | 147 | 306 | 119 | 120 | 53 |
| 71-75 | 315 | 244 | 358 | 142 | 293 | 78 | 104 | 44 |
| 76-80 | 172 | 123 | 303 | 87 | 215 | 44 | 71 | 26 |
| 81-85 | 117 | 105 | 126 | 51 | 84 | 34 | 51 | 20 |
| 86-90 | 68 | 21 | 38 | 11 | 44 | 4 | 0 | 0 |
| 91+ | 9 | 8 | 18 | 4 | 10 | 4 | 0 | 0 |
| **Total** | 6075 | 5437 | 5200 | 2974 | 3163 | 1651 | 1711 | 1093 |
| **11512** | **8174** | **4814** | **2804** |
| **Grand Total – 27304** |

Figure 6:Number of clients evaluated at HE, HAT and EM sections.

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Figure 7:Gender wise distribution of Clients evaluated.

**DEPARTMENT OF CLINICAL PSYCHOLOGY**

**Diagnostic services**

The cases referred from OPD-Audiology and OPD-Speech-Language registered at the institute undergo routine and detailed psychometric assessments for differential diagnosis. Pre-vocational assessment is carried out for adolescents/adults with communication disorders. Neuro-psychological evaluations are conducted for individuals with neuro-linguistic/communication problems. Psycho-educational achievement testing and grade level assessments are done for children with scholastic backwardness and academic under achievement. Behavior assessment is done for children with problem behaviors/skill deficits. Family assessment is done on specific cases requiring family intervention programs. Table 18 shows the details of psycho-diagnostic cases and diagnostics-wise distribution and cases, respectively.

Table 18: Overview of cases seen in Psycho-diagnostic clinic.

|  |  |  |
| --- | --- | --- |
| Sl. No. | Particulars | Total No. cases |
| 1 | New cases | 4504 |
| 2 | Old cases | 827 |
| 3 | Total no. of Hindi cases | 417 |
| **Total** | **5748** |

Table 19 depicts the individuals with communication disorders for whom psychological assessments were carried out.

Table 19: Psychological assessment of individuals with communication disorders.

|  |  |  |
| --- | --- | --- |
| Sl. No. | Categories of cases | Number of cases |
| 1 | Mental Retardation | 2622 |
| 2 | Delayed Speech and Language | 781 |
| 3 | Hearing loss | 442 |
| 4 | Learning Disability | 338 |
| 5 | Stuttering | 331 |
| 6 | Misarticulation | 170 |
| 7 | Cerebral palsy | 42 |
| 8 | Aphasia | 34 |
| 9 | Autism | 22 |
| 10 | Functional voice disorder | 8 |
| 11 | Voice Problem | 9 |
| 12 | Others | 487 |

**Therapeutic Services**

Therapeutic services are routinely provided for cases with various types of communication disorders. Home based and clinic based remedial training programs are provided for children with scholastic backwardness. Appropriate individual and family guidance and counseling are carried out for cases whenever necessary. Preadolescent and adolescent individuals with disabilities are given pre-vocational and vocational guidance after appropriate aptitude testing. Neuropsychological retraining programs include attention retraining, memory training or allied cognitive training programs for individuals with neuro-linguistic/communication problems. Individualized behavior counseling, therapy and modification is carried out in clinics as well as home setting for cases reporting behavior problems. Skill training on activities of daily living, functional academics, functional living skills, social or communicative skills are given for cases showing skills deficits behaviors. Table 20 provides details of the therapy provided.

Table 20: Details on nature and type of therapy provided to cases.

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No. | Particulars | Total No. cases | Total No. sessions |
| 1 | Behaviour therapy  | 219 | 1122 |
| 2 | Behaviour modification  | 317 | 862 |
| 3 | Home based training program for MR/SLD  | 485 | 952 |
| 4 | Remedial training for SLD cases | 338 | 1456 |
| 5 | Intensive parent counseling program  | 324 | 324 |
| 6 | Parent counseling program  | 5290 | 5290 |

**CENTRE FOR REHABELITATIONAND EDUCATION THROUGH DISTANCE MODE (CREDM)**

The centre conducted – orientation programs to parents, allied professionals, Speech-Language Pathologists and Audiologists on speech productions, mechanism of hearing, speech and language development, auditory development, causes and types of hearing loss, identification of hearing loss, assessment of hearing, hearing aids, , speech and language intervention in children with hearing impairment. In order to prepare visuals for the orientation programs the staff of the centre gave 194 sessions of speech and language therapy to children with hearing impairment.

**DEPARTMENT OF CLINICAL SERVICES**

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A total of **47,370** ***clients*** have been registered during the year with various types of speech, hearing and language disorders. This includes **18916** ***new clients*** and **28454** clients who have made ***repeat visits*** for the evaluation of their problems.

 A total of **19,491** clients were seen from speech and language OPD, audiology OPD, ENT and Psychology OPD. Of these **7,282** clients were evaluated in detail for various speech and language problems. The needy clients are also evaluated for associated ENT and psychological problems by the faculty and staff from the respective departments. Clients requiring further management are given speech/language therapy for a period of 45 minutes daily. A total of **5,566** clients attended speech and language therapy and **26,144** individual speech and language therapy sessions were given in the year 2009-10. The faculty and clinical staff provide supervision and counseling along with support and guidance to parents for home training. In addition, the clients were referred for various other therapy programs (e.g. Physio therapy, Occupation therapy, Autism therapy, etc) by the concerned supervisors. Table 21 to 49 depicts statistics of services provided.

Table 21: State-wise distribution of new clients - April 2009-March 2010.

|  |  |  |  |
| --- | --- | --- | --- |
| States | Male | Female | Total Cases |
| Karnataka | 11251 | 6760 | 18011 |
| Kerala | 318 | 193 | 511 |
| Tamil Nadu | 107 | 68 | 175 |
| Andhra Pradesh | 75 | 35 | 110 |
| Assam | 8 | 1 | 9 |
| Gujarat | 1 | 0 | 1 |
| West Bengal | 6 | 0 | 6 |
| Union Territories (ALL) | 3 | 1 | 4 |
| Maharashtra | 16 | 0 | 16 |
| Madhya Pradesh | 7 | 4 | 11 |
| Delhi | 2 | 0 | 2 |
| Uttar Pradesh | 10 | 1 | 11 |
| Orissa | 3 | 6 | 9 |
| Rajasthan | 4 | 1 | 5 |
| Bihar | 3 | 3 | 6 |
| Punjab | 3 | 0 | 3 |
| Haryana | 0 | 0 | 0 |
| Kashmir | 1 | 0 | 1 |
| Himachal Pradesh | 0 | 0 | 0 |
| Jharkhand | 3 | 4 | 7 |
| Chhattisgarh | 2 | 1 | 3 |
| Uttaranchal | 0 | 0 | 0 |
| Manipur | 0 | 0 | 0 |
| Goa | 4 | 2 | 6 |
| Arunachal Pradesh | 1 | 0 | 1 |
| **Outside India** |
| Maldives | 4 | 1 | 5 |
| Over Seas | 3 | 0 | 3 |
| **Total Clients** | **11835** | **7081** | **18916** |

Figure 8:State-wise distribution of clients from April 2009-March 2010.

Table 22: Total number of persons registered at Medical Records - April 2009-March 2010.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Months | New Persons | Repeat Persons | Total Persons | No of Working Days | Daily Average |
| April | 1389 | 2304 | 3693 | 18 | 205 |
| May | 1811 | 2803 | 4614 | 21 | 220 |
| June | 1712 | 2767 | 4479 | 22 | 204 |
| July | 1751 | 2700 | 4451 | 23 | 194 |
| August | 1585 | 2212 | 3797 | 20 | 190 |
| September | 1461 | 1825 | 3286 | 20 | 164 |
| October | 1754 | 2322 | 4076 | 21 | 194 |
| November | 1657 | 2246 | 3903 | 20 | 195 |
| December | 1684 | 2071 | 3755 | 21 | 179 |
| January | 1455 | 2316 | 3771 | 19 | 198 |
| February | 1300 | 2430 | 3730 | 20 | 187 |
| March | 1357 | 2458 | 3815 | 22 | 173 |
| **Total** | **18916** | **28454** | **47370** | **247** | **192** |

Figure 9**:** Statistics of Clients seen in Medical records, Speech-Language and Audiology OPD from Apr 2009 – Mar 2010.

Table 23: Disorders-wise distribution of diagnostic cases seen in OPD-Speech Language Pathology.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Disorders | Language Disorders | Voice Disorders | Fluency Disorders | Articulation Disorders | Multiple Disorders | Normal |  |
| **Months** | **C** | **A** | **G** | **C** | **A** | **G** | **C** | **A** | **G** | **C** | **A** | **G** | **C** | **A** | **C** | **A** | **G** | **Total** |
| **April**  | 325 | 68 | 4 | 9 | 27 | 6 | 46 | 19 | 0 | 59 | 2 | 2 | 22 | 3 | 11 | 8 | 3 | **614** |
| **May** | 472 | 75 | 9 | 30 | 48 | 22 | 81 | 17 | 1 | 48 | 10 | 0 | 16 | 2 | 10 | 4 | 2 | **802** |
| **June** | 390 | 138 | 4 | 5 | 31 | 10 | 33 | 22 | 0 | 41 | 8 | 1 | 7 | 5 | 12 | 12 | 0 | **719** |
| **July** | 366 | 147 | 10 | 8 | 33 | 9 | 14 | 24 | 0 | 25 | 18 | 3 | 22 | 2 | 8 | 25 | 3 | **717** |
| **Aug** | 309 | 121 | 10 | 13 | 24 | 6 | 21 | 27 | 2 | 20 | 12 | 0 | 4 | 0 | 19 | 17 | 0 | **605** |
| **Sep** | 227 | 87 | 5 | 02 | 24 | 3 | 19 | 23 | 0 | 37 | 14 | 1 | 6 | 0 | 9 | 11 | 4 | **472** |
| **Oct** | 301 | 78 | 12 | 18 | 27 | 10 | 34 | 17 | 1 | 24 | 8 | 5 | 23 | 1 | 16 | 17 | 0 | **592** |
| **Nov** | 286 | 96 | 8 | 13 | 32 | 7 | 23 | 12 | 0 | 19 | 6 | 1 | 4 | 0 | 2 | 17 | 2 | **528** |
| **Dec** | 300 | 109 | 8 | 11 | 28 | 9 | 31 | 24 | 3 | 22 | 7 | 5 | 4 | 0 | 14 | 19 | 2 | **596** |
| **Jan** | 285 | 91 | 12 | 13 | 24 | 6 | 24 | 22 | 2 | 22 | 16 | 0 | 15 | 1 | 17 | 18 | 4 | **572** |
| **Feb** | 310 | 72 | 6 | 14 | 19 | 9 | 15 | 19 | 1 | 21 | 6 | 0 | 1 | 1 | 10 | 7 | 0 | **511** |
| **Mar** | 344 | 74 | 0 | 10 | 19 | 11 | 13 | 19 | 1 | 29 | 11 | 0 | 2 | 0 | 11 | 10 | 0 | 554 |
| **Total** | 3870 | 1156 | 88 | 146 | 336 | 108 | 354 | 245 | 11 | 367 | 118 | 18 | 126 | 15 | 139 | 165 | 20 | **7282** |
| **Disorder wise** | **5114** | **590** | **610** | **503** | **141** | **324** |  |
| **Overall total** | **7282** |

C - Child, A - Adult, G - Geriatric

Figure 10:Disorders-wise distribution of diagnostic cases seen in OPD- Speech language.

Table 24: Statistics of rehabilitation services provided in the Department of Clinical Services.

|  |
| --- |
| **Disorder-wise distribution of Therapy Clients from Apr 2009-Mar 2010** |
| **Disorders** | **Language Disorders** | **Voice Disorders** | **Fluency Disorders** | **Articulation Disorders** | **Multiple Disorders** |  |
| **Months** | **C** | **A** | **G** | **C** | **A** | **G** | **C** | **A** | **G** | **C** | **A** | **G** | **C** | **A** | **G** | **Total** |
| **April** | 394 | 11 | 0 | 2 | 8 | 3 | 32 | 28 | 0 | 29 | 2 | 0 | 49 | 0 | 0 | **558** |
| **May** | 304 | 34 | 4 | 1 | 13 | 0 | 65 | 21 | 0 | 54 | 25 | 1 | 24 | 0 | 0 | 546 |
| **June** | 232 | 24 | 3 | 4 | 7 | 0 | 4 | 1 | 0 | 25 | 14 | 0 | 35 | 0 | 0 | 349 |
| **July** | 179 | 20 | 0 | 14 | 1 | 0 | 28 | 41 | 0 | 31 | 3 | 0 | 55 | 1 | 0 | 373 |
| **Aug** | 295 | 7 | 1 | 6 | 7 | 0 | 9 | 29 | 0 | 3 | 2 | 6 | 50 | 1 | 0 | 416 |
| **Sep** | 195 | 114 | 2 | 16 | 20 | 1 | 16 | 31 | 0 | 6 | 4 | 0 | 61 | 2 | 0 | 468 |
| **Oct** | 325 | 10 | 1 | 11 | 13 | 0 | 17 | 12 | 1 | 10 | 4 | 0 | 65 | 5 | 0 | 474 |
| **Nov** | 299 | 35 | 2 | 16 | 9 | 1 | 20 | 32 | 0 | 16 | 4 | 0 | 34 | 3 | 0 | 471 |
| **Dec** | 311 | 63 | 0 | 6 | 29 | 2 | 15 | 31 | 1 | 3 | 3 | 0 | 74 | 9 | 0 | 547 |
| **Jan** | 226 | 26 | 10 | 7 | 42 | 4 | 14 | 22 | 1 | 5 | 3 | 0 | 83 | 1 | 0 | 444 |
| **Feb** | 336 | 42 | 0 | 7 | 17 | 4 | 20 | 16 | 0 | 14 | 6 | 0 | 23 | 4 | 0 | 489 |
| **Mar** | 347 | 2 | 2 | 4 | 0 | 0 | 3 | 32 | 1 | 6 | 0 | 0 | 33 | 1 | 0 | 431 |
| **Total** | **3443** | **388** | **25** | **94** | **166** | **15** | **243** | **296** | **4** | **202** | **70** | **7** | **586** | **27** | **0** | **5566** |
| **Disorder wise** | **3856** | **275** | **543** | **279** | **613** |
| **Overall total** | **5566** |

C - Child, A - Adult, G - Geriatric

Figure 11:Disorders-wise distribution of therapy clients from April 2009 –March 2010.

**DEPARTMENT OF ELECTRONICS**

##### **Hearing Aid issue and Electro-acoustic evaluation**

1. **ADIP scheme, Ministry of Social Justice and Empowerment, Govt. of India.**

 Department of Electronics distributes free hearing aids and solar battery chargers under ADIP scheme of Ministry of Social Justice and Empowerment to the eligible hearing impaired people.

Table 25: Hearing aids & Solar Battery Chargers issued under ADIP Scheme.

|  |  |  |
| --- | --- | --- |
| Sl. No. | Item | No. of hearing aids |
| 1 | Hearing aids & Solar Battery Chargers issued at the institute | 4167 |
| 2 | Hearing aids & Solar Battery Chargers issued at the speech and hearing camps | 493 |
|  | **Total**  |  **4660** |

Ministry of Social Justice & Empowerment has selected our institute as the sole authorized agency for electro-acoustic evaluation of random samples 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 hearing aids from seven governmental / nongovernmental agencies involved in hearing aid distribution were evaluated under this program.

1. **AIISH Hearing aid dispensing scheme**

The institute has a scheme for dispensing all types of hearing aids at concessional rates. In the report year **851** hearing aids of different categories and types were distributed under this scheme. Testing, electro-acoustic evaluation and issue of these hearing aids and their after sales service are undertaken by the department.

**DEPARMENT OF OTORHINOLARYNGOLOGY**

The Department of Otorhinolaryngologyoffers diagnostic services to various ear, nose and throat diseases associated with communication disorders. On an average about 50 microscopic examinations and 10 endoscopies are done every day. The department offers diagnostic, therapeutic, surgical treatment to about 150 patients per day. Minor procedure like suction clearance of ear discharge, removal of foreign bodies, removal of wax etc, chemical cauterization, endoscopic evaluation of voice, evaluation of vertiginous patients are other activities of the department.

The department is running a separate unit (AIISH, ENT ‘D’ unit) at K.R Hospital attached to Mysore Medical College which runs OPD on every Thursday, and O.T. on every Friday.

ENT ‘D’ Unit with 20 bedded inpatient facilities is availed for major, minor and emergency surgeries at K.R. Hospital for the AIISH patients. Table 26 and 27 show details of clinical services offered by the department.

Table 26: Details of clinical services offered by the Department of Otorhinolaryngology.

|  |  |
| --- | --- |
| Total No. of cases seen in the Department of ENT, AIISH | Total No. of cases seen in the K.R. Hospital |
| New Cases  | 15,834 | New Cases  | 5,948 |
| Old Cases  | 14,981 | Old Cases  | 6,523 |
|  **Total**  | **30,815** |  **Total**  | **12,471** |

Table 27:Details of surgeries operations done at K.R. Hospital.

|  |  |
| --- | --- |
| Major | Minor |
| 262 | 27 |

|  |  |
| --- | --- |
| No. of Microscopic Examination | 13,713 |
| No. of Endoscopic Examination  | 334 |
| **Certificate Issued**  |
| Handicapped Certificate (Pension)  | 338 |
| Railway Concession Certificate  | 213 |
| Medical Certificate  | 65 |

**DEPARMENT OF PREVENTION OF COMMUNICATION DISORDERS**

1. **Infant screening program**

Infant screening was carried out throughout the report year in 9 hospitals [Basappa Memorial Hospital (B.M.H), Combined Hospital, Harsha Hospital, Kamakshi Hospital, K.R.H Hospital, Makkala Koota Immunization Center, Mission Hospital, N.P.C Hospital & S.M.T.D.H Hospital] in Mysore. All new born infants were screened for hearing using Behavioral Observational Audiometery (BOA), Oto-acoustic Emissions (OAE) screening and administering High Risk Register (HRR). High risk registers were administered to identify those at risk for communication disorders. Table 28 and figures 12, 13, 14, 15, 16, 17 & 18 shows the details of the infants screened.

Table 28**:** Details of new born infants screened for hearing and communication disorders.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | Total No. of infants screened | Boys | Girls | Total Referred for follow up |
| Apr 2009 | 986 | 524 | 462 | 91 |
| May 2009 | 963 | 494 | 469 | 93 |
| June 2009 | 1100 | 601 | 499 | 168 |
| July 2009 | 1063 | 526 | 537 | 105 |
| Aug. 2009 | 1101 | 587 | 514 | 74 |
| Sept. 2009 | 1167 | 624 | 543 | 71 |
| Oct. 2009 | 1041 | 543 | 498 | 47 |
| Nov. 2009 | 920 | 480 | 440 | 59 |
| Dec. 2009 | 934 | 517 | 417 | 65 |
| Jan 2010 | 1005 | 556 | 449 | 32 |
| Feb 2010 | 1059 | 535 | 524 | 87 |
| Mar 2010 | 1077 | 562 | 515 | 118 |
| **Total**  | **12416** | **6549** | **5867** | **1010** |

Figure 12: Total Number of Infants screened at various Hospitals from

 April 2009 to March 2010.

 Figure 13: Proportion of Boys and Girls infants screened and found to be at risk in various Hospitals from April 2009 to March 2010.

**Individuals with Positive HRR – Prenatal, Natal & Post natal Causes**

Figure 14: Distribution of high risk factors in infants screened at various Hospitals from April 2009 to March 2010.

Figure 15: Distribution of Prenatal factors in infants screened for high risk at various Hospitals from April 2009 to March 2010.

Figure 16: Distribution of Natal factors in infants screened for high risk at various Hospitals from April 2009 to March 2010.

Figure 17: Distribution of Postnatal factors in infants screened for high risk at various Hospitals from April 2009 to March 2010.

 Figure 18: Consanguinity, Sibling History and Family History as factors in infants screened at various Hospitals from April 2009 to March 2010.

(Note: \* 6891 – No siblings)

1. **Follow up of referred clients at AIISH**

 Effort to strengthen the follow up of clients referred for detailed investigations for hearing and speech language functions is made by contacting the clients/caregivers through telephone, wherever the telephone numbers are available and through letters (for the rest of the clients). Figure 19 shows the details of those clients who reported at AIISH from various programs conducted by the department such as infant screening, school screening, screening industrial workers and screening at camps.



Figure 19:Details of follow up clients of the POCD department in the report year.

**DEPARTMENT OF SPEECH-LANGUAGE PATHOLOGY**

The Department of Speech-Language Pathology is one of the major departments of the institute. The department caters to evaluation, diagnosis and management of communication disorders. Academic training and research in the above areas is also an ongoing activity. The department is also involved in material development and public education programs.

1. **Diagnostic services (Evaluation of cases from April 2009 to March 2010)**

Table 29:Details of Evaluation of cases.

|  |  |
| --- | --- |
| Type of the disorder | Total No. of cases evaluated |
| 1. Language Disorders
 | 4040 |
| 1. Speech Disorders
2. Voice disorders
3. Disorders of Phonology
4. Disorders of Fluency
 | 301298444 |



Figure 20:Details of clients evaluated from April 2009-March 2010

1. **Therapeutic program: Supervision of cases with Speech, Language disorders**

Table 30:Details of Supervision of cases with Speech-Language Disorders.

|  |  |
| --- | --- |
| Type of the disorder | Total No. of cases supervised |
| 1. Language Disorders
 | 1695 |
| 2. Speech disorders a) Voice disorders b) Disorders of phonology c) Disorders of fluency | 234708 |



Figure 21:Details of clients supervised from April 2009-March 2010.

**DEPARTMENT OF SPEECH-LANGUAGE SCIENCES**

 The Department of Speech-Language Sciences is one of the major departments involved in assessment of normal aspects of speech, language and communication. The department caters to evaluation, diagnosis and management of communication disorders and active in counseling and guidance services. Academic training and research in normal aspects of speech, language and communication are the main focus of the department. Apart from this, the specialized units of Forensic and Professional voice care units cater to special needs of the clients for speaker recognition and voice care and maintenance.

Table 31:Details of diagnostic services and therapy supervision.

|  |  |  |
| --- | --- | --- |
| Unit | Diagnostics(No of cases) | Therapy(No. of cases) |
| Voice | 30 | 70 |
| Phonology | 45 | 51 |
| Fluency | 40 | 56 |
| Language | 362 | 440 |
| Professional voice care centre | 44 | 29 |
| **Total**  | **521** | **646** |

**DEPARTMENT OF SPECIAL EDUCATION**

Clinical services of varied nature were offered by / under the guidance of the Speech-Language Pathologist at the department to clients (and their caregivers) receiving preschool and other special educational services at the department.

FM systems are being used by children with hearing impairment receiving services at AIISH Preschool. In order to appraise the usefulness of the device, routine speech - language, and hearing evaluation are carried out once in 6 months, coordinated by the Speech-Language Pathologist at the Department.

Table 32: Details of the evaluation carried during the year.

|  |  |  |  |
| --- | --- | --- | --- |
| SL. No. | Nature of Evaluation | II Round Completed in April 2009 | III Round in II Term of 2009-10(as part of ARF Project) |
| 1. | Voice (in Coordination with Department of Speech- Language Sciences) | 11 | --- |
| 2. | Language(in Coordination with Department of Clinical Services) | 1 | --- |
| 3. | Listening (by / under Supervision of SLP at the Department) | 5 | --- |
| 4. | Articulation (by / under Supervision of SLP at the Department) | 11 | --- |
| 5. | Speech – Language Screening (by / under Supervision of SLP at the Department) | --- | 100 |

Systematic and comprehensive assessment of all-round abilities of the children at AIISH Preschool are carried out at the beginning and end of each academic term. These assessments are carried out with the purpose of maintaining cumulative progress records and decision-making regarding retention, grouping and discharge of clients, and evaluation for placement guidance for further schooling. Teacher-made tests, and standardised assessment tools like ‘*Assessment Checklist for Children with Developmental Disabilities*’ (Venkatesan, 2002) are used in the process. For outgoing children who are discharged after successful completion of preschooling, ‘School Readiness Test’ (Yathiraj et al., 2009) is carried out to test their preparation for mainstreaming.

Table 33: Details of the children assessed during the year.

|  |  |  |
| --- | --- | --- |
| Sl. No. | Stage Evaluation | No. of Children |
| Flower | Fruits | Colours |
| 1 | Term End Evaluation in April 2009 | 78 | 44 | 19 |
| 2 | Term Beginning in May-June 2009 | 144 | 97 | 20 |
| 3 | Term Transition in November-December 2009 | 124 | 99 | 19 |

Educational instructional services at the Preschool are organised for children having difficulties in communication due to presence of disabilities like hearing impairment, mental retardation and autism. Among them, there are also children who have multiple special needs due to presence of more than one disability. Curriculum, training methods and materials are individualised within the group in order to cater to the unique nature of their needs.

 Table 34: Details of the children with multiple special needs who received preschool training.

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No.  | Nature of Special Need | No. of Children in I Term 2009-10 (June 09 to November 09) | No. of Children in II term 2009-10 (December 09 to March 10) |
| 1 | HL with Autism | 02 | 02 |
| 2 | MR with CP | 18 | 28 |
| 3 | HL with MR | 01 | 02 |
| 4 | MR with VI | 03 | 02 |
| 5 | MR with Autism | 11 | 13 |
| 6 | HL with CP | 01 | 01 |

1. **SPECIALIZED CLINICAL SERVICES**

The institute runs specialized clinics to cater to the specific requirements of persons with communication disorders. These clinics are run by various departments of the institute, the details are provided in the following sections.

**DEPARTMENT OF AUDIOLOGY**

* 1. **Listening Training Unit**

 Listening training is provided for clients who use hearing devices or for clients with Central Auditory Processing Disorders. Clients who undergo training in listening, communication strategies are trained by student clinicians under the supervision of the staff. Table 35 provides the details of the clients who have undergone listening training.

Table 35: Clients seen in listening training unit.

|  |  |
| --- | --- |
| Details | Numbers |
| Total no. of clients seen  | 2018 |
| Total no. of sessions | 10563 |
| Number of DT clients | 130 |
| Number of new clients | 326 |
| Number of repeat clients | 1592 |
| Number of clients discharged | 89 |
| Number of clients discontinued | 88 |
| Parent counseling session (Individual) | 110 |
| Hindi clients  | 199 |
| No. of clients for CI  | 24 |
| No. of sessions for CI | 616 |

**DEPARTMENT OF CLINICAL PSYCHOLOGY**

**Benefits and concessions**

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, L.I.C./U.T.I. schemes etc. 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 provided during court proceedings.

Table 36: Clients seen in specialized clinical services and consultant specialists.

|  |  |  |
| --- | --- | --- |
| Sl. No. | Particulars of case | Total. No |
| 1 | M.R. certificates for financial assistance  | 2021 |
| 2 | Railway concessions for M.R.  | 107 |
| 3 | Income tax Rebate for parents of M.R.  | 40 |
| 4 | Psychological reports for special school admissions | 224 |
| 5 | Certificate for language exemption for special children | 85 |
| 6 | LIC/UTI deposits for MR persons  | 20 |
| 7 | Medico-legal cases  | 3 |
| 8 | Court appearance for rendering expert opinion | 3 |

**DEPARTMENT OF CLINICAL SERVICES**

Allied professionals such as Pediatrician, Neurologist, Plastic surgeon, Prosthodontist, Phonosurgeon, physiotherapist and occupational therapists provide consultancy services for better patient care and management.

Table 37: Clients seen in specialized clinical services and consultant specialists - April 2009 - March 10.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Apr | May | June | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
| PT | Cases | 59 | 67 | 52 | 34 | 15 | 42 | 51 | 69 | 47 | 49 | 38 | 46 | 569 |
| session | 272 | 249 | 245 | 110 | 152 | 171 | 339 | 450 | 269 | 275 | 326 | 384 | 3242 |
| OT | Cases | 71 | 79 | 74 | 71 | 96 | 91 | 47 | 30 | 20 | 31 | 29 | 63 | 702 |
| session | 323 | 397 | 328 | 452 | 485 | 456 | 203 | 95 | 85 | 194 | 269 | 385 | 3672 |
| Neurologist | 12 | 41 | 48 | 39 | 34 | 24 | 52 | 48 | 39 | 36 | 28 | 48 | 449 |
| Pediatrician | 04 | 24 | 24 | 23 | 26 | 23 | 35 | 23 | 15 | 23 | 24 | 37 | 281 |
| Phonosurgeon | 0 | 01 | 01 | 0 | 0 | 01 | 0 | 02 | 06 | 03 | 02 | 01 | 17 |
| Plastic surgeon | 13 | 15 | 08 | 18 | 06 | 13 | 12 | 10 | 12 | 08 | 08 | 0 | 123 |
| Prosthodantist | 06 | 15 | 0 | 06 | 05 | 04 | 06 | 02 | 02 | 02 | 08 | 01 | 57 |

Figure 22:Clients seen in specialized clinical services and consultant specialists.

Figure 23:Clients seen in PT/OT from April 2009-March 2010.

**DEPARTMENT OF SPEECH-LANGUAGE PATHOLOGY**

The Department of Speech-Language Pathology houses specialized clinical units viz., Alternative and Augmentative Communication (AAC), Autism Spectrum Disorder (ASD) and Craniofacial unit. These units cater to the diagnostic and therapeutic activities of clients with specific disabilities and specialized intervention programs.

1. **AAC Unit: Statistics of clinical activities of the unit**

Table 38:Rehabilitation services offered at AAC unit.

|  |  |
| --- | --- |
| Details | Total No. of cases |
| 1. New cases evaluated
 | 32 |
| 1. Evaluation Sessions
 | 36 |
| 1. Therapy cases seen
 | 284 |
| 1. Therapy Sessions
 | 1636 |
| 1. D.T. Cases
 | 5 |
| 1. Home training cases
 | 6 |

**Interaction meets: AAC Unit**

Interaction meet with Dr. R. Ramasubramaniam, Ms. Archana Salyan Sundar and Mr. Thiyagaranjan from Siemens Information Systems Inc. Bangalore., regarding development of AAC devices in India on 18.5.2009.

**Report on “Photo gallery of AAC clients at AIISH” conducted on 8th and 9th October 2009 as a part of celebration of International AAC Awareness month**

In connection with the communication received from the ‘International Society on Augmentative and Alternative communication (ISAAC)”, recognizing October 2009 asInternational AAC Awareness month, the AAC Special clinic of AIISH organized an exhibition to educate one and all about AAC on 8th and 9th October 2009. This was arranged in the form of an exhibition to project the communication skills of clients using AAC modalities as captured through photographs. The theme of the photo gallery was titled as “We may not speak perfectly, but we can communicate”. The photo gallery was kept open to public. Those who visited the exhibition were oriented to the purpose, means and materials used for AAC rehabilitation. The event was advertized in popular newspapers, which also published the matter as columns in the newspapers. More than 300 persons visited the exhibition. The group included clients with various communication disorders and their caregivers, graduate and post graduate students doing various courses in the field of speech, language and hearing, professionals from allied specialists and the public. Feedback was obtained from the visitors and the common opinion was that they now understood the need for promoting communication in the disabled and wished for more of such programs in future.

1. **ASD Unit**

Table 39:Statistics of clinical activities.

|  |  |
| --- | --- |
| Details | Total |
| 1. No. of cases evaluated
 | 258 |
| 1. No. of assessment sessions
 | 262 |
| 1. No. of therapy cases
 | 601 |
| 1. No. of therapy sessions
 | 3269 |
| 1. No. of D.T. cases
 | 49 |
| 1. No. of cases discharged
 | 29 |
| 1. No. of cases discontinued
 | 10 |

1. **Craniofacial Unit**

Table 40:Details of Craniofacial Unit.

|  |  |  |
| --- | --- | --- |
| Details | Children | Adults |
| No. of clients evaluated by plastic surgeon | 102 | 27 |
| No. of clients evaluated by prosthodontist | 49 | - |
| No. of clients recommended for surgery | 25 | 15 |
| No. of clients recommended for speech therapy | 58 | 9 |
| No. of client recommended for Prosthesis | 11 | - |
| No. of session taken for preparation of prosthesis | 44 | - |
| No. of speech prosthesis prepared | 09 |  |
| No. of cases attended speech and lang. therapy | 56 | 6 |

****

Figure 24:Showing the details of Craniofacial Unit.



Figure 25:Number of clients recommended for Surgery, Speech Therapy and Prosthesis.

**DEPARTMENT OF SPEECH-LANGUAGE SCIENCES**

1. **Professional Voice Care Centre**

The Professional Voice Care Centre (PVCC) is dedicated to the assessment and management of voice in professional voice users like teachers, singers, politicians etc. Regular workshops are conducted for AIR announcers, prospective teachers and theatre artists about maintenance of voice and further preventive measures to be followed. Public education pamphlets about voice and its care are developed to reach the target population.

Table 41: Details of Students Training.

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No. | Course Level | No. of students trained | No. of Hours |
| 1. | AIISH Interns | 47 | 816 |
| 2. | M.Sc (SLP) | 32 | 389 |
| 3. | Other Institution Interns | 23 | 742 |
|  | **Total** | **102** | **1947** |

**Client Statistics**

Table 42:Details of client statistics.

|  |  |
| --- | --- |
| No. of Clients evaluated | Consultancy |
| **44** | **4** |

1. **Forensic Voice Care Centre**

 Four forensic cases were completed in the current year.

Table 43: Details of Students Training

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No. | Course Level | No. of students trained | No. of Hours |
| 1. | PGDFSST  | 05 | 880 |

1. **PRESCHOOL TRAINING AND SPECIAL EDUCATION**

**Preschool Training for Children with Communication Disorders**

 Preparatory training for schooling is offered to children with different kinds of communication disorders like hearing impairment, mental retardation, cerebral palsy, autism and multiple problems. The training is currently offered in 4 languages, namely, Kannada, Malayalam, Hindi and English. Details of the services offered from April 2009 to March 2010 are as follows:

Table 44:Statistics of preschool services.

|  |  |  |  |
| --- | --- | --- | --- |
| Month & Year | No. of Children | No. of Children | No. of Sessions |
| April, 2009 | 21 | 141 | 1406 |
| May, 2009 | Summer Camp held from 01.05.09 to 30.05.09 between 10am to 1 pm. 53 children attended the Camp |
| June, 2009 | 36 | 166 | 3960 |
| July, 2009 | 36 | 166 | 4120 |
| August, 2009 | 36 | 167 | 3420 |
| September, 2009 | 36 | 159 | 2520 |
| October, 2009 | 36 | 152 | 3420 |
| November, 2009 | 36 | 152 | 3600 |
| December, 2009 | 38 | 185 | 3420 |
| January, 2010 | 38 | 186 | 3615 |
| February, 2010 | 38 | 181 | 3762 |
| March, 2010 | 36 | 170 | 3960 |

No. of sessions per day for each group : 05

No. of sessions handled by teachers : 02 /day

No. of parent teaching sessions : 02 /day

Extra-curricular session : 01 / day

Listening training session (only for Fruits groups) : 03 / week

Duration of each session : 45 minutes

Total No. of hours for each group per day : 4 hours

**Preschool Parent Empowerment Program**

Caregivers of children who are seeking admission to preschool are empowered to handle training session for their children with communication disorders in the preschool premises until admissions are made in the next term of the academic year.

Table 45: Details of children with communication disorders and their caregivers.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Month | Kannada Fruit (10:45-11:30 am) | Kannada Flower/colour (09:00-09:45) | Malayalam Fruit 02.15-3.00 pm | Malayalam Flower/Colour (09.00-09.45 am | Hindi Fruit /Flower/Colour (11.30 am 12.15 pm |
|  | C | S | C | S | C | S | C | S | C | S |
| April 09 | 34 | 89 | 22 | 40 | 16 | 40 | 16 | 40 | 03 | 24 |
| May 09 | 34 | 81 | 23 | 36 | 17 | 30 | 16 | 36 | 03 | 23 |
| June 09 | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| July 09 | 14 | 140 | 13 | 130 | 06 | 60 | 12 | 120 | 01 | 04 |
| August 09 | 17 | 19 | 25 | 19 | 08 | 19 | 15 | 19 | 03 | 19 |
| September 09 | 22 | 14 | 25 | 13 | 08 | 19 | 15 | 14 | 04 | 28 |
| October 09 | 22 | 14 | 25 | 13 | 08 | 19 | 15 | 14 | 05 | 28 |
| November 09 | 22 | 14 | 31 | 19 | 08 | 18 | 21 | 19 | 05 | 18 |
| December 09 | 01 | 11 | 14 | 21 | 12 | 12 | 18 | 12 | 02 | 02 |
| January 10 | 07 | 18 | 16 | 19 | 20 | 19 | 20 | 19 | 04 | 19 |
| February 10 | 07 | 16 | 17 | 16 | 29 | 20 | 21 | 20 | 02 | 19 |
| March 10 | 12 | 20 | 24 | 15 | 22 | 21 | 28 | 22 | 02 | 18 |

**\*C = Children, S = No. of sessions**

**Early Intervention Program**

Young children with communication disorders who have not attained preschool age (2½ years of age) are catered through special early intervention programme which focuses on providing early stimulation for overall development. These services are provided on one-to-one basis and with emphasis on the role of the caregiver. These services will aid in better early development of children with communication disorders and readiness for preschool training. Following are the details of the children, who received services.

Table 46: Details of Delayed Speech with Mental Retardation & Hearing Loss.

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No. | Month & Year | Delayed Speech Language with Hearing Loss | Delayed Speech and language with Mental Retardation |
|  |  | **No. of children** | **No. of sessions** | **No. of children** | **No. of sessions** |
| 1. | June, 2009 | 04 | 08 | 04 | 08 |
| 2 | July, 2009 | 10 | 41 | 01 | 04 |
| 3 | August, 2009 | 14 | 64 | 01  | 06 |
| 4 | September, 2009 | 12 | 57 | 01 | 03 |
| 4 | October, 2009 | 10 | 54 | 01 | 02 |
| 5 | November, 2009 | 17 | 48 | 00 | 00 |
| 6 | December, 2009 | 21 | 35 | 01 | 04 |
| 7 | January, 2010 | 14 | 50 | 01 | 03 |
| 8 | February, 2010 | 08 | 39 | 01 | 04 |
| 9 | March, 2010 | 11 | 44 | 00 | 00 |

**Special Education Services**

School-aged children with communication disorders are supported in the education through various kinds of special educational services, especially with the focus on promoting inclusive education. The table III35 depicts the services delivered for such children.

Table 47: Details of Services delivered.

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No. | Activities | Number served | **Sessions** |
| No. of Clients | DT | Hindi cases |
| 1 | Counselling & Guidance | 64 | NA | 4 | 70 |
| 2 | Placement guidance evaluation | 30 | NA | 3 | 42 |
| 3 | IEP | 03 | NA | -- | 88 |
| 4 | Curricular Support Services for Children with Communication Disorders | 25 | 6 | 4 | 756 |
| 5 | Consultancy for Home-Based Curricular Support | 04 | 1 | -- | 46 |

1. **TECHNOLOGICAL SERVICES**

 The institute is equipped with the state of the art technological equipments to carry out various types of analysis and real time measurements. These measurements help the departments to offer consultancy in terms of electroacoustic measurements and calibration of various equipment used by the departments of AIISH as well as allied professionals.

**DEPARTMENT OF AUDIOLOGY**

**Acoustic Measurements**

The Department is well equipped with real time analyzers, which enables the audiologist to carry out measurement of electro-acoustic characteristics of hearing aids. The measurement helps in the certification of hearing aids. Electro-acoustic characteristics of 141 trial hearing aids were carried out in the reporting year.

**DEPARTMENT OF ELECTRONICS**

####  a) Acoustic measurements

 The department is equipped with state of the art equipments and expertise in the area of acoustic noise measurement. In the report year, the department undertook following consultancy services.

Table 48: Consultancy services undertaken in the field of acoustics and calibrations.

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No. | Nature of consultancy work | Name of firm | No. of consultancy jobs |
| 1 | Noise measurement on Computer server | M/s TUV Reinland, Bangalore  | 1 No. |
| 2 | Noise measurement on Dot matrix printers  | M/s Wipro Peripherals, Mysore | 1 No. |
| 3 | Acoustic measurement and analysis of alarm tones produced by patient care monitor | L & T Medical Systems, Mysore | 2 No. |
| 4 | Noise measurement on Dot matrix printers | M/s TVS Electronics Pvt. Ltd., Chennai  | 1No. |
| 5 | Acoustic measurement and analysis of alarm tones & Mechanical movements produced by ICU Ventilator | M/s ERKADI System, Bangalore  | 1 No. |
| 6 | Installation and commissioning of 5 units of induction loop system | Mercy convent school for the deaf, Mysore | 1 No. |
| 7 | Installation and commissioning of 5 units of induction loop system | Sairanga school for the deaf, Mysore | 1 No. |
| 8 | Electroacoustic evaluation of hearing aids | SSA, project, Malappuram, Kerala | 12 Nos. |
| 9 | Electroacoustic evaluation of hearing aids | State commissioner for the disabled, Chennai | 114 Nos. |
| 10 | Calibration of audiometer | Pvt. Clinic, Mandya | 1 No. |
| 11 | Noise analysis and RT measurements | National Centre for Biological Science, Bangalore | 1 No. |

#### Hearing aid repairs

 Hearing aid repair is another major activity of the Department of Electronics where the facility for service and repair of both body level and BTE hearing aids are available to all hearing aid users at a nominal cost. Table 49 shows the number of hearing aids repaired at the department, during the report year.

#### Table.49: Number of hearing aids repaired.

|  |  |  |
| --- | --- | --- |
| Sl. No. | Type of hearing aid | Quantity |
| 1 | Body level hearing aids | 307 |
| 2 | BTE hearing aids | 147 |
|   | **Total** | **454** |