CLINICAL CARE

Patient Registration

Totally **13,432** new clients were registered for availing clinical services at the institute during the reporting year. In addition **29,965** case files were retrieved for repeat/follow up visits for various evaluations. The geographical and gender-wise details of new clients are given in *table 1*. Majority of them (12970) were from Karnataka, the state in which the institute is located, followed by the neighboring states of Kerala (174), Tamil Nadu (88), and Andhra Pradesh (67). Also there were clients from U.K, USA, Maldives and Nepal. Males (8132) outnumbered females (5294) in availing clinical services.

Table 1: Geographical & Gender wise distribution of new clients

Sl. No	Locality	Male	Female	Total
1.	Andra Pradesh	46	21	67
	Arunachal			
2.	Pradesh	-	1	1
3.	Assam	2	1	3
4.	Bihar	12	2	14
5.	Chattisgarh	2	1	3
6.	Delhi	4	3	7
7.	Goa	1	-	1
8.	Gujarat	7	-	7
9.	Hariyana	1	2	3
10.	Himachal Pradesh	-	1	-
11.	Jarkhand	6	2	8
12.	Karnataka	7817	5153	12970
13.	Kashmir	2	1	3
14.	Kerala	117	57	174
15.	Madhya Pradesh	3	2	5
16.	Maharastra	8	6	14
17.	Manipur	-	-	-
18.	Meghalaya	-	-	-
19.	Mizoram	-	-	-
20.	Nagaland	-	-	-
21.	Orissa	6	2	8
22.	Punjab	1	-	1
23.	Rajasthan	9	4	13
24.	Sikkim	1	-	1
25.	Tamil Nadu	59	29	88
26.	Telangana	8	-	8
27.	Tripur	1	-	1
28.	Union Territories	-	-	-
29.	Uttar Pradesh	11	5	16
30.	Uttaranchal	2	1	3
31.	West Bengal	6	1	7
	Total	8132	5294	13426
Over Sea	s Total	04	02	06
Grand T	otal	8136	5296	13432

Speech and Language Assessment and Rehabilitation

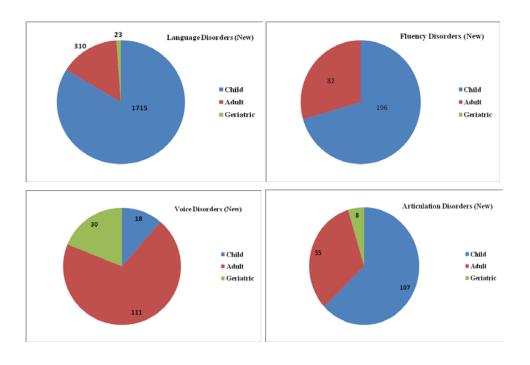
The speech and language outpatient unit evaluated 3,922 clients which include 2,824 new and 1098 review cases. Of the new cases, 2,048 were identified with various kinds of speech and language disorders and 92 were found to have normal speech. The details of various speech and language disorders diagnosed are given in *table 2 and figure 1*.

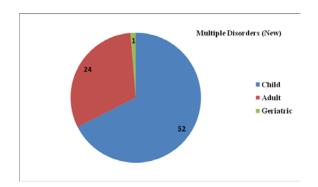
Table 2: Assessment of Speech-Language Disorders

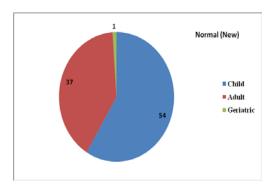
Disorders	Language Disorders			Fluency Disorders		Voic	e Disor	ders		iculati sordei			lultip sorde		Normal		I	Total	Hindi	
Months	C	Α	G	C	A	G	C	Α	G	C	Α	G	C	Α	G	C	Α	G		
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	35	0	0	8	4	0	2	1	2	2	2	0	0	0	0	2	0	0	58	13
June	107	31	1	23	5	0	1	21	5	4	0	0	1	0	0	4	3	0	206	36
July	32	6	1	10	6	0	0	4	0	1	2	0	0	0	0	0	1	0	63	6
Aug	84	14	3	7	4	0	2	1	2	4	2	0	5	3	0	2	1	0	134	12
Sept	123	25	4	16	2	0	2	3	1	12	7	1	6	6	0	4	7	0	219	20
Oct	103	31	1	12	10	0	0	5	1	6	8	0	4	1	0	4	9	0	195	28
Nov	138	27	1	19	3	0	2	10	3	5	4	0	4	6	0	8	1	0	231	39
Dec	242	31	0	29	15	0	4	16	4	19	8	1	4	1	0	7	6	1	388	34
Jan	259	31	2	18	10	0	3	13	3	21	10	0	9	1	1	13	0	0	394	36
Feb	316	47	1	26	11	0	1	18	7	16	10	5	10	4	0	4	4	0	480	50
March	276	67	9	28	12	0	1	19	2	17	2	1	9	2	0	6	5	0	456	48
Total	1715	310	23	196	82	0	18	111	30	107	55	8	52	24	1	54	37	1		
Disorder Wise	2	2048			278			159			170			77			92		2824	322
Over All		2824																		

C- Child, A-Adult, G-Geriatric

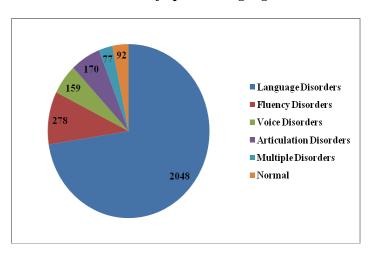
Figure: 1 Assessment of Speech-Language Disorders (New cases Disorder-wise)







Overall Assessment of Speech-Language Disorders



Clients requiring further management were given various speech/language therapies depending upon the type and severity of disorder, for daily sessions of 45 minutes duration. A total of 7,305 therapy sessions were conducted for 1,093 persons with speech/language disorders (walk in) and a total of 9,154 therapy sessions were conducted for 1,995 persons with speech/language disorders (tele) during the reporting year. The details of disorder-wise therapy carried out are given in *table 3 & 4* and *figure 2 & 3*.

Table 3: Speech-Language Therapy (walk in)

				Disord	ers						
Months	Child Language	Adult Language	Voice	Articulation	Fluency	Multiple	Normal	Total			
April	Lockdown due to pandemic										
May	7	0	1	1	2	0	0	11			
June	107	13	1	6	6	0	1	134			
July	56	3	2	6	3	2	1	73			
Aug	46	5	0	3	5	8	1	68			
Sept	43	14	1	5	6	5	0	74			
Oct	69	8	2	12	20	12	12	135			
Nov	63	6	2	9	6	6	4	96			
Dec	99	13	2	9	12	6	9	150			
Jan	104	12	5	6	4	4	2	137			
Feb	91	8	1	5	6	7	0	118			
Mar	69	6	2	4	5	10	1	97			
Total	754	88	19	66	75	60	31	1093			

Figure 2: Overall Disorder wise Speech-Language Therapy

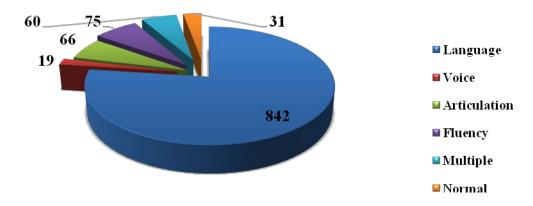
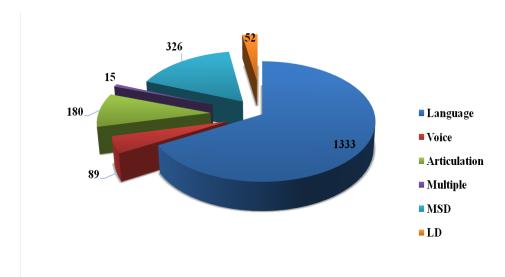


Table 4: Speech-Language Therapy (Tele mode)

Disorders		nguag sordei			Voice sorde			ticulati isorde			Aultij isord		N	MSD			LD		
Months	C	A	G	C	A	G	C	A	G	C	A	G	C	A	G	C	Α	G	Total
April		Lockdown due to pandemic																	
May	84	14	1	10	0	0	38	0	0	12	3	0	0	6	1	0	0	0	169
June	120	14	0	1	6	2	10	2	0	0	0	0	44	0	0	15	0	0	214
July	91	11	2	0	6	3	10	6	0	0	0	0	26	0	0	9	0	0	164
August	80	5	4	2	6	2	6	3	0	0	0	0	34	0	0	4	0	0	146
September	76	6	2	1	4	1	4	4	0	0	0	0	23	0	0	3	0	0	124
October	127	6	2	1	7	0	8	8	0	0	0	0	34	0	0	3	0	0	196
November	134	6	2	1	7	0	10	7	0	0	0	0	35	0	0	3	0	0	205
December	97	2	2	0	5	0	7	6	0	0	0	0	22	0	0	2	0	0	143
January	111	2	2	0	4	1	6	8	0	0	0	0	28	0	0	2	0	0	164
February	97	1	1	1	5	2	7	7	0	0	0	0	20	0	0	1	0	0	142
March	223	8	0	3	8	0	20	3	0	0	0	0	53	0	0	9	1	0	328
Total	1240	75	18	20	58	11	126	54	0	12	3	0	319	6	1	51	1	0	1995
Disorder Wise	1333 89				180			15			326			52					
Over All									19	95									

Figure 3: Overall Disorder wise Speech-Language Therapy



Speech and language assessment and therapeutic services were also provided at the seven DHLS centres of the Institute located in different parts of the country, the details of which are given in table 4.

Table 5 : Speech-Language clinical services at the DHLS Centres

		Asses	ssment			Therapy				
Centers	Language	Voice	Phonology	Fluency	MSD/ Dysphasia	Language	Voice	Phonology	Fluency	MSD/ Dysphasia
Mysore										
Ranchi										
New										
Delhi										
Bhagalpur										
Mumbai										
Lucknow										

Audiological Assessment and Rehabilitation

Hearing Evaluations were carried out on individuals who complained of hearing problems. In the Audiology outpatient department a total of 6,394 clients were assessed and hearing evaluations were carried out for 6,330 individuals. The details of the audiological evaluation are given in table 6.

Table 6: Hearing Evaluation

Sl.	Category	Total
1	Clients seen in Outpatient	6394
	department	
2	Hearing Evaluation	6330
3	Normal hearing	942
4	Minimal	722
5	Mild	843
6	Moderate	785
7	Moderately severe	722
8	Severe	659
9	Profound	713
10	Minimal to mild	49
11	Mild to moderate	90
12	Mod. to moderately severe	219
13	Modtly severe to severe	175
14	Severe to profound	247
15	Moderate to severe	89
16	Sloping	424
17	Ears tested having	
	 Conductive hearing 	1949
	 Mixed hearing loss 	2489
	 SN hearing loss 	3704
18	Clients with unilateral;	912
	Hearing Level	
19	Clients with bilateral Hearing	4825
	Level	

20	Ears with Aud. Dys-synchrony	32
21	Clients with Auditory	2
	Processing Disorder	
22	Clients with Functional	82
	Hearing Loss	
23	Clients - tinnitus evaluation	210
24	Clients for Pure Tone	6060
	Audiometry	
25	Clients for Speech Audiometry	2219
26	Clients for Immittance	6069
	evaluation	
27	Clients for Otoacoustic	1130
	Element	
28	Clients for Auditory Brainstem	1003
	Response	
29	Clients for Vestibular Evoked	2
	Myogenic Potential	
30	Clients for Video Head	1
	Impulse Tests	
31	Clients for Behavioral	195
	Observation Audiometry	
32	Clients for Visual	47
	Reinforcement Audiometry	
33	Behavioral Vestibular	2
	Assessment	

Hearing aid trial and prescription were carried out for clients in need for amplification and/or assistive listening devices. Clients evaluated of hearing aids were 3960 and 2510 hearing aids were prescribed at AIISH. Of the 3998 clients evaluated, 1503 were female and 2495 male. The details are given in *table 7 and figure 4*.

Table 7: hearing Aid Trial

Hearing Aid Trial	Total
No. of clients seen for Hearing Aid Trial	3960
HAs prescribed at AIISH	2510
 Body level hearing aids 	194
Analogue BTE	633
 Digital BTE 	1565
 Trimmer Digital BTE 	2
Digital ITE	514
Digital ITC	7
Digital CIC	19
Digital RIC	290
Testing for CI candidacy	9
No. of clients recommended	1
Auditory training	379
Speech reading	122
Unaided/aided audiograms	122
Aided audiogram for Cochlear Implant	64
Behavioural Observation Audiometry	5

Aided Visual reinforcement Audiometry	3
Conditioning	126
Programming of digital Hearing Aid	1767
Reprogramming of Hearing Aid	1534
Retrial with Custom Ear Mould	362
Recommended for ear plugs	2
Rec. for Cochlear Implant candidacy	
	55

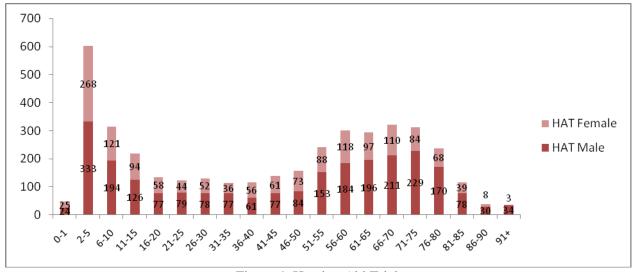


Figure 4: Hearing Aid Trial

At Ear mould lab, ear impressions were taken for 4277 clients. These include 575 new and 3420 old clients at AIISH and 129 in community based camps. The earmould details are given table 8.

Table 8: Earmould Statistics

Category	Total
Clients attended	4277
New clients	575
Old clients	3420
At Camp	129
Ear impressions taken	
Free-of-cost	3187
100% payment	3601
Ear imprn taken-camp	129
CPL impressions	4
EMs completed	4423
No. Mould Lacquered	1521
No. of sound tube issued	181
Hard regular moulds	34
Hard shell mould made	561
Soft mould made	2
Hard canal moulds	443
Soft canal moulds	17
Instant moulds	92
ITC impression made	24

Swimmer plug (hard)	5
No. of ear blocked	1359
EMs with aco. modificns.	1178
No. of students posted	3187

Audiological services were also provided at the DHLS centres of the Institute located in different parts of the country, the details of which are given in table 9.

Centers	OPD (Case history)	Evaluation	Earmoulds	Hearing aid trial (HAT)	Listening
Mysore					
Ranchi					
New Delhi					
Bhagalpur					
Mumbai					
Lucknow					

Referred Evaluation-1: Psychological Assessment and Rehabilitation

Psychological assessment was carried out for the referred cases registered at the Department of Clinical Psychology. This includes Routine Psycho-Diagnostic Assessment for Screening and Identification Detailed Psychological Assessment [(including specialized assessment such as assessment for Learning Disability, neuro-psychological assessment, assessment for disability certification, behavioral assessment and assessment for skill training, Psychological Intervention (including behavior modification programs, home based skill training programs, cognitive-behaviour and group intervention programs for caregivers)].

Routine psycho-diagnostic assessment was carried out for 3471 new and 946 repeat cases at the Department during the reporting year. The detailed is given in *table 10*.

10: Routine Psycho-Diagnostic Assessment

Classification of disorders according to the criteria included in Chapter V (F) of ICD-10					
F 70#	Mental retardation				
F 80.0	Specific speech articulation disorder				
F 80.1	Expressive language disorder	401			
F 80.2	Receptive language disorder	287			
F 88#	Other disorders of psychological development	187			
F81#	Specific developmental disorders of scholastic skills	395			
F 84#	Pervasive developmental disorders	100			
F 98.5	Stuttering (stammering)	179			
F 44.4	Dissociative motor disorders	5			
F00-F99	Other disorders included in Chapter V (F) of ICD-10	232			
The code # refers to "condensed" codes (Ref ICD-IO PC)					
Classification according to the criteria included in Chapter XVIII (R) of ICD 10					
R 47.0	R 47.0 Dysphasia and aphasia				

R 41.83	Borderline Intellectual Functioning	531		
Avg. Intelligence with disorders classified elsewhere				
TOTAL				

Psychological assessment includes intelligence / developmental (203 cases in 322 sessions), psychoeducational (226 cases in 509 sessions), neuropsychological (7 cases in 48 sessions), personality (23 cases in 28 sessions), behavioural (2 cases in 5 sessions) and forensic assessments (4 cases in 18 sessions).

The psychological intervention provided includes behavior modification (69 cases in 162 sessions), cognitive behaviour therapy (8 cases in 22 sessions) neuropsychological rehabilitation (3 cases in 9 sessions).

Referred Evaluation-2: Otolaryngological Assessment and Rehabilitation

The Otorhino-laryngological assessment and rehabilitation for persons with communication disorders were being carried out at the Department of Otolaryngology. In addition to the clinical services provided at the Institute, the Department staffs rendered diagnostic, therapeutic and surgical services at K.R. Hospital, Mysore Medical College, Mysuru. Totally, 11472 new and 12390 review cases were examined during the reporting year at the institute, and 3087 microscopic, 117 stroboscopic / endoscopic examination, 46 vertigo, 25 otoendoscopic and 5 diagnostic naso endoscopic examinations were carried out. Also, 12509 new and 11334 repeat cases were examined and 87 major and 280 minor surgeries were successfully carried out at K.R.Hospital.

Specialized Clinical Services

The institute provided a variety of specialized clinical services for individuals with communication disorders during the reporting year at the following clinical units.

> Augmentative and Alternative Communication (AAC) Unit

The AAC unit supported, enhanced and provided alternative methods of communication for individuals who are non-verbal. The unit evaluated 33 clients in 184 sessions during the reporting year.

➤ Autism Spectrum Disorders (ASD) Unit

Assessment and treatment were provided for 222 clients with autism spectrum disorders at the ASD unit during the reporting year. Of them, 24 were from Hindi region. The unit also attended 337 therapy and 47 demonstration therapy cases. Thirteen therapy cases discharged during the period. The total number of therapy sessions conducted was 2133 (tele mode) and 1548 (walk in).

➤ Clinic for Adult and Elderly Persons with Language Disorders (CAEPLD)

CAEPLD provides clinical services to adult and elderly persons. Totally, 67 clients were evaluated in the clinic during the reporting year. The number of therapy cases were 46 and therapy sessions 196. Also there were 35 DT cases. Twenty six cases were discharged.

Dysphasia Unit

This unit facilitates assessment and management of persons with swallowing disorders. The unit evaluated 31 cases in 36 sessions. Also, there were 10 therapy cases. The number of cases discharged was 5.

> Fluency Unit

This unit catered to the needs of persons with stuttering and other fluency disorders and provided clinical services to 303 persons with fluency disorders in 1565 sessions (Tele mode) and 163 persons with fluency disorders in 1086 sessions (Walk in) during the reporting year.

> Implantable Hearing Devices Unit

The activities of this unit include selection of candidates, mapping/ programming, trouble shooting of implantable hearing devices such as cochlear implant, bone anchored hearing aids and middle ear implants. During the reporting year, 114 clients were seen in the unit. The mapping for Cochlear Implant cases was 67. Trouble shooting was done for 71 client devices. Also, counselling was given for 127 clients.

Learning Disability Clinic

One case was evaluated in the Unit during the reporting year. Also there was one therapy case who underwent therapy in 15 sessions. There were 40 DT cases.

➤ Listening Training (LT) Unit

Listening Training Unit: Listening training unit (LTU) is committed to provide aural rehabilitation to the needy. The listening training was provided to not only the clients who use hearing devices such as hearing aids and cochlear implants but also to those with (Central) auditory processing disorders. In addition, training was also imparted to individuals suffering from tinnitus or hyperacusis. Totally, 1282 persons underwent listening training in 7584 sessions during the reporting year. Of the 1282 clients, 130 were new and the remaining 647 were repeat cases.

> Motor Speech Disorders Unit

This specialized unit caters to the needs of persons with motor speech disorders. It enables them to realize their potential and become contributing members of the society. Totally, 127 cases were evaluated in 127 sessions. Also there were 6 therapy cases and 29 Demonstration therapy.

> Neuropsychology Unit

The services offered in the unit includes the assessment of specific function of the brain through standard individualized test, detailed assessment of lobular functions through standardized batteries and rehabilitation through paper pencil techniques or through computer assisted packages. Totally, 7 (48 sessions) neuropsychological assessments and 3 (9 sessions) neuropsychological rehabilitation were made during the reporting year in the unit.

> Professional Voice Care (PVC) Unit

The unit provided specialized assessment and management services to professional voice users during the reporting year. It organized various programs to orient and sensitize professional voice users on care, maintenance and conservation of voice. The unit evaluated 12 clients and provided rehabilitation to 20 clients. In addition, the unit trained a total of 64 UG and PG students in 273 hours.

> Structural Orofacial Anomalies (U- SOFA) Unit

Clients with deformalities in the growth of head and facial bones were given multi-disciplinary diagnostic and rehabilitation services in the clinic. The experts of the clinic evaluated 8 clients during the reporting year. Also 29 (telemode) and 14 (walk in) cases were evaluated 178 (telemode) and 85 (walk in) sessions.

Vertigo Clinic

The clinic offered comprehensive care in evaluation and management of patients with vertigo. A multidisciplinary team comprising of otolaryngologist, audiologist and neurologist evaluated

46 new and 424 follow up patients in the clinic for both peripheral and central vertigo during the reporting year and diagnostic tests like microscopic examination of ear, electro nystagmography, vestibulo spinal tests, neurological evaluation, video nystagmography, audiological tests and vestibular evoked myogenic potential test were carried out for the needy ones.

➤ Voice Clinic

This clinic offered evaluation and management services to persons of all ages with voice disorders. Totally, 27 clients with voice disorders were evaluated in the clinic using video stroboscopy and software for voice assessment and rehabilitation services was provided to 50 cases.

Special Educational Services

The following educational services were provided to the children with special needs at the pre-school, attached to the Department of Special Education during the reporting year.

- i) **Special Educational Assessment:** Educational Assessment services are offered for 337 children with communication disorders to determine readiness for schooling and to suggest an appropriate grade, placement as well as necessary services.
- ii) **Parent Infant Program (PIP):** PIP was provided to very young children ranging from birth to 2.5 years with the objective of improving physical, cognitive, communication, social and emotional skills as detailed in *figure 5*.
- iii) **Preschool Parent Empowerment Program (PPEP):** PPEP was provided to 858 caregivers of children ranging from 2.5-3 years before formal admission to preschool in 3301 sessions with the aim of empowering caregivers to train their children and get adjusted to preschool atmosphere.
- Preschool Training & Supplementary Services (PSS): Preschool service, a preparatory training for children with communication disorders in self-help, cognitive, communication and academic skills necessary for successful schooling was provided to children in the age range of 3-6 years having hearing impairment, cerebral palsy, and multiple disability and to those in the age range of 3-10 years having intellectual disability and autism. The details are given in table 11.
- v) Curricular Support Services, Individualized Education Program and Demonstration Education Therapy / Non formal Education Program were offered respectively to 256, 42 and 5 children with communication disorders who were mainstreamed but have certain difficulties in coping with academics.
- vi) Sensory Adaptation for Education to cater to the sensory issues of young children with special needs.
- vii) Special use of music for educational readiness and up-building (Unit was discontinued during Covid-19).
- viii) Speech-Language group therapy

- ix) Support services for Empowering Caregivers
- x) One-month summer camp for children (camp was not conducted due to Covid-19.
- xi) Counselling and guidance for parents and family
- xii) Literacy computer and yoga
- xiii) Parent Enrichment Program
- xiv) Library of books and toys
- xv) Parents help parents program

Table 11: Pre School Training

Sl.	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
No.													
Clients	145	154	154	164	173	169	169	168	164	164	160	153	1937
Sessio	947	1391	711	712	561	680	549	590	652	714	696	790	8993
ns													

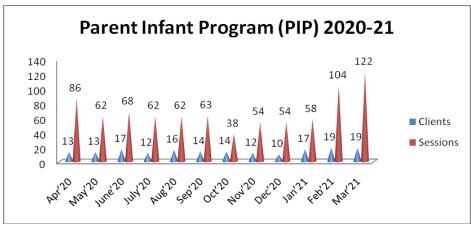


Figure 5: Parent Infant Programme

Medical Speciality & Allied Health Services

The institute facilitated the services of various medical specialists such as pediatrician, neurologist, plastic surgeon, prosthodontist, orthodontist, phono-surgeon and services of allied health professionals such as physiotherapist and occupational therapist, to the needy clients. Totally, 433 (walk in) and 301 (telemode) patients underwent Physio and Occupational therapy in 2337 (walk in) and 1932 (telemode) sessions, during the reporting year. In addition, 39, 31, 39, 10, 30 clients consulted pediatrician, phonosurgeon, plastic surgeon, orthodontist, Dietician respectively. The details are given in figure 6.

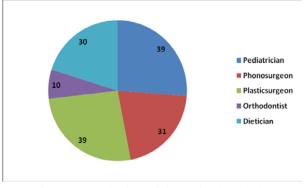


Figure 6: Medical specialty and allied health

Clinical Support Services

The institute extended a diverse range of support services to patients and their family. These include the following.

> Distribution and Repairing of Aids:

Electro-acoustic evaluation, management and repair of hearing aids were carried out under the aegis of Department of Electronics. Totally 1203 hearing aids were distributed (AIISH-948, OSCs-197, Camps-60 & Plan Project - 35), after electro-acoustic evaluation and testing under ADIP scheme. Under AIISH Hearing Aid Dispensing Scheme, 2324 hearing aids were issued at concessional rate. Also, 71291 hearing aid spares such as HA cells, cords, battery doors, ear hooks, body case, wind weather protector, BET Huggies, Domes and Tips were issued. In addition, 249 body level and 954 BTE hearing aids were repaired, electronic-acoustic evaluation was carried out for 7 hearing aids and 5 audiometers were calibrated.

- ➤ Counselling and Guidance: The professional experts of the Institute provided counselling and guidance on various aspects of the disorders such as treatment procedures, usage and care of tools like hearing aids during the reporting year.
- ➤ **Distribution of toy kits:** 31 toy kits were distributed to eligible disabled children worth Rs.23,250/-.
- Materials sold at Library: Rs. 82,735/-

Issue of Certificates:

Various certificates like financial aid, income tax exemption, educational scholarship, and school admission were issued to the eligible candidates during the reporting year, the details of which are given in table 12.

Table 12: Details of certificates issued

Particulars	Total		
Transfer certificate	6		
Evaluation reports	154		
Attendance certificate	22		
School admission certificate	4		
Admission to deaf school	5		
MR Certificate	592		
Railway concession - ENT	17		
Bonafide certificate	9		
Handicapped Certificate	690		
(Pension)			
Medical Certificate	442		

Financial Aid: The institute distributed total amount of Rs. 3,76,938/- among 7 clients below poverty line towards the purchase of hearing aids during the reporting year under the aegis of the Department of Clinical Services.

> Clinical Observation Posting

The institute facilitated clinical observation posting for students in the area of communication disorders and allied fields from other institutes in the country and abroad. Around hundred students and staff from 5 institutes across the country and abroad were posted for clinical observation in different clinical units and departments of the institute during the reporting year. The details of the institutions are given below.

- 1. Vidyavardhaka College of Engineering, Mysuru
- 2. Maharaja Institute of Technology, Mysuru
- 3. Free Lancer
- 4. Karnataka Institute of Medical Sciences, Hubli
- 5. Hassan Institute of Medical Sciences, Hassan