#### **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 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 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 Newborn 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.	Hospitals/Immunization Centres	Total	Total No. at
No	I. Hospitals in Mysuru	screened	risk
1.	Ashwini Nursing Home	120	01
2.	Cheluvamba Immunization Centre	88	01
3.	Combined Hospital	37	01
4.	CSI Holdsworth-Memorial Hospital	162	11
5.	Govt. Jayanagar Maternity Hospital	618	14
6.	Kamakshi Hospital (KH)	540	03
7.	Kamala Raman Hospital	20	01
8.	KR Hospital, Cheluvamba Hospital	4243	95
9.	Kyathmanalli Immunization Centre	198	03
10.	Mahadeshwara Nursing Home	140	04
11.	Makkalakoota Immunization Centre	132	01
12.	NPC Maternity Hospital	238	08
13.	Shree Devi Nursing Home	148	01
14.	Sigma Hospital	242	12
15.	Sri Chamundeshwari nursing home	72	02
10.	Total	6998	158
	II. Outreach Service Centres	0330	
1.	All India Institute of Medical Sciences,	1056	100
1.	Bhuvaneshwar, Orissa	1056	189
2.	Belagavi Institute of Medical Science, Belagavi, Karnataka	1515	149
3.	Bidar Institute of Medical Sciences, Bidar, Karnataka	2088	1830
4.	Gulbarga Institute of Medical Sciences, Kalaburgi, Karnataka	1349	63
5.	Indira Gandhi Institute of Medical Sciences, Patna, Bihar	238	39
6.	Karnataka Institute of Medical Sciences, Hubli, Karnataka	1464	496
7.	Kodagu Institute of Medical Science, Kodagu, Karnataka	1718	678
	Primary Health centre (Under Karuna trust), Gumballi, Karnataka	134	9
8.	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
	Taluk General Hospital, KR. Pete, Mandya, Karnataka	234	6
11.	Sub-divisional hospital, K R Nagar Taluk, Yadavagiri, Mysore, Karnataka*	751	29
	Primary health center, Akkihebbalu, Mandya, Karnataka*	13	0
	Vivekananda Memorial hospital, H. D. Kote, Sarguru, Karnataka	268	19
12.	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		
1.	All India Institute of Medical Sciences, Patna	523	14
2.	All India Institute of Physical Medicine and Rehabilitation, Mumbai	419	53
3.	Indira Gandhi Medical College, Shimla	570	46
4.	Jawaharlal Institute of Postgraduate Medical Education and Research JIPMER, Puducherry	1229	168
5.	Jawaharlal Nehru Medical College & Hospital, JLNMCH, Bhagalpur, Bihar	1200	57
6.	King George's Medical University KGMU, Lucknow, Uttar Pradesh	2071	61
7.	Post Graduate Institute of Medical Education and Research, New Delhi	777	81
8.	Rajendra Institute of Medical Sciences, Ranchi	221	8
9.	Sri Devaraj Urs Academy of Higher Education and Research, Kolar, Karnataka	1515	01
	Total	8525	489
	Grand Total	30067	4414

<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	1090	2563	1421
milestones			
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	Total
_			Centers	
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

S1.	Date	Location	
No.		2000000	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	105
		Chamrajnagar	
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

## **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
1.	Sub-divisional Hospital (PHC), Sagara	04	00	09	02	15
2.	Primary Health Centre (PHC), Gumballi	06	05	22	01	34
3.	Vivekananda Memorial Hospital, Sarguru	00	289	236	11	536
	Taluk Hospital, Nanjangud		101	144	03	256
4.	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
5.	Taluk General Hospital, KR Nagara	06	05	22	01	34
	Primary Health Centre, Akkihebbalu		00	09	02	15
6.	Gulbarga Institute of Medical Sciences	41	82	187	32	342

7.	Kodagu Institute of Medical Sciences, Madikeri	53	65	378	114	610
8.	Belagavi institute of medical sciences (BIMS)	20	32	119	35	206
9.	9. Bidar Institute of Medical Sciences, Bidar		13	91	58	170
10.	All India Institute of Medical Sciences, Bhuvaneshwar, Orissa		477	869	233	1935
11.	11. Karnataka Institute of Medical Sciences, Hubli		00	1405	221	1710
12. 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

		** '	Speech-language therapy			
Sl No.	OSC	Hearing Aids	No. of	No. of sessions		
31110.	OSC	Dispensed	clients	Regular Therapy	Tele therapy	
1.	Sub-divisional Hospital, Sagara taluk, Sagara, Karnataka	01	135	169	294	
2.	Primary Health centre (Under Karuna trust), Gumballi, Karnataka	67	58	130	75	
3.	Vivekananda Memorial hospital, HD kote, Sarguru, Karnataka	31	88	355	75	
	Taluk Hospital, Nanjangud, Karnataka	23	41	151	127	
4.	Community Health Centre, Hullahalli, Karnataka	01	16	65	56	
5.	Taluk General Hospital, KR Pete, Mandya, Karnataka	41	28	127	23	
6.	Gulbarga Institute of Medical Sciences, Kalaburgi, Karnataka	00	84	139	274	
7.	Kodagu Institute of Medical Science, Kodagu, Karnataka	68	93	432	159	
8.	Belagavi Institute of Medical Science, Belagavi, Karnataka	05	48	142	89	
9.	Bidar Institute of Medical Sciences, Bidar, Karnataka	00	29	128	51	
10.	All India Institute of Medical Sciences, Bhuvaneshwar, Orissa	00	381	593	0	
11.	Karnataka Institute of Medical Sciences, Hubli, Karnataka	00	107	185	52	
12.	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

	Lan	iguage	Flu	uency	Sı	eech	V	<sup>7</sup> oice	Dys	sphagia	Mu	ltiple
	Cases	Sessions	Cases	Sessions	Cases	Sessions	Cases	Sessions	Cases	Sessions	Cases	Session
												S
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
	Cases	
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
<b>Grand Total</b>	74	1475