**OUTREACH SERVICES**

The Institute carries out various outreach services on communication and its disorders in different parts of the country through the Department of Prevention of Communication Disorders (POCD) and Tele-Centre for Prevention of Communication Disorders (TCPD). Also, the Institute has 12 Outreach Service Centres (OSCs) and nineNew-born Screening Centres across the country. The major outreach services carried out during the reporting year are given below.

**Communication Disorder Screening Programmes**

The Institute conducted screening programs for communication disorders in different settings and localities. The individuals participating in the programs were checked for speech, language, and hearing disabilities and provided with diagnostic and therapeutic services.

**New-born/Infant Screening**

This program focuses on screening neonates and infants at risk for communication disorders using various tools such as High-Risk Register for communication disorders, Behavioral Observation Audiometry, Oto Acoustic Emission Screening, and Screening Checklists.

During the reporting year, the screening program was conducted at 15 hospitals in Mysuru, 12 Outreach Service Centres (OSC) and their nearby hospitals, and nine New-born Screening Centres (NBS) of the Institute functioning in different parts of the country. A total of 30067 new-borns were screened. Of these, 4414 were at risk for communication disorders. The details are given in table 1.

**Table 1: Newborn/ Infant Screening**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Hospitals/Immunization Centres** | **Total screened** | **Total No. at risk** |
| **I. Hospitals in Mysuru** |
|  | Ashwini Nursing Home  | 120 | 01 |
|  | Cheluvamba Immunization Centre | 88 | 01 |
|  | Combined Hospital | 37 | 01 |
|  | CSI Holdsworth-Memorial Hospital | 162 | 11 |
|  | Govt. Jayanagar Maternity Hospital | 618 | 14 |
|  | Kamakshi Hospital (KH) | 540 | 03 |
|  | Kamala Raman Hospital | 20 | 01 |
|  | KR Hospital, Cheluvamba Hospital  | 4243 | 95 |
|  | Kyathmanalli Immunization Centre | 198 | 03 |
|  | Mahadeshwara Nursing Home  | 140 | 04 |
|  | Makkalakoota Immunization Centre | 132 | 01 |
|  | NPC Maternity Hospital | 238 | 08 |
|  | Shree Devi Nursing Home  | 148 | 01 |
|  | Sigma Hospital  | 242 | 12 |
|  | Sri Chamundeshwari nursing home | 72 | 02 |
| **Total** | **6998** | **158** |
| **II. Outreach Service Centres** |
|  | All India Institute of Medical Sciences, Bhuvaneshwar, Orissa | 1056 | 189 |
|  | Belagavi Institute of Medical Science, Belagavi, Karnataka | 1515 | 149 |
|  | Bidar Institute of Medical Sciences, Bidar, Karnataka | 2088 | 1830 |
|  | Gulbarga Institute of Medical Sciences, Kalaburgi, Karnataka | 1349 | 63 |
|  | Indira Gandhi Institute of Medical Sciences, Patna, Bihar | 238 | 39 |
|  | Karnataka Institute of Medical Sciences, Hubli, Karnataka | 1464 | 496 |
|  | Kodagu Institute of Medical Science, Kodagu, Karnataka | 1718 | 678 |
| 8. | Primary Health centre (Under Karuna trust), Gumballi, Karnataka  | 134 | 9 |
| *Taluk Hospital, Yelandur, Gumballi, Karnataka\** | 15 | 2 |
| *Community Health Centre, Santhemarahalli, Gumballi, Karnataka\** | 172 | 19 |
| 9. | Sub-divisional Hospital, Sagara Taluk, Karnataka  | 1450 | 48 |
| 10. | Taluk Hospital, Nanjangud, Karnataka  | 769 | 35 |
| *Community Health Centre, Bannuru, Karnataka\** | 1 | 0 |
| *Community Health Centre, Hullahalli, Karnataka\** | 43 | 2 |
| 11. | Taluk General Hospital, KR. Pete, Mandya, Karnataka | 234 | 6 |
| *Sub-divisional hospital, K R Nagar Taluk, Yadavagiri, Mysore, Karnataka\** | 751 | 29 |
| *Primary health center, Akkihebbalu, Mandya, Karnataka\** | 13 | 0 |
| 12. | Vivekananda Memorial hospital, H. D. Kote, Sarguru, Karnataka  | 268 | 19 |
| *St, Mary’s Hospital, HD kote, Sarguru, Karnataka\** | 693 | 92 |
| *Taluk Hospital, H.D. Kote- Immunization, Sarguru, Karnataka\** | 573 | 62 |
| **Total**  | **14544** | **3767** |
| **III. New-born Screening Centres** |
|  | All India Institute of Medical Sciences, Patna | 523 | 14 |
|  | All India Institute of Physical Medicine and Rehabilitation, Mumbai | 419 | 53 |
|  | Indira Gandhi Medical College, Shimla | 570 | 46 |
|  | Jawaharlal Institute of Postgraduate Medical Education and Research JIPMER, Puducherry  | 1229 | 168 |
|  | Jawaharlal Nehru Medical College & Hospital, JLNMCH, Bhagalpur, Bihar  | 1200 | 57 |
|  | King George's Medical University KGMU, Lucknow, Uttar Pradesh | 2071 | 61 |
|  | Post Graduate Institute of Medical Education and Research, New Delhi | 777 | 81 |
|  | Rajendra Institute of Medical Sciences, Ranchi | 221 | 8 |
|  | Sri Devaraj Urs Academy of Higher Education and Research, Kolar, Karnataka  | 1515 | 01 |
| **Total**  | **8525** | **489** |
| **Grand Total**  | **30067** | **4414** |

**\*** *Nearby Health Centres of the Outreach Service Centres*

**Tele-follow up for risk babies**

The new-borns/infants referred during the new-born screening were followed up through telephone calls to parents/caregivers and advised for detailed evaluation at the Department of Clinical Services at AIISH, Mysuru or at the NBS centers /OSCs. A complete test battery was administered for those clients who came for follow-up. The details are given in table 2.

**Table 2: Tele - follow up**

|  |  |  |  |
| --- | --- | --- | --- |
| **Categories** | **AIISH** | **OSC**  | **NBS Centers** |
| Normal speech, language & hearing milestones | 1090 | 2563 | 1421 |
| Mortality  | 14 | 95 | 5 |
| Referred for detailed evaluation | 21 | 32 | 11 |
| Total Phone follow up | 1125 | 2690 | 1437 |

The new-borns/infants who were found at risk for communication disorder even after phone follow up are advised and called up for detailed evaluation at AIISH, Mysuru or at the respective NBS Centers/OSCs. A complete test battery was administered for these clients who came for follow-up. The details are given in table 3.

**Table 3: Follow up Evaluation for Newborns and Infants**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Categories**  | **AIISH** | **OSC** | **NBS Centers** | **Total** |
| Clinically Normal (CN) | 71 | 341 | 162 | 574 |
| Hearing disorder (HI) | 5 | 30 | 24 | 59 |
| Speech Disorder (SD) | - | 6 | 3 | 9 |

**Industrial Screening**

The Institute conducts hearing screening and screening for other communication disorders for the industrial workers and employees repeatedly exposed to loud noises at their work settings. Totally 592 employees were screened, and among them, 162 were referred for detailed evaluation. The employees were also oriented on the harmful effects of noise on hearing, the importance of the hearing conservation program, and the use of hearing protective devices in noisy areas.

**Student Screening**

Nursery, primary school, secondary school, and pre-university college students were screened for communication disorders as a part of the student screening program during the reporting year. Seven hundred eighty-three students were screened, and among them, 11 (1.4%) were identified with ear-related disorders, 36 (4.6%) with hearing loss, and 19 (2.4%) with speech-language problems. They were recommended for follow-up at the Institute.

**Elderly Screening**

Speech, language, and hearing evaluations were conducted for elderly citizens in different localities. A total of 99 elderly citizens were screened for speech, language, and hearing disorders in various community-based camps. Of them, 35 persons passed the screening test. Among the rest, 42 had hearing loss, and 3 had speech, language, cognitive, and swallowing disorders. Twenty-one of the 42 persons with hearing loss had ear infections. Six persons identified in the screening camps were rehabilitated later in the nearby Outreach Service Centre.

**Camp-based Screening**

The Institute organized twenty-one camps to screen citizens for communication disorders in various localities across Karnataka during the reporting year. The camps were organized under the aegis of the Department of POCD, Outreach Service Centres, and the New-born Screening Centres of the Institute. The expert speech, hearing, and allied health professionals of the Institute screened 945 individuals in the camps. The details are given in table 4.

**Table 4: Camp-based Screening**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.****No.** | **Date** | **Location** | **No. of Cases** |
|  | 3.04.2021 | KSRTC Bus Depot, Kolar | 54 |
|  | 20.04.2021 | Lanke, Sarguru | 15 |
|  | 28.04.2021 | Bidrahalli, Sarguru | 12 |
|  | 30.04.2021 | Mullur, Sarguru | 7 |
|  | 20.06.2021 | OSC Sarguru | 20 |
|  | 5.07.2021 | Kenchanahalli, Moorbanth, Borethevarematti, Jaganekote, Kempahadi, hosahalli hadi, Dhonnemadana hadi, HD Kote taluk, Mysuru | 13 |
|  | 29.07.2021 | Huskoor hadi, Devalapurahadi, Kalla halli hadi (A&B), Udugi hadi, Seegodi hadi, Kadabegur, Adnahalli hadi, Kurnegala hadi, HD Kote taluk, Mysuru | 16 |
|  | 3.08.2021 | Basavanagirihadi, Boodaluruhadi, BommulapurahadiAsthihadi, Hosahadi HD Kote taluk, Mysuru | 19 |
|  | 11.08.2021 | Katlla, Nemnallihadi Kemppepura, Kanthanahadi HD Kote taluk, Mysuru | 17 |
|  | 27.08.2021 | Ballehadi, Goluruhadi, Bavali, Anemalahadi, Machurhadi, Thinmanahosahadi, HD Kote taluk Mysuru  | 08 |
|  | 18.09.2021 | Niveditha Nagar, Mysuru | 93 |
|  | 22.09.2021 | District Rural Development Cell, Biligere | 49 |
|  | 24.09.2021 | District Rural Development Cell, Periyapatna  | 56 |
|  | 9.10.2021 | Bigdhgalkatte, Kundapura Taluk, Udupi | 57 |
|  | 10.10.2021 | Madeshwara Colony, Harapanahalli Hobli, Amachvadi Chamrajnagar | 105 |
|  | 20.10.2021 | Yaraganahalli, Mysuru  | 130 |
|  | 23.10.2021 | Ambedkar Bhawan, HD Kote taluk, Mysuru | 30 |
|  | 29.10.2021 | KSRTC Bus Depot, Malur, Kolar | 64  |
|  | 3.12.2021 | PHC Gumballi, Nanjangud taluk, Mysuru | 37 |
|  | 12.12.2021 | Sneha Seva Trust, Bengaluru | 86 |
|  | 18.12.2021 | Government School, Bengaluru | 57 |

**Bedside Screening**

Bedside screening for communication disorders was carried out for the inpatients in K.R. Hospital, Mysuru, and KIMS hospital, Hubli. Of the twelve persons screened, two were identified with motor speech disorders, three with multiple illnesses, and seven with swallowing disorders. They were referred to AIISH for further evaluation.

**Clinical Services at Outreach Service Centers (OSCs)**

Diagnostic and therapeutic services on communication disorders were provided at the Outreach Service Centres (OSCs) of the Institute located in different parts of the country. Six thousand four hundred twenty-seven persons were registered for availing clinical services at the 12 OSCs. The clients were evaluated for speech-language and hearing disorders and provided with speech-language therapy and hearing aids. The details are given in table 5 and table 6.

**Table 5: Speech-Language and Hearing evaluation at the Outreach Service Centres**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sl. No | OSC | Normal | ENT | Total(AUD) | Total(S&P) | Total |
|  | Sub-divisional Hospital (PHC), Sagara | 04 | 00 | 09 | 02 | 15 |
|  | Primary Health Centre (PHC), Gumballi | 06 | 05 | 22 | 01 | 34 |
|  | Vivekananda Memorial Hospital, Sarguru | 00 | 289 | 236 | 11 | 536 |
|  | Taluk Hospital, Nanjangud | 08 | 101 | 144 | 03 | 256 |
| Community Health Centre (CHC), Bannuru | 00 | 00 | 11 | 00 | 11 |
| Community Health Centre (CHC), Hullahalli | 00 | 89 | 64 | 03 | 156 |
|  | Taluk General Hospital, KR Pete | 49 | 14 | 197 | 13 | 273 |
| Taluk General Hospital, KR Nagara | 06 | 05 | 22 | 01 | 34 |
| Primary Health Centre, Akkihebbalu | 04 | 00 | 09 | 02 | 15 |
|  | Gulbarga Institute of Medical Sciences | 41 | 82 | 187 | 32 | 342 |
|  | Kodagu Institute of Medical Sciences, Madikeri | 53 | 65 | 378 | 114 | 610 |
|  | Belagavi institute of medical sciences (BIMS) | 20 | 32 | 119 | 35 | 206 |
|  | Bidar Institute of Medical Sciences, Bidar | 08 | 13 | 91 | 58 | 170 |
|  | All India Institute of Medical Sciences, Bhuvaneshwar, Orissa | 356 | 477 | 869 | 233 | 1935 |
|  | Karnataka Institute of Medical Sciences, Hubli | 84 | 00 | 1405 | 221 | 1710 |
|  | Indira Gandhi Institute of Medical Sciences, Patna | 02 | 00 | 02 | 120 | 124 |
| **Total** | **641** | **1172** | **3765** | **849** | **6427** |

**Table 6: Speech-Language and Hearing Rehabilitation at the Outreach Service Centres**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.**  | **OSC** | **Hearing Aids Dispensed** | **Speech-language therapy**  |
| No. of clients | No. of sessions  |
| Regular Therapy | Tele therapy |
|  | Sub-divisional Hospital, Sagara taluk, Sagara, Karnataka | 01 | 135 | 169 | 294 |
|  | Primary Health centre (Under Karuna trust), Gumballi, Karnataka | 67 | 58 | 130 | 75 |
|  | Vivekananda Memorial hospital, HD kote, Sarguru, Karnataka  | 31 | 88 | 355 | 75 |
|  | Taluk Hospital, Nanjangud, Karnataka  | 23 | 41 | 151 | 127 |
| Community Health Centre, Hullahalli, Karnataka | 01 | 16 | 65 | 56 |
|  | Taluk General Hospital, KR Pete, Mandya, Karnataka  | 41 | 28 | 127 | 23 |
|  | Gulbarga Institute of Medical Sciences, Kalaburgi, Karnataka | 00 | 84 | 139 | 274 |
|  | Kodagu Institute of Medical Science, Kodagu, Karnataka | 68 | 93 | 432 | 159 |
|  | Belagavi Institute of Medical Science, Belagavi, Karnataka | 05 | 48 | 142 | 89 |
|  | Bidar Institute of Medical Sciences, Bidar, Karnataka | 00 | 29 | 128 | 51 |
|  | All India Institute of Medical Sciences, Bhuvaneshwar, Orissa | 00 | 381 | 593 | 0 |
|  | Karnataka Institute of Medical Sciences, Hubli, Karnataka | 00 | 107 | 185 | 52 |
|  | Indira Gandhi Institute of Medical Sciences, Patna, Bihar | 00 | 115 | 124 | 298 |
|  | **Total** | **237** | **1223** | **2740** | **1573** |

**Tele-Assessment and Tele-Intervention Services**

The Tele-Centre for Persons with Communication Disorders (TCPD) of the Institute offers tele-assessment and tele-intervention services to the doorsteps of persons with communication disorders across the country and abroad. The details are given in table 7, 8 & 9.

**Table 7: Disorder-wise Tele-Assessment and Intervention**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Language** | **Fluency** | **Speech** | **Voice** | **Dysphagia** | **Multiple** |
|  | Cases | Sessions | Cases | Sessions | Cases | Sessions | Cases | Sessions | Cases | Sessions | Cases | Sessions |
| **Paediatric** | 44 | 772 | 3 | 24 | 1 | 14 | - | - | - | - | 3 | 97 |
| **Adult** | 12 | 305 | 6 | 70 | 5 | 159 | 1 | 16 |  | - | - | - |
| **Geriatric** | 1 | 52 | - | - | 1 | 31 | - | - | 1 | 2 | 1 | 27 |
|  |  | Paediatric: 0-18years; Adults: 18-65 years; Geriatric: 65 years& above |   |

**Table 8: Country-wise Tele-assessment and Intervention**

|  |  |  |
| --- | --- | --- |
| **Country** | **No. of Cases** | **No. of Sessions** |
| Dubai | 1 | 20 |
| India | 74 | 1475 |
| UK | 3 | 65 |
| US | 1 | 9 |
| **Total** | **79** | **1569** |

**Table 9: State-wise Tele-assessment and Intervention in India**

|  |  |  |
| --- | --- | --- |
| **States**  | **No. of Cases** | **No. of Sessions** |
| Andhra Pradesh | 1 | 9 |
| Assam | 2 | 29 |
| Chandigarh | 1 | 2 |
| Chhattisgarh | 1 | 18 |
| Delhi | 4 | 56 |
| Jharkhand | 2 | 35 |
| Karnataka | 40 | 726 |
| Kerala | 10 | 255 |
| Maharashtra | 2 | 76 |
| Orissa | 2 | 25 |
| Punjab | 1 | 27 |
| Rajasthan | 1 | 2 |
| Secunderabad | 1 | 41 |
| Tamil Nadu | 5 | 142 |
| Uttar Pradesh | 1 | 32 |
| **Grand Total** | **74** | **1475** |