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 13 New-born Screening Centres across the country. Of the 12 OSCs, four were opened during the reporting year. 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 abilities 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 17 hospitals in Mysuru, 12 Outreach Service Centres (OSC) and their nearby hospitals and 13 Newborn Screening Centres (NBS) of the Institute functioning in different parts of the country. A total of 34051 newborns were screened. Of these, 2340 were at risk for communication disorders. The details are given in table 1.

Table 1: Newborn/Infant Screening

S1. No	Hospitals/Immunization Centers	Total screened	Total No. at risk
	I. Hospitals in Mysuru	1	
1.	KR Hospital, Cheluvamba Hospital	3570	143
2.	Kamakshi Hospital	551	06
3.	Mission Hospital (MH)	79	25
4.	Chamundeshwari Nursing Home	45	00
5.	Ashwini Nursing Home	63	00
6.	Shree Devi Nursing Home	117	00
7.	St. Joseph's Hospital	01	00
8.	Mahadeshwara Nursing Home	79	02
9.	Sigma Hospital	307	04
10.	Jayanagar Maternity Hospital	317	02
11.	NPC Maternity Hospital	53	03
12.	Makkalakoota - Immunization Centre	90	01
13.	Immunization Centre, Kyathmanalli	35	00
14.	Lakshmidevamma Shankarshetty Maternity	18	00
14.	Hospital	10	00
15.	Seth Mohandas Tulsidas Maternity Hospital	90	00
16.	Gopala Gowda Shanthaveri Memorial Hospital	11	01
17.	Brindavan Hospital	16	00
	Total	5442	187
	II. Outreach Service Centers		
1.	Sub-divisional Hospital, Sagara Taluk, Karnataka (OSC)	917	38
	Primary Health centre (Under Karuna trust), Gumballi, Karnataka (OSC)	123	19
2.	Taluk Hospital, Yelandur, Gumballi, Karnataka*	33	05
	Community Health Centre (CHC), Santhemarahalli, Gumballi, Karnataka (Only newborn screening) *	89	12
	Vivekananda Memorial hospital, H. D. Kote, Sarguru, Karnataka (OSC)	460	64
3.	St, Mary's Hospital, HD kote, Sarguru, Karnataka*	1159	133
	Taluk Hospital, H. D. Kote- Immunization, Sarguru, Karnataka*	879	64
	Taluk Hospital, Nanjangud, Karnataka (OSC)	298	00
4.	Community Health Centre (CHC), Hullahalli, Karnataka*	08	00
5.	Taluk General Hospital, KR. Pete, Mandya, Karnataka (OSC)	270	10

Sub-divisional hospital, K R Nagar Taluk, Yadavagiri, Mysore, Karnataka*	145	02
6. Gulbarga Institute of Medical Sciences, Kalaburgi, Karnataka	371	160
7. Kodagu Institute of Medical Science, Kodagu, Karnataka	2097	66
8. Belagavi Institute of Medical Science, Belagavi, Karnataka	1055	122
9. Bidar Institute of Medical Sciences (BRIMS), Bidar, Karnatka	53	38
10. All India Institute of Medical Sciences (AIIMS), Bhuvaneshwar, Orissa	13	07
11. Karnataka Institute of Medical Sciences(KIMS), Hubli, Karnataka	94	49
12. Indira Gandhi Institute of Medical Sciences (IGIMS), Patna, Bihar	07	07
Total	8071	796
III. New-born Screening Centers		
1. All India Institute of Medical Science, Patna	49	2
2. All India Institute of Physical Medicine and Rehabilitation, Mumbai	64	11
3. Janana Hospital & JLNMCH, Ajmer	4135	105
4. Jawaharlal Nehru Medical College & Hospital, Bhagalpur, Bihar	1210	130
5. JIPMER, Puducherry	4658	388
6. King George's Medical University, Lucknow	680	90
7. NetajiSubhash Chandra Bose Medical College, Jabalpur	3791	366
8. Post Graduate Institute of Medical Education and Research, New Delhi	698	36
9. Rajendra Institute of Medical Sciences, Baritayu, Ranchi	1631	68
10. Regional Institute of Medical Sciences, Imphal	467	32
Sri Devaraj Urs Academy of Higher Education and Research, Kolar	1049	0
12. Sri Ramachandra Bhanj Medical College and Hospital, Cuttack	1646	65
13. Vivekananda Memorial Hospital, HDKote, Sarguru	460	64
Total	20538	1357
Grand Total	34051	2340

^{*}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	572	1621	1015
& hearing milestones			
Referred for detailed	18	136	36
evaluation			
Total Phone follow up	590	1757	1051

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)	8	219	251	478
Hearing disorder (HI)	00	11	171	182
Speech Disorder (SD)	01	03	41	45

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, 490 employees were screened, and among them, 162 were referred for detailed evaluation. 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. Totally, 76 employees attended for the detailed audiological evaluation at the Institute. Of the 152 ears tested, 17 had

normal hearing, 47 minimal hearing loss, 74 mild hearing loss, 13 moderate hearing loss and one moderately severe hearing loss.

Student Screening

Nursery, primary school, secondary school and PU college students were screened for communication disorders as a part of the school screening programme during the reporting year. Totally, 2642 students were screened and among them 131 (4.9%) were identified with ear-related disorders, 125 (4.7%) with hearing loss and 75 (2.8%) 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. Totally, 64 elderly citizens were screened and among them 24 persons passed the hearing test. The remaining 40 elders had hearing loss (26 nos.), speech-language disorders (14 nos.), cognitive disorders (11 nos.), ENT issues, and swallowing disorders (2 nos.).

Camp-based Screening

The Institute organized seventy-seven 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 5936 individuals for communication disorders in the camps. The details are given in table 4.

Table 4: Camp-based Screening

S1. No.	Date	Location	No. of Cases	
1	16.06.2020	Hanchipura PHC,	05	
1.	10.00.2020	Heggadadevanakote taluk,Mysuru	0.5	
2.	18.06.2020	Hampapura Anganawadi,	07	
۷.	16.06.2020	Heggadadevanakote taluk,Mysuru	07	
3.	18.06.2020	Jinnalli Anganawadi, Sargur, Mysuru	07	

4.	19.06.2020	N. Belthur PHC, Heggadadevanakote taluk, Mysuru	30
5.	20.06.2020	Annuru PHC, Maddur taluk, Mandya	14
6.	22.06.2020	Mulluru PHC, Kollegala taluk, Chamarajanagara	12
7.	23.06.2020	Savve Anganawadi, Heggadadevanakote taluk,Mysuru	30
8.	24.06.2020	Neralekuppe PHC, Piriyapatna, Mysuru	60
9.	25.06.2020	Kollegala Anganawadi, Chamarajanagara	11
10.	26.06.2020	Kenchenahalli, Bidrahalli, Anganawadi, Bengaluru	22
11.	01.07.2020	Koolya Middle School, HD Kote taluk, Mysuru	14
12.	01.07.2020	Itnahebbal PHC, Mysuru	62
13.	10.07.2020	Kothegala PHC, Hunsur taluk, Mysuru	32
14.	02.09.2020	Dharmapura Anganawadi, Hunsur taluk, Mysuru	31
15.	09.09.2020	Chowthi Anganwadi, Periyapatna taluk, Mysuru	30
16.	16.09.2020	Kittur Anganwadi, Periyapatna taluk, Mysuru	31
17.	23.09.2020	Anganwadi, Hunsur taluk, Mysuru	29
18.	30.09.2020	SeegurAnganwadi, Periyapatnataluk, Mysuru	31
19.	07.10.2020	Doddanerale, Anganawadi, Periyapatnataluk, Mysuru	31
20.	14.10.2020	Manuganahalli, Anganwadi, Hunsur taluk, Mysuru	22
21.	21.10.2020	Bettadapura, Anganwadi, Periyapatnataluk, Mysuru	24
22.	16.10.2020 to 21.10.2020	Viveka Rural Livelihood Centre Kenchanahalli, HD Kote taluk, Mysuru	14
23.	04.11.2020	Somanahalli, Anganawadi, Hunsur taluk, Mysuru	26

24.	12.11.2020	Bettadpura, Anganwadi, Periyapatna taluk, Mysuru	31
25.	12.11.2020	Vivekananda Memorial Hospital, Saragurtaluk, Mysuru	22
26.	18.11.2020	Hosakote, Rathnapuri-Anganawadi, Hunsur taluk, Mysuru	29
27.	19.11.2020 to 23.11.2020	Viveka Rural Livelihood Centre Kenchanahalli, HD Kote taluk, Mysuru	15
28.	25.11.2020	Gorahalli, Kullanakoppulu- Anganwadi-Periyapatna taluk, Mysuru	22
29.	28.12.2020 to 01.01.2021	Viveka Rural Livelihood Centre, Kenchanahalli, HD Kote taluk, Mysuru	13
30.	06.01.2021	Arvey, Anganawadi, Hunsur taluk, Mysuru	10
31.	13.01.2021	Channakesavapura, Anganwadi, Periyapatna taluk, Mysuru	16
32.	16.01.2021	Vedavysa Yoga foundation, Mysuru	33
33.	20.01.2021	Hearing screening at Halekere, Anganwaadi, Periyapatna taluk, Mysuru	36
34.	19.01.2021 to 22.01.2021	Residential camp for Cerebral Palsy, Nanjangud taluk, Mysuru	24
35.	25.01.2021	School Screening Camp, Viveka School of Excellence, Sarguru taluk, Mysuru	56
36.	27.01.2021	Ichooru,Anganwadi, Periyapatna taluk, Mysuru	21
37.	28.01.2021	L&T, Bengaluru	283
38.	29.01.2021	Devirammannahalli Punchaya Office, Nanjangudu taluk, Mysuru	50
39.	02.02.2021	Inner wheel rotary club, Hadinaru village, Mysuru	104
40.	03.02.2021	Anganawadi, Hunsur taluk, Mysuru	40
41.	05.02.2021	Govt High school, Varuna Hobli, Mysuru	294
42.	05.02.2021	Government High school, Varuna Hobli, Mysuru	294

43.	09.02.2021	Govt High school, Belavadi taluk, Mysuru	97
44.	09.02.2021	Government High school, Belavadi taluk, Mysuru	97
45.	10.02.2021	JP Hindustan First Grade College, Mysuru	136
46.	10.02.2021	Anganawadi, Hunsur taluk, Mysuru	33
47.	10.02.2021	JP Hindustan First Grade College, Mysuru	136
48.	12.02.2021	Adarsha Vidyalaya Govt School, Mysuru	264
49.	12.02.2021	Adarsha Vidyalaya Govt School, Mysuru	264
50.	16.02.2021 & 17.02.2021	Sree Nataraja Public School, Mysuru	204
51.	16.02.2021 & 17.02.2021	Sree Nataraja Public school, Mysuru	204
52.	19.02.2021	Government High school, Varakodu Varuna Hobli, Mysuru	174
53.	19.02.2021	Government High school, Varakodu Varuna Hobli, Mysuru	174
54.	23.02.2021	University of Mysore, Mysuru	102
55.	24.02.2021	Anganwaadi Bhuvanahalli, Periyapatna taluk, Mysuru	37
56.	25.02.2021	Railway station premises, Mysuru	155
57.	26.02.2021	Govt High School, Hommaragalli, HD Kote taluk, Mysuru	362
58.	26.02.2021	Govt.High school, Hommaragalli, HD Kote Taluk, Mysuru	362
59.	01.03.2021	Mysore City Corporation, Mysuru	173
60.	02.03.2021	Govt High School, Choranahalli, Varuna Hobli, Mysuru	85
61.	03.03.2021	University of Mysore, Mysuru	129
62.	03.03.2021	King George's Medical University, Lucknow, Uttar Pradesh	54
63.	08.03.2021	Govt. School, HD Kote taluk, Mysuru	26
64.	10.03.2021	Rotary Vidya Samsthe, Hunsur taluk, Mysuru	36

65.	01.03.2021 &	VMH, Sarguru taluk, Mysuru	60
00.	13.03.2021	Viviri, bargara talak, iviy sara	00
66.	17.03.2021	Angawadi, Maraduru, Mysuru	34
67.	17.03.2021	Anganwadi, Hosuru, Mysuru	14
68.	20.03.2021	Tribal health resource center, B R Hills, Yelandur taluk, Chamarajanagar	14
69.	21.03.2021	Gajera, Jambusar taluk, Gujarat	67
70.	21.03.2021	Ankhi, Jambusar taluk, Gujarat	41
71.	22.03.2021	Jambusarvill, Jambusartaluk, Gujarat	41
72.	22.03.2021	Amod, Amodtaluk, Gujarat	31
73.	23.03.2021	Buva, Amod taluk, Gujarat	18
74.	23.03.2021	Samni, Gujarat	44
75.	24.03.2021	Anganwadi, Periyapatna taluk, Mysuru	60
76.	24.03.2021	Karnataka Power Cooperation	207
76.	& 25.03.2021	Limited, Jog and Kargal, Shivamoga	207
77.	31.03.2021	Anganwadi, Hunsur, Sargur taluk, Mysuru	33

Screening the General Public

The general public were screened for speech, language and hearing disorders at the Department of POCD at AIISH and Outreach Service Centresat Belagavi, Kalaburgi, Nanjangud, Gumballi, Akkihebbalu, Sarguru and Sagara. Totally, 2648 persons were screened and among them, 605 had hearing loss, 95 had speech-language disorders and 14 ENT issues. The affected persons were provided with appropriate rehabilitation services.

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. Totally, 2633 persons were registered for availing clinical services at the 14 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 table5and table 6.

Table5: Speech-Language and Hearing evaluation at the Outreach Service Centers

		Outreach Service Centers													
Type of Disorders	Taluk Hospital, Nanjangud	Primary Health Centre (PHC), Hullahalli	Primary Health Centre (PHC). Akkihebbal	Taluk General Hospital, KR Pete	Primary Health Centre (PHC), Gumballi	Sub-divisional Hospital, Sagara (PHC) Taluk	VMH, Sarguru	BIMS Belagavi	GIMS, Kalburgi	KIMS, Kodagu	AIIMS, Bhuvaneshwar	KIMS, Hubli	BRIMS, BidaR	IGIMS, Patna	Total
			Hear	ing di	sorders	(Ear-wise	data)					1			
Normal	47	02	02	88	04	31	70	912	206	444	4	23	2	-	1835
Conductive	24	-	-	41	06	31	33	50	106	53	4	61	2	-	411
Sensori neural	40	30	12	62	109	42	41	247	334	321	12	72	48	-	1370
Mixed	17	01	08	66	12	23	21	52	219	78	5	43	12	-	557
No type (Minimal & Profound)	18	01	-	59	19	55	51	133	429	226	25	71	6	-	1093
Aud-Total (ears)	146	34	22	316	150	182	216	1394	1294	1122	50	270	70	-	5266
Aud-Total (Individuals)	73	17	11	158	75	91	108	697	647	561	25	135	35	-	2633
			$\mathbf{S}_{\mathbf{l}}$	eech-l	Languag	ge Disorde	rs								
Voice	01	-	-	-	-	-	02	02	07	06	17	13	-	01	49
Fluency	04	-	-	03	-	02	02	08	12	13	2	4	-	-	50
Articulation disorders	02	01	-	02	01	06	05	05	38	12	15	4	-	01	92
Language disorders	09	03	03	19	09	25	49	72	110	29	21	12	06	01	368
Total (Individuals)	16	04	03	24	10	33	58	87	167	60	55	33	06	03	559

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

		Speech-language therapy				
Outreach Service Center	Hearing Aids Dispensed	No. of clients	No. of regular sessions	No. of Tele- sessions		
Taluk Hospital, Nanjungudu	31	40	45	172		
Kodagu Institute of Medical Science, Kodagu	22	97	90	484		
Taluk General Hospital, KR Pet	17	26	-	189		
Vivekananda Memorial hospital, HD Kote, Sarguru	100	84	102	102		
Sub-divisional Hospital, Sagara	4	113	125	524		
Primary Health Centre (Under Karuna trust), Gumballi	19	27	34	103		

Taluk Hospital, Akkihebbalu	10	4	0	38
Community Health Centre (CHC), Hullahalli	-	7	7	0
Gulbarga Institute of Medical Sciences, Kalaburgi	-	67	8	432
Belagavi Institute of Medical Science, Belagavi	-	68	36	176
Total	203	533	447	2220

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

	Articulation		Fluency		Language		Voice		Swallowing		Resonance	
	Case	Sessions	Cases	Sessions	Cases	Sessions	Cases	Sessions	Cases	Sessions	Cases	Sessions
	s											
Paediatric	7	159	2	47	69	1849	-	-	-	-	-	-
Adult	3	22	4	120	9	549	2	48	-	-	2	-
Geriatric	-	-	-	-	1	10	-	-	2	36	Nil	Nil
	Paediatric:0-18years; Adults:18-65 years; Geriatric:65 years& above											

Table 8: Country-wise Tele-assessment and Intervention

Country	No. of	No. of Sessions		
	Cases			
Australia	1	41		
Dubai	1	80		
India	82	2271		
Ireland	1	5		
Japan	1	25		
Qatar	4	136		
Kuwait	1	46		
UK	2	130		
US	5	62		
Singapore	1	43		
Grand Total	99	2839		

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

States	No. of Cases	No. of Sessions		
Andhra Pradesh	1	4		
Assam	3	89		
Chattisgarh	1	66		
Chandigarh	2	29		
Haryana	1	59		
Jharkhand	3	111		
Karnataka	37	1100		
Kerala	3	85		
Maharashtra	2	78		
Madhyapradesh	1	32		
New Delhi	6	167		
Orissa	2	5		
Pondicherry	1	16		
Rajasthan	2	66		
Tamil Nadu	8	211		
Telangana	1	46		
UP	5	63		
Uttrakand	1	4		
West Bengal	2	40		
Grand Total	82	2271		