#### **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 16 Outreach Service Centres (OSCs) and nine New-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 programmes for communication disorders in different settings and localities. The individuals participating in the programmes were checked for speech, language and hearing disabilities and provided with diagnostic and therapeutic services.

### **New-born/Infant Screening**

This programme focuses on screening neonates and infants who are 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, screening programme was carried out at the hospitals in Mysuru, Outreach Service Centres (OSC) and their nearby hospitals and Newborn Screening Centres (NBS) of the Institute functioning in different parts of the country. A total of 40132 newborns were screened. Of these, 6074 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							
1.	Ashwini Nursing Home	158	02				
2.	Cheluvamba Immunization Centre	100	01				
3.	Combined Hospital	108	04				
4.	CSI Holdsworth-Memorial Hospital	221	20				
5.	Gopalagowda Hospital	12	-				
6.	Govt. Jayanagar Maternity Hospital	901	28				
7.	Kamakshi Hospital (KH)	738	08				
8.	Kamala Raman Hospital	21	01				
9.	KR Hospital, Cheluvamba Hospital	5678	138				
10.	Kyathmanalli Immunization Centre	319	09				
11.	Mahadeshwara Nursing Home	187	04				
12.	Makkalakoota Immunization Centre	191	03				
13.	NPC Maternity Hospital	303	09				
14.	Shree Devi Nursing Home	192	02				
15.	Sigma Hospital	317	12				
16.	SMTDH	55	3				
17.	SMTDH Immunization Centre	12	-				
18.	Sri Chamundeshwari nursing home	94	03				
	Total	9607	247				
	II. Outreach Service Centres						
1.	All India Institute of Medical Sciences, Bhuvaneshwar, Orissa	1508	410				
2.	All India Institute of Medical Sciences, Bhopal, Madhyapradesh	57	01				
3.	All India Institute of Medical Sciences, Jodhpur, Rajasthan	20	01				
4.	Belagavi Institute of Medical Science, Belagavi, Karnataka	2391	233				
5.	Bidar Institute of Medical Sciences, Bidar, Karnataka	2479	1834				
6.	Gulbarga Institute of Medical Sciences, Kalaburgi, Karnataka	1989	620				
7.	Indira Gandhi Institute of Medical Sciences, Patna, Bihar	369	146				
8.	Karnataka Institute of Medical Sciences, Hubli, Karnataka	2118	644				
9.	Kodagu Institute of Medical Science, Kodagu, Karnataka	2297	761				

10.	Mahatma Gandhi Memorial Medical College, Indore, Madhya Pradesh	77	38
	Primary Health Centre (Under Karuna trust), Gumballi, Karnataka	157	17
11.	Taluk Hospital, Yelandur, Gumballi, Karnataka*	28	6
	Community Health Centre, Santhemarahalli, Gumballi, Karnataka*	203	30
12.	Sub-divisional Hospital, Sagara Taluk, Karnataka	2078	121
13.	Sub-divisional Hospital, Kundapura, Karnataka	21	21
	Taluk Hospital, Nanjangud, Karnataka	795	45
14.	Community Health Centre, Bannuru, Karnataka*	17	0
	Community Health Centre, Hullahalli, Karnataka*	46	2
	Taluk General Hospital, KR. Pete, Mandya, Karnataka	260	11
15.	Sub-divisional hospital, K R Nagar Taluk, Yadavagiri, Mysore, Karnataka*	778	38
	Primary health center, Akkihebbalu, Mandya, Karnataka*	14	1
	Vivekananda Memorial hospital, H. D. Kote, Sarguru, Karnataka	341	31
16.	St, Mary's Hospital, HD kote, Sarguru, Karnataka*	928	137
	Taluk Hospital, H.D. Kote- Immunization, Sarguru, Karnataka*	881	137
	Total	19852	5285
	III. New-born Screening Centres		
1.	All India Institute of Medical Sciences, Patna	613	26
2.	All India Institute of Physical Medicine and Rehabilitation, Mumbai	450	53
3.	All India Institute of Physical Medicine and Rehabilitation, Mumbai (TLH)	23	01
4.	Indira Gandhi Medical College, Shimla	570	46
5.	Jawaharlal Institute of Postgraduate Medical Education and Research JIPMER, Puducherry	1229	168
6.	Jawaharlal Nehru Medical College & Hospital, JLNMCH, Bhagalpur, Bihar	1575	67
7.	King George's Medical University KGMU, Lucknow, Uttar Pradesh	2893	71
8.	Post Graduate Institute of Medical Education and Research, New Delhi	1044	101
9.	Rajendra Institute of Medical Sciences, Ranchi	221	8
10.	Sri Devaraj Urs Academy of Higher Education and Research, Kolar, Karnataka	2055	01
	Total	10673	542
	Grand Total	40132	6074

<sup>\*</sup> 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	1708	3441	1857
milestones			
Mortality	32	142	16
Referred for detailed evaluation	37	50	19
Total Phone follow up	1777	3633	1892

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	Total
_			Centers	
Clinically Normal (CN)	86	376	182	644
Hearing disorder (HI)	11	36	30	77
Speech Disorder (SD)	-	8	3	11

#### **Industrial Screening**

The Institute conducts hearing screening and screening for other communication disorders for the industrial workers and employees who are repeatedly exposed to loud noises at their work settings. Totally, 688 employees were screened, and among them, 237 were identified with hearing impairment. The employees were also oriented on harmful effects of noise on hearing, importance of hearing conservation program and also 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 programme during the reporting year. Totally, 904 students were screened and among them 37 (4%) were identified with ear-related disorders, 37 (4%) with hearing loss and 21 (2%) with speech-language disorders. They were recommended for follow-up at the Institute.

### **Elderly Screening**

Speech, language and hearing evaluations were carried out for elderly citizens in different localities. A total of 137 elderly citizens were screened for speech, language and hearing disorders in various community based camps. Of them, 60 persons passed the screening test. Among the rest, 48 had hearing loss and seven had speech, language, cognitive and swallowing disorders. Thirty-two of the 48 persons with hearing loss had ear infections. 12 persons identified in the screening camps were rehabilitated later in the nearby Outreach Service Centre.

### **Camp-based Screening**

The Institute organized thirty-one camps for screening the 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 1518 individuals in the camps. The details are given in table 4.

Table 4: Camp-based Screening

Sl. No.	Date	Location	No. of Cases
1.	3.04.2021	KSRTC Bus Depot, Kolar	54
2.	20.04.2021	Lanke, Sarguru	15
3.	28.04.2021	Bidrahalli, Sarguru	12
4.	30.04.2021	Mullur, Sarguru	7
5.	20.06.2021	OSC Sarguru	20
6.	5.07.2021	Kenchanahalli, Moorbanth, Borethevarematti, Jaganekote, Kempahadi, hosahalli hadi, Dhonnemadana hadi, HD Kote taluk, Mysuru	13
7.	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
8.	3.08.2021	Basavanagirihadi, Boodaluruhadi, Bommulapurahadi Asthihadi, Hosahadi HD Kote taluk, Mysuru	19
9.	11.08.2021	Katlla, Nemnallihadi Kemppepura, Kanthanahadi HD Kote taluk, Mysuru	17
10.	27.08.2021	Ballehadi, Goluruhadi, Bavali, Anemalahadi, Machurhadi, Thinmanahosahadi, HD Kote taluk Mysuru	08
11.	18.09.2021	Niveditha Nagar, Mysuru	93
12.	22.09.2021	District Rural Development Cell, Biligere	49
13.	24.09.2021	District Rural Development Cell, Periyapatna	56
14.	9.10.2021	Bigdhgalkatte, Kundapura Taluk, Udupi	57
15.	10.10.2021	Madeshwara Colony, Harapanahalli Hobli, Amachvadi Chamrajnagar	105
16.	20.10.2021	Yaraganahalli, Mysuru	130
17.	23.10.2021	Ambedkar Bhawan, HD Kote taluk, Mysuru	30
18.	29.10.2021	KSRTC Bus Depot, Malur, Kolar	64
19.	3.12.2021	PHC Gumballi, Nanjangud taluk, Mysuru	37
20.	12.12.2021	Sneha Seva Trust, Bengaluru	86
21.	18.12.2021	Government School, Bengaluru	57
22.	17.02.2022	Government School, Kollegala	96
23.	27.02.2022	Sai Mandir, Raja Bazar, Patna, Bihar	60
24.	2.03.2022 to 5.03.2022	AIIPMR, Mumbai	38
25.	3.03.2022	Chinmaya Vidya Kendra High School, Ejipura, Bengaluru	28
26.	3.03.2022	Taluk Hospital, KR Nagara, Mysuru	10
27.	9.03.2022	State Home for Women, Vijayanagar, Mysuru	39
28.	10.03.2022 & 14.03.2022	Shiralkoppa Community Healthcare Centre, Shiralkoppa, Shikaripur, Shimogga and SDH Sagara, Shimogga, Karnataka	11

29.	17.03.2022	Rotary Club, Station Road, Hospete	116
30.	23.03.2022	Maddur Colony, Gundlupet, Chamrajnagar	53
31.	29.03.2022	Sarkari Madhari Hiriya Prathamika Shaale, Hannur	122

### **Bedside Screening**

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

## Clinical Services at the 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. Totally, 9206 persons were registered for availing clinical services at the 20 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
1.	Sub-divisional Hospital (PHC), Sagara	09	31	45	03	52
2.	Primary Health Centre (PHC), Gumballi	06	31	48	01	60
3.	Vivekananda Memorial Hospital, Sarguru	13	303	263	17	569
	Taluk Hospital, Nanjangud	08	131	227	08	343
4.	Community Health Centre (CHC), Bannuru	0	07	16	0	23
	Community Health Centre (CHC), Hullahalli	0	92	64	03	159
	Taluk General Hospital, KR Pete	55	58	262	14	340
5.	Taluk General Hospital, KR Nagara	06	05	22	01	34
	Primary Health Centre, Akkihebbalu	04	00	09	02	15
6.	Gulbarga Institute of Medical Sciences	44	97	227	90	440
7.	Kodagu Institute of Medical Sciences, Madikeri	191	195	790	154	1062
8.	Belagavi Institute of Medical Sciences, Belgaum	49	200	316	128	496

9.	Bidar Institute of Medical Sciences, Bidar	10	42	166	84	271
10.	All India Institute of Medical Sciences, Bhuvaneshwar, Orissa	366	493	895	324	2052
11.	Karnataka Institute of Medical Sciences, Hubli	102	0	1974	317	2375
12.	Indira Gandhi Institute of Medical Sciences, Patna	03	0	02	148	152
13.	All India Institute of Medical Sciences, Bhopal,	21	107	128	77	205
14.	All India Institute of Medical Sciences, Jodhpur	00	00	00	52	52
15.	Community Health Center, Malappuram, Kerala	02	10	12	69	81
16.	Gandhi Medical College, Bhopal, Madhya Pradesh	04	75	75	13	167
17.	Government Medical College Hospital, Surguja, Chattisgarh	00	20	20	03	23
18.	Lok Nayak Hospital, New Delhi	00	00	00	122	122
19.	Mahatama Gandhi Memorial Medical college, Indore, Madhya Pradesh		17	18	29	47
20.	Subdivision Hospital, Kundapura, Karnataka	05	59	59	07	66
	Total	899	1973	5638	1666	9206

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

			Speec	h-language t	herapy	
Sl No.	OSC	Hearing Aids	No. of	No. of sessions		
51110.	Osc	Dispensed	clients	Regular Therapy	Tele therapy	
1.	Sub-divisional Hospital, Sagara taluk, Sagara, Karnataka	10	135	169	294	
2.	Primary Health centre (Under Karuna trust), Gumballi, Karnataka	76	71	157	80	
3.	Vivekananda Memorial hospital, HD kote, Sarguru, Karnataka	39	113	552	75	
	Taluk Hospital, Nanjangud, Karnataka	31	46	167	127	
4.	Community Health Centre, Hullahalli, Karnataka	01	16	65	56	
5.	Taluk General Hospital, KR Pete, Mandya, Karnataka	41	34	141	23	
6.	Gulbarga Institute of Medical Sciences, Kalaburgi, Karnataka	00	107	225	274	
7.	Kodagu Institute of Medical Science, Kodagu, Karnataka	71	127	693	159	
8.	Belagavi Institute of Medical Science, Belagavi, Karnataka	14	55	167	89	
9.	Bidar Institute of Medical Sciences, Bidar, Karnataka	00	49	168	67	

10.	All India Institute of Medical Sciences,	00	638	810	0
	Bhuvaneshwar, Orissa  Karnataka Institute of Medical Sciences,				
11.	Hubli, Karnataka	00	139	268	53
12.	Indira Gandhi Institute of Medical Sciences, Patna, Bihar	00	129	148	360
13.	All India Institutes of Medical Sciences (AIIMS), Jodhpur, Rajasthan	00	64	87	00
14.	Lok Nayak Hospital, New Delhi	00	64	100	00
15.	All India Institutes of Medical Sciences (AIIMS), Bhopal, Madhya Pradesh	00	24	75	00
16.	Gandhi Medical College, Bhopal, Madhya Pradesh	00	13	29	00
17.	Community Health Center, Malappuram, Kerala	00	59	215	00
18.	Government Medical College Hospital, Surguja, Chattisgarh	00	02	01	00
19.	Mahatama Gandhi Memorial Medical college, Indore, Madhya Pradesh	00	37	19	00
20.	Subdivision Hospital, Kundapura, Karnataka	00	07	25	00
	Total	283	1929	4281	1657

### **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	64	841	6	38	3	26	-	-	-	-	4	99
Adult	13	306	7	74	5	159	1	16		-	-	-
Geriatric	3	63	-	-	2	45	-	-	2	9	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	2	24
India	105	1605
UK	3	65
US	1	9
Total	111	1703

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

States	No. of Cases	No. of Sessions
Andhra Pradesh	2	15
Assam	4	36
Bihar	1	1
Chandigarh	1	2
Chhattisgarh	2	19
Delhi	4	56
Himachal Pradesh	1	13
Jharkhand	2	35
Karnataka	54	780
Kerala	13	264
Maharashtra	3	80
Orissa	2	25
Punjab	1	27
Rajasthan	3	8
Secunderabad	1	41
Telangana	2	7
Tamil Nadu	4	164
Uttar Pradesh	1	32
<b>Grand Total</b>	101	1605