

CAREERS IN AUDIOLOGY AND SPEECH-LANGUAGE PATHOLOGY

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There are multiple subjects and disciplines of study with their own distinct features in the field of allied health. Audiology and Speech and Language Pathology is an allied health science which is directly concerned with knowledge & skills to evaluate, diagnose and treat (intervention) disorders, swallowing as well as disability screen & advocacy in individual of any age across life span. It also includes counseling persons with disorders of communication and their family members rehabilitate persons with speech, language, swallowing and hearing disorders prevent speech, language, swallowing and hearing disorders.

Professionals having qualification in speech and language pathology (SLP) are called Audiologist and Speech Language Pathologist. Audiology is a branch of science that studies hearing, balance, and related disorders. Its practitioners, who treat those with hearing loss and proactively prevent related damage, are audiologists. Employing various testing strategies, audiology aims to determine whether someone can hear within the normal range, and if not, which portions of hearing are affected, to what degree, and where the lesion causing the hearing loss is found. If an audiologist determines that a hearing loss or vestibular abnormality is present he or she will provide recommendations to a patient as to what options may be of assistance.

Similarly, speech-language pathology (SLP) is a field of expertise practiced by a clinician known as a speech-language pathologist, also sometimes referred to as a speech and language therapist or a speech therapist. SLP is considered an "allied health profession" along with audiology, physiotherapy, occupational therapy, clinical psychology, physical therapy, and others. The field of SLP is distinguished from other "related health professions" as SLPs are legally permitted to diagnose certain disorders which fall within their scope of practice. SLPs specialize in the evaluation, diagnosis, and treatment of communication disorders, cognitive - communication disorders, voice disorders, and swallowing disorders etc. SLPs also play an important role in the diagnosis and treatment of autism spectrum disorder, which is becoming developmental disorders.

According to Census 2011, there are 2.68 million Persons with Disabilities in India in which 50.71 lakh is hearing disabilities and 19.98 Lakh persons is suffering from speech disorder. In short, Audiology and Speech language Pathologists are professionally responsible for the assessment and treatment of a broad range of speech, language, swallowing, and cognitive-communication and hearing impairments. Such impairments may result from structural or functional causes, and may have developed over time, or have resulted from causes such as stroke, head injury, or cancers of the head and neck.

EMPLOYMENT & SELF EMPLOYMENT

Audiologist and Speech Language Pathologists serve as educators in Universities and /or college education and training programs related to hearing science and disorders as well as communication sciences and disorders and swallowing. Moreover, there is huge demand of professionally trained

Audiologist and Speech Language Pathologist to serve children with speech and language problems along with persons with hearing loss and mental retardation, autism and many more. They have opportunities to work in hospitals, special schools, speech and hearing institutes, hearing instrument manufacturing industry, government and non-government agencies working for the persons with disabilities such as National Institutes for Empowerment of Persons with Disabilities, Composite Regional Centers for Persons with Disabilities (CRCs), Universities, CBSE Schools, Hospitals, Rehabilitation Centres, NRHM, District Disability Rehabilitation Centers (DDRC), Rastriya Bal Suraksha Karyakaram (RBSK), Buniyaad Centers, District Early Intervention Centers (DEIC), SSA as well as to do independent practice. Excellent opportunities await abroad for higher studies and practice. Presently, the services of trained professionals are limited to district headquarters level. However, there is urgent need to ensure speech and language pathologist at Block, and subdivision level in compliance to the mandate of Right to Persons with Disabilities Act 2016. But due to shortage of trained professionals Govt. is unable to provide services to needy once. Hence, there will requirement of many more professionals.

SCOPE OF PRACTICE AUDIOLOGIST AND SPEECH LANGUAGE PATHOLOGIST

The Rehabilitation Council of India (RCI) is a statutory body created under the Rehabilitation Council of India Act, 1992, is entrusted with the twin responsibility of regulating and monitoring the training of personnel in the disability sector and maintaining a Central Rehabilitation Register. Any professional in the disability sector wishing to practice in the area of any disability should not only possess a graduate/ postgraduate degree recognized by the RCI, but should also be registered with the RCI and included in the Central Rehabilitation Register. Through anybody with a Diploma in Speech-language and Hearing or Communication Disorders can dispense services for the needy, he/she shall do so only under the supervision of an Audiologist and Speech Language Pathologists professionals with at least a graduate degree.

COURSES IN AUDIOLOGY AND SPEECH AND LANGUAGE PATHOLOGY

1. Diploma in Hearing Aid and Ear Mould Technology (DHA & ET)

This programme aims at training the students in the maintenance and repair of hearing aids as well as in ear mould technology. The focus is more on practical training and the student trainees are given hands-on experience in the repair of different types of hearing aids and preparation of ear moulds.

2. Diploma in Early Childhood Special Education (Hearing Impairment)

This diploma programme helps in generating manpower that will cater to the needs of children with hearing impairment below 3 years of age and their caregivers. Those trained would be able to help children with hearing impairment to be equipped with pre-school, pre-academic skills. This would enable these children to learn a school curriculum more easily. Thus, those who undergo the DECSE(HI) programme would be required to help to train children with hearing impairment before they are admitted to school making it possible to enable the children to study in regular schools along children with normal hearing.

3. Diploma in Hearing, Language and Speech (DHLS)

This programme is designed to generate manpower that will cater to the needs of individuals with communication disorders at the grass-root level. In this programme, the students are trained to identify individuals with communication disorders and make appropriate referrals for further diagnosis. The students are also trained to supervise the caregivers in following the guidelines given by professionals for rehabilitation. Extensive practical training is given to supplement the theoretical knowledge.

4. Bachelor of Audiology and Speech Language Pathology (B.ASLP)

The undergraduate students of B.ASLP/BASLP learn about the normal aspects and disorders of speech, language and hearing. The students are trained in evaluation, diagnosis, treatment and management of communication disorders. The training includes theoretical and practical aspects, with focus on clinical teaching-learning. The students get hands-on experience in dealing with clients under the supervision of qualified staff.

5. P.G. Diploma in Augmentative and Alternative Communication (PGDAAC)

The programme aims to provide academic and practical experience designed to prepare speech language pathologists and special educators to provide trans-disciplinary and field-based AAC services for individuals with complex communication needs so that they can reach their full potential.

6. P.G. Diploma in Clinical Linguistics for Speech-Language Pathology

Clinical linguistics is a branch of linguistics that deals with the application of linguistic principles to communication disabilities, especially in clinical settings. It involves inter-disciplinary study among various fields such as speech and language pathology, linguistics, clinical psychology and education. The programme aims at imparting knowledge regarding language development and its disorders. Primarily, the program will prepare the candidates to undertake inter-disciplinary research in the areas of speech, language and cognition. In addition, the programme will equip speech-language pathologists to enhance their already acquired knowledge regarding assessment, diagnosis and planning of intervention programs for children and adults with communication problems in the Indian context.

7. P.G. Diploma in Forensic Speech Science and Technology

The identification of individuals through their speech characteristics is an area of speech science that reliably arouses attention of forensic experts. There are very few forensic laboratories in India undertaking forensic speaker identification. The P.G. Diploma in Forensic Speech Sciences and Technology programme intends to train professionals in the area of forensic speaker identification which would be applicable in forensic sciences.

8. P.G. Diploma in Neuro-Audiology

Neuroaudiology is the specialized branch of Audiology that deals with the structure, function and disorders of auditory neural pathway and the allied neural network. The scope of this specialty is interdisciplinary. Knowledge in this area can be utilized to identify space occupying lesions as well as diffused lesions of the auditory and associated neural pathways. It can be used to study processing of auditory signal, in persons who hear normally as well as a wide range of clinical population. It is also useful in evaluating plasticity in the auditory neural system. The focus of the programme is on imparting research and clinical skills regarding the auditory and vestibular system. The programme also imparts knowledge and skills necessary to carry out research pertaining to the area.

9. M.Sc. (Speech- Language Pathology)

The Postgraduate programme in Speech-Language Pathology is geared towards imparting advanced knowledge and skills as applicable to the profession of Speech-Language Pathology. The programme is designed to develop manpower to contribute to theoretical, clinical, research, field-based and technology based knowledge to the discipline of Speech-Language Pathology. The programme focuses on differential diagnosis and management of communication disorders and conduct research to further the profession in the country.

10. M.Sc. (Audiology)

The post-graduate programme in Audiology is geared for students who yearn for in-depth knowledge and skills in the field. The post-graduate programme in Audiology focuses in providing detailed information about normal aspects of the auditory system as well as on differential diagnosis and differential management of auditory disorders. In addition, the students are also trained on relevant aspects pertaining to disabilities and to identify research needs and plan research that would help in upgrading diagnostic and rehabilitative services.

11. Ph.D. (Speech-Language Pathology, Audiology & Speech & Hearing)

The doctoral programme is geared towards increasing quality and quantity of research in the area of Speech-Language Pathology, Speech Sciences & Language Sciences as well as the areas include auditory physiology, psychophysics, speech perception, Diagnostic Audiology, Rehabilitation Audiology, Industrial and Forensic Audiology, Educational Audiology, Pediatric and Geriatric Audiology and equipment, clientele and collaboration to undertake research in a wide range of area of Speech and Hearing.

ADMISSION TO AUDIOLOGY AND SPEECH AND LANGUAGE PATHOLOGY COURSES

The candidate applying for admission to bachelor program should have passed 10+2 examination or an equivalent examination conducted by the Pre University Board of Education of the respective State Government securing a minimum of 50% marks. Relaxation in the qualifying marks shall be as per rules and regulations of respective University / State/UTs or Central Government. The

applicant/candidate should have studied Physics, Chemistry and any one of Biology/ Mathematics/ Computer Science/ Statistics/ Electronics/ Psychology. Further for post graduation level programmes the candidates with a B.ASLP or B.Sc (Speech & Hearing) degree of any University recognized by the Rehabilitation Council of India or any other degree considered as equivalent thereto and having an average of not less than 55% of marks are eligible for admission to master degree courses. Applicants shall not be older than 30 years on the 1st July of the year of admission. Admission to various courses is done directly by the respective institutions as per prescribed norms of affiliated respective universities. The academic session starts every year sometime in May/ June and the process of admission starts in April every year. Therefore, for admission to any course the concerned institution and Universities may be contacted directly. National Board of Examination in Rehabilitation (NBER) under RCI, New Delhi is conducting entrance examination for admission to Diploma Courses. Duration of courses is as under

S. N.	Name of Course	Eligibility	Duration in Year
1.	Diploma in Hearing Aid & Ear Mould Technology	12th /II PUC /Diploma in Electronics/ITI)	1 year
2.	Diploma in Early Childhood Special Education (Hearing Impairment)	12th /II PUC	1 year
3.	Diploma in Hearing, Language & Speech	12th /II PUC (Science stream)	1 year
4.	B.ASLP 12th /II PUC (PCM/B)	12 TH / II PUC(PCM/B)	4 year
5.	PG Dip in Augmentative and Alternative Communication	B.Sc. (Sp. & Hg.) /B.ASLP / B.S.Ed. (HI, Autism Spectrum Disorders, Learning Disability, Mental Retardation, Cerebral Palsy, Multiple disabilities)	1 year
6.	PG Dip in Clinical Linguistics for Speech-Language Pathology	B.Sc. (Sp. & Hg.) /B.ASLP	1 year
7.	PG Dip in Forensic Speech Science & Technology	B.Sc. (P/M/E/CS)/ B.Sc. (Sp. & Hg.)/B.ASLP / B. Tech/ MBBS)	1 year
8.	PG Dip in Neuro- Audiology	B.Sc. (Sp. & Hg.) /B.ASLP	1 year
9.	M.Sc. (SLP)	B.Sc. (Sp. & Hg.)/B.ASLP	2 year
10.	M.Sc. (Aud)	B.Sc. (Sp. & Hg.)/B.ASLP	2 year
11.	Ph.D. (SLP), (Aud), (Speech & Hearing)	M.Sc. (SLP) / M.Sc. (Aud) / M.Sc. (Sp. & Hg.) /MASLP, with 1 year work experience	3 year

SPECIALIZED TRAINING & RESEARCH INSTITUTES

In addition to approximately 58 RCI recognized training institutions throughout India some of these well known institutes/universities are conducting regular courses such as All India Institute of Speech and Hearing (AIISH) at Mysore; Dr. Shakuntala Misra National Rehabilitation University (DSMNRU) at Lucknow; Ali Yavar Jung National Institute of Speech and Hearing Disabilities (Divyangjan) (AYJNISHD) at Mumbai; National Institute of Speech & Hearing (NISH) at Thiruvananthapuram, National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD) at Chennai; Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh; Guru Gobind Singh Medical College and Hospital, Faridkot, Punjab; C.U. Shah Medical College at Surendernagar, Gujarat; Netaji Subash Chandra Bose Medical College (NSCB) at Jabalpur; Topiwala National Medical College (B.Y.L. Nair Charitable Hospital) at Mumbai; Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER) at Pondicherry; Regional Institute of Medical Sciences (RIMS) at Imphal, Manipur; Christian Medical College (CMC) at Vellore; Sri Ramachandra Medical College & Research Institute at Chennai; are well known institutions for higher studies and research in subjects related to Audiology and Speech and Language Pathology.

INDIAN SPEECH AND HEARING ASSOCIATION (ISHA)

The Indian Speech and Hearing Association (ISHA) is the professional and scientific association of more than 3160 members who are speech-language pathologists, audiologists, and speech, language, and hearing scientists in India and internationally. The ISHA is registered under the Mysore Societies Registration Act, 1960 and taking care of professionals since 1966. The association has its central office at All India Institute of Speech and Hearing (AIISH), Manas gangothi, Mysore, Karnataka. The ISHA envisages professional excellence in Speech Language and Hearing services, safeguarding professional ethics and the interest of professionals and the people with Speech Language and Hearing disorders through its mission by promoting excellence in Speech Language and Hearing profession and rehabilitation services through advocacy, leadership, unique and continued education, both for public and professional awareness, ethical considerations and outcome monitoring and professional networking and support to research. Registered State unit of ISHA is being established throughout India for professional development such as Uttar Pradesh Speech and Hearing Association (UPISHA) at Lucknow, Bihar Speech and Hearing Association (BISHA) at Patna etc.

RESEARCH OPPORTUNITIES

Audiologist and Speech Language Pathologists are involved in conducting basic and applied research related to normal processes and disorders of hearing balance, communication, swallowing and other related aspects. Audiologist and Speech Language Pathologists are involve in the design and conduct of basic and applied research to increase the knowledge base, to develop new methods and programs and to determine the efficiency of assessment and treatment paradigm; disseminate research findings to other professionals and to the public in the relevant fields. Opportunities for research are available at CRCs, specialized National Institutes and Universities in India and abroad. To pursue a Ph.D., one needs to fulfill UGC requirements.

TRAITS FOR SUCCESS

To have a successful career as Audiologist and Speech Pathologist are required traits such as keen observation, willingness to help people, strong communication skills, analytical ability, patience and perseverance among others. One also requires a basic sensitivity towards people with disabilities and need to be ethical in approach. All such skills and traits can be developed with positive and sincere efforts. Audiology and Speech and Language Pathology is an area in which you derive satisfaction in helping persons with disabilities to lead good, balanced and peaceful life, overcome mental problems and enrich people's social, family and workplace relationships. In general it is not a career of fancy designations and regular promotions. Therefore, if the subject genuinely interests you, only then you will enjoy your work and career in Audiology and Speech and Language Pathology. Moreover, your graduate qualification with Audiology and Speech and Language Pathology will work for other jobs like banking, civil services, Railway etc as well.

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